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Michele Barron-Albers
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**Mentorship and Teacher Retention:
Analysis of Beginning Special Education Teachers' Experiences in Minnesota**

by

Michele Barron-Albers

A Dissertation

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Education

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John Eller, Chairperson
Jennifer Christensen
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Abstract

Beginning special education teachers each year enter their classrooms with high expectations and best-practice strategies they are eager to employ. Related literature affirmed, however, that they are quickly faced with what Charlotte Danielson (1999) described as a “sink or swim in the deep end of the pool” culture (p. 251-7) as they grapple with the needed sudden transition from theory to practice. Done well, effective mentoring can become the bridge between preservice learning and classroom experience and guide beginning special education teachers toward a deeper and more impactful teaching practice.

This study’s purpose was to explore facets of new special education teacher mentorship supports in Minnesota to better understand what constituted effective mentoring program supports for new special education teachers in the profession. The study also endeavored to explore the influence of these supports on beginning special education teachers’ plans to remain in the field. The results of this study are intended to supplement the gap in the literature related to the influence of effective mentorship on special education teacher retention rates in Minnesota and to provide greater insight into how mentorship was provided, what that mentorship consisted of, and who provided it to beginning special education teachers in our state.

The significance of this study was supported by four primary factors: 1) the growth of induction/mentoring programs across the United States, 2) the continued high attrition rate of special education teachers and the need to retain them in the field, 3) the limited research on the issues to be investigated, and 4) the recommendations from previous research. Therefore, this study researched specific themes of mentorship to better understand what constituted effective mentoring program supports for beginning special education teachers in Minnesota and to explore the influence on beginning special education teachers’ plans to remain in the profession. Mandlawitz (2003) reported that the first three years of teaching represent a critical time-period for understanding and affecting the attrition rate of special education teachers. As such, this study focused solely on beginning special education teachers in their first three years of teaching.

The findings of the study indicated that there was an apparent disconnect between what beginning special education teachers found helpful and what they were actually being provided in terms of mentorship support delivery. Further, there appeared to be a disconnect between what content beginning teachers found helpful and what they were actually being provided. There also appeared to be a shift from year one to year two in terms of the reported supports that were most beneficial. Ultimately, findings of the study indicated that provision of positive and meaningful mentorship experience in year one, year two, and year three of teaching special education had a positive impact on beginning teacher retention rates in the short- and long-term.

Key Search Words: Special Education, Retention, Mentorship, Attrition, Collaboration, Teaching, Minnesota, Effectiveness

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consolation, and your unwavering dedication and commitment to our journey has made all the difference for me, and I know I would not be here if it weren't for you both. You are appreciated beyond measure.

Dedication

I dedicate this work to my father, Daniel Neil Barron, who started this journey with me, but was not able to survive to see me reach the end. He was the first teacher I ever knew, and he instilled in me a deep love of learning and always encouraged me to be my best self. He is a presence that I miss every day, and his example continues to inspire me each day to learn and to grow.

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Chapter I: Introduction

“In order to be a mentor, and an effective one, one must care. You must care. You don’t have to know how many square miles are in Idaho, you don’t need to know what is the chemical makeup of chemistry, or of blood or water. Know what you know and care about the person, care about what you know and care about the person you’re sharing with.”

– Maya Angelou (2017)

Beginning special education teachers (SETs) each year enter their classrooms with high expectations and best-practice strategies they are eager to employ. Related literature indicated, however, that beginning special education teachers are quickly faced with what Charlotte Danielson (1999) described as a “sink or swim in the deep end of the pool” culture (p. 251-7). Beginning SETs face the daunting task of navigating behavior management dilemmas, co-teaching requirements, due process timelines, alignment to the Individuals with Disabilities Education Act (IDEA) mandates of Free and Appropriate Public Education (FAPE) and Least Restrictive Environment (LRE), meaningful data collection and analysis, effective management of paraprofessionals, and more (Hagaman & Casey, 2018), all without what Shulman and Colbert (1988) noted as the professional practice and the professional knowledge that only come with time and experience.

In a study for the Center on Educational Policy, Mandlawitz, (2003) reported that the first three years of teaching represent a critical time-period for understanding and affecting the attrition rate of special education teachers. Ingersoll and Strong (2011) noted in their meta-analysis of 15 empirical studies that most correlational studies reviewed suggested that beginning teachers benefited from induction supports and that induction reduced attrition rates. Research further indicated that new special education teachers ranked mentorship as their number one requested induction support, followed by disability-specific training and training on district policies (Hagaman & Casey, 2018).

In recent decades, teacher mentoring programs have become a preferred facet of teacher induction (Britton et al., 2003; Hobson et al., 2009; Strong, 2009). While research (Ingersoll & Strong, 2011) indicated that the number of teacher mentorship programs has risen, there has also been a documented rise in teacher attrition rates indicating a potential disconnect between these two variables (Swanson, 2008). In 2006, only 16 states required and financed induction or mentorship programming supports for all new teachers (Quality Counts, 2006) while in 2010, the number had grown to 23 states which funded mandatory induction and mentorship programming (Quality Counts, 2010). Most recently, by 2019, 31 states reported requiring induction or mentorship programming to support new teachers (ECS, 2019). This denoted a 93.75% increase nation-wide in teacher induction and mentorship programming from 2006 to 2019.

Conversely, when looking specifically at special education, teacher attrition rates rose by 89.39% between 2013 to 2021 (Billingsley & Bettini, 2019; Goldrick et al., 2014). In fact, in related research on teacher attrition, (Carver-Thomas & Darling-Hammond, 2017; Boe et al., 2008) it was noted that, when compared to general education teachers, special education teachers historically left the profession at a rate 46% higher than their general education counterparts.

The reported elevated attrition rate of special education teachers added to the teacher shortage concerns that have been well-documented over the past several decades (Ingersoll, 2012; Sutchter et al., 2016). Administrators and policy makers have struggled for more than 20 years to understand and mitigate factors that lead to SET shortages in the profession (Billingsley & Bettini, 2019). As Ingersoll (2001) reported, the issues surrounding the SET shortage are very complex, but research indicated that attrition is a major contributor.

In a recent update to the landmark study of the American Teaching Force, Ingersoll et al., (2018) reported that the American teaching force was, in fact, “ballooning” rather than shrinking

(p 6). Data from the report indicated that, from school years 1987-88 to 2015-16, total K-12 student enrollment in the nation's schools (public, private, and charter combined) rose by 20%. During the same time, however, the number of teachers employed in schools increased at over three times that rate, by 64% (Ingersoll et al., 2018). When reporting specifically on special education teachers, Ingersoll noted:

The data also indicate that a significant source of the ballooning has been the growth of special education, likely linked to changes in the Individuals with Disabilities Education Act, the main federal special education legislation. The number of public-school teachers whose main field was special education increased by 89%, compared to 58% for general elementary school teachers. Special education classes average about half the size of typical classes in elementary and secondary schools, and special education is a relatively large field. Hence, the increase in special education teachers alone accounts for about 14% of the increase in the public-school teaching force. (p. 6-7)

Comparatively, approximately 13% of licensed and qualified special education teachers leave the profession each year (Carver-Thomas & Darling-Hammond, 2017) providing a potential zero-sum gain.

Minnesota aligns with this national trend of teacher exodus from the field of special education. In a report by the Minnesota Office of the Legislative Auditor (Nobles, 2013), it was reported that in Minnesota the special education student population grew by 10% in five years. Concurrently, the number of teachers with the appropriate qualifications to teach special education dropped by nearly the same percentage (Nobles, 2013).

In a 2019 report to the state of Minnesota, it was found that 52.5% of all Minnesota teachers holding a teaching license (general education and special education) were not working

as a teacher in a public school (Wilder Research, 2019). The report further indicated that the state had no requirement that all new teachers must receive mentoring support (Wilder Research, 2019).

Statement of the Problem

The significance of this study was supported by four primary factors: 1) the growth of induction/mentoring programs across the United States, 2) the continued high attrition rate of special education teachers and the need to retain them in the field, 3) the limited research on the issues to be investigated, and 4) the recommendations from previous research. Each of these factors contributed to the need for further study of the overall influence of mentorship on beginning special education teacher retention. Additionally, limited research was found specifically related to the influence of mentorship supports on special education teachers new to the profession in Minnesota. Therefore, this study researched specific themes of mentorship to better understand what constituted effective mentoring program supports for beginning special education teachers in Minnesota and to explore the influence on beginning special education teachers' plans to remain in the profession.

Purpose of the Study

This study's purpose was to explore facets of new special education teacher mentorship supports in Minnesota to better understand beginning teachers' perspectives on what constituted effective mentoring program supports for new teachers in the profession and to explore the influence of these supports on beginning special education teachers' plans to remain in the field.

Research Questions

The following research questions guided this study and aligned to the study's conceptual framework:

1. How do select Minnesota special education teachers within their first three years of service rate the overall effectiveness of their mentoring experience?
2. What forms of mentorship support do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective forms of supports provided?
3. What mentorship support content do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective content provided?
4. What personal and professional characteristics do select Minnesota special education teachers within their first three years of service report as being most valuable for mentors to possess?
5. How do select Minnesota special education teachers within their first three years of service rate their plans to remain in the field of special education in relation to the overall effectiveness of the mentorship supports provided?

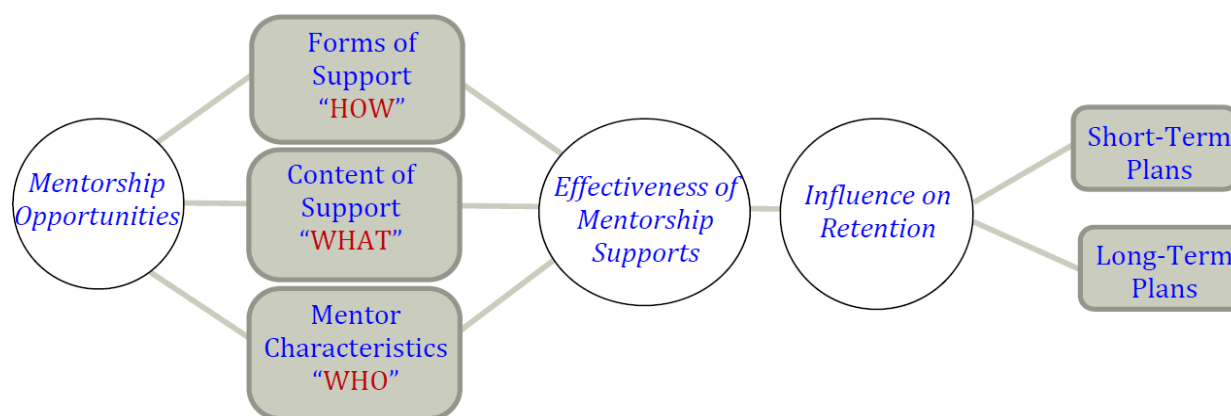
Conceptual Framework

The purpose of this study was to explore what constituted effective mentorship programming for beginning special education teachers and to understand the influence of mentorship programs on retention rates of new special education teachers in Minnesota. To align with findings in related literature (Mandlawitz, 2003; Israel et al., 2013), new Minnesota special education teachers within their first three years of teaching were surveyed to better understand the unique elements related to mentorship that positively or negatively influenced their decision to remain in their teaching role.

As shown in Figure 1, the conceptual framework for this study centered on the perceived effectiveness of mentoring supports provided to beginning teachers in the field. A review of the related literature demonstrated several overarching themes related to effective mentorship of beginning special education teachers. These themes were 1) how the mentorship supports were provided (form), 2) what the actual supports entailed and focused on (content), and 3) personal and professional characteristics of the mentors providing the supports. This conceptual framework considers the relationship between the supports and assistance provided to new special education teachers, the perceived effectiveness of such supports, and the influence on the new teachers' plans to remain in the field. The themes were explored to determine their import as facets of successful mentorship programs for beginning special education teachers in Minnesota and the overall influence on their plans to remain in the profession.

Figure 1

Conceptual framework



Overview of Research Design

This study was conducted to explore the perceptions of the effectiveness of mentorship supports provided in the state of Minnesota, specifically centering on three themes: 1) the forms of mentorship supports provided, 2) the content of the supports provided, and 3) the personal and professional characteristics of the mentors providing the supports, and to determine if these

supports influenced beginning special education teachers' plans to remain in the profession. The study utilized a quantitative research methodology to explore the frequency and perceived effectiveness of the given supports.

As reported by Creswell, (2014), a quantitative methodological approach utilizes surveys and numerical data. Further, quantitative research is “a type of educational research in which the researcher decides what to study; asks specific, narrow, questions; collects quantifiable data from participants; analyzes these numbers using statistics; and conducts the inquiry in an unbiased, objective manner” (Bauer & Brazer, 2012, p. 211).

Data were collected via an online questionnaire sent to Minnesota special education teachers who were reported by the MN Professional Educator Licensing and Standards Board (PELSB) as being within their first three years of teaching.

Assumptions of the Study

Several assumptions were made in the completion of this study.

1. It was assumed that mentorship programming continued despite the COVID-19 global pandemic although the programming may have been altered or hindered due to the disruption.
2. It was assumed that mentorship practices were designed to aid in teacher retention.

Delimitations

As noted by Creswell (2012), delimitations aim to narrow the scope of a study. For example, the scope may focus on specific variables, specific participants, specific sites, or narrowed to one type of research design (e.g., ethnography or experimental research).

The following delimitations were chosen by the researcher and implemented to aid in adhering to the scope of the study:

1. This study was conducted between August, 2021 and October, 2021 during the COVID-19 pandemic. This may have skewed the data as many Minnesota districts continued via distance learning while many other Minnesota districts transitioned to in-person formats for the start of the academic year and may not have been able to provide authentic and typical mentorship supports.
2. Data gathered through the online questionnaire focused solely on specific themes of mentorship (forms, content, characteristics) versus a broader exploration of other themes found in related literature.
3. Participants were required to have completed their first, second, or third year of teaching with an initial licensure in Special Education.
4. Participants were required to have been offered and accepted a mentor during their first, second, and/or third year of teaching.
5. The research study utilized a quantitative methodology, focusing specifically on basic descriptive statistic to analyze the gathered data and consisted of percentages and frequency counts.

The purpose of this study was to explore the influence that mentorship programming may have on retention rates of beginning special education teachers in Minnesota and to better understand what constituted effective mentoring program supports for new teachers in the profession. The state of Minnesota historically had no requirement that all new teachers received induction or mentoring support, but the policy in place did encourage individual school districts to work to develop appropriate and viable mentoring programs for teachers new to the profession and the district (Minnesota Statute § 122A.70, 2020). However, Minnesota statute § 122A.70

was amended in July, 2021 to require rather than encourage school districts to create teacher mentorship programs for all teachers new to the profession (Minnesota Statute § 122A.70, 2021).

Definitions of Terms

The following definitions of terms used in this study are provided for further clarification.

Teacher Turnover: The situation of being employed by a particular school as a licensed teacher for a year, but not in the following year.

Teacher Attrition: For the purpose of the study, teacher attrition was defined as teachers leaving the profession. Teacher attrition often included teachers changing specialties, transferring to another school, or leaving the profession altogether.

Beginning Teacher: For the purpose of the study, a beginning teacher is a public-school teacher with three or fewer years of teaching experience.

Teacher Retention: For the purpose of the study, this refers to teachers who remain in their respective schools as teachers from one school year to the next school year.

SET: For the purpose of the study, this refers to special education teachers.

Induction: For the purpose of the study, this refers to Serpell's (2000) broad-based view of induction as "a helping mechanism for beginning teachers...a process that begins with the signing of a teaching contract, continues through orientation, and moves toward establishing the teacher as a professional" (p. 2).

Mentorship: For the purpose of the study, this refers to the practice by veteran teachers of nurturing behaviors and skills that allow beginning teachers to approach teaching as "an inquiry process" or exploration that is "assisted by an experienced other" found in the mentor.

Study Outline

Chapter One introduced the study, statement of the problem, purpose of the study, research questions, conceptual framework, assumptions of the study, delimitations, research design, and definitions of terms. Chapter Two provides a review of related literature which explores special education teacher (SET) shortages, attrition, and mentorship. The literature review then discusses in more detail three themes of mentorship and their influence on SET retention rates. These are 1) the forms of mentorship supports provided, 2) the categories of mentorship support provided, and 3) the characteristics of those who provide the mentorship supports. Chapter Three describes the methodology of the study including an introduction, description of participants, human subject approval, instrument(s) for data collection and analysis, research design, and procedures and timelines. Chapter Four summarizes results and provides answers to the research questions. Finally, Chapter Five provides conclusions and recommendations.

Chapter II: Literature Review

One of the most important challenges in the field of special education is developing a qualified workforce and creating work environments that sustain special educators' involvement and commitment.

Billingsley, 2004, pg.39

In 2004, Congress reauthorized the Individuals with Disabilities Education Act (IDEA) and most recently amended the IDEA through Public Law (PL) 114-95, the Every Student Succeeds Act (ESSA), in December 2015. The IDEA ensures that all children with disabilities are entitled to a free appropriate public education (FAPE) to meet their unique needs and to prepare them for opportunities to pursue further education, to secure gainful employment, and to enjoy and experience independent living (IDEA, 2004).

Prior to the passing of federal legislation, over 4 million children with disabilities were denied appropriate access to public education by being prohibited from entry into public school altogether, while others were placed in separate classrooms away from peers, or in regular classrooms without adequate support for their special needs (Katsiyannis et al., 2001). Although the passing of IDEA has wholly benefited students with special needs (IDEA, 2004), securing and retaining fully qualified and appropriately licensed special education teachers (SETs) to provide FAPE as mandated by IDEA continues to be problematic (Aragon, 2016).

Since the passing of PL 94-142 in 1975, several significant variables have hindered improvements in the field of special education in terms of teacher preparation and continued professional development to include a continual shortage of qualified personnel to deliver special education services (Sutcher et al., 2016) and the disparate hiring and placement of well-prepared special education teachers (Garcia & Weiss, 2019b).

In the review of related literature on teacher retention rates and successful mentorship support programs for beginning special education teachers, the following themes of mentorship emerged as having an influence on teacher retention rates: 1) the forms of mentorship support provided, 2) the categories of mentorship support provided, and 3) the characteristics of those who provide the mentorship supports. This review of literature will begin with an exploration of research on the shortage of qualified personnel in special education and the factors contributing to the exodus of educators from the field of special education. It will then discuss teacher induction and mentorship and conclude with an examination of the above noted themes of new special education teacher mentorship as specific factors that may contribute to increased SET retention rates.

Special Education Teacher Shortages

McLeskey et al. (2004) reported special education teacher (SET) shortages have been chronic, persistent, and critical. Throughout the entire decade of the 1990s, over 30,000 SET positions were filled by non-certified teachers, and in 2000–01, over 47,000 (11%) of those filling special education teacher positions were not certified to teach in the subject area (McLeskey et al., 2004). In a 2021 report by the US Department of Education, it was noted that 49 states and the District of Columbia report special education teacher shortages, to include 98% of the school districts in the country (US Department of Education, 2021). In the first Annual Report to Congress on IDEA, Parts B and C, 2019 (Davis, 2020), data gathered indicated that during the 2016-2017 school year, a total of 27,644, or 8.1 %, of the 341,695 full-time equivalent (FTE) special education teachers who provided special education and related services for students ages 6 through 21 under IDEA, Part B, were not highly qualified.

According to research by McLeskey et al, (2004), two primary factors fueled special education teacher shortages: 1) too few SETs are completing comprehensive teacher preparation programs, and 2) too many new SETs leave the field of special education each year. In a 2016 report by the Education Commission of the States, it was reported that, of those individuals who enter the teaching profession, many report overall job dissatisfaction, a loss of autonomy, and limitations in feedback, recognition, advancement, and reward as reasons for leaving the profession (Aragon, 2016).

The reported elevated attrition rate of special education teachers added to the teacher shortage concerns that have been well-documented over the past several decades as administrators and policy makers worked to understand and ameliorate factors that lead to SET shortages in the profession (Garcia & Weiss, 2019a). The issues surrounding the SET shortage were very complex, but research indicated that attrition was a major contributor (Ingersoll, 2001).

In a recent update to the landmark study of the American Teaching Force, Ingersoll et al., (2018) reported that the American teaching force was, in fact, “ballooning” rather than shrinking (p 6). Data from the report indicated that, from school years 1987-88 to 2015-16, total K-12 student enrollment in the nation’s schools (public, private, and charter combined) rose by 20%. During the same time period, however, the number of teachers employed in schools increased at over three times that rate, by 64% (Ingersoll et al., 2018). When reporting specifically on special education teachers, Ingersoll noted:

The data also indicate that a significant source of the ballooning has been the growth of special education, likely linked to changes in the Individuals with Disabilities Education Act, the main federal special education legislation. The number of public-school teachers

whose main field was special education increased by 89 percent, compared to 58 percent for general elementary school teachers. Special education classes average about half the size of typical classes in elementary and secondary schools, and special education is a relatively large field. Hence, the increase in special education teachers alone accounts for about 14 % of the increase in the public-school teaching force. (p. 6-7)

Comparatively, approximately 13% of licensed and qualified special education teachers leave the profession each year (Carver-Thomas & Darling-Hammond, 2017) providing a potential zero-sum gain. Each year, beginning special education teachers entered the profession and subsequently left in large numbers for teaching positions in general education, or they left the field altogether, thus creating a well-documented revolving door into and out of the teaching profession (Ingersoll, 2001).

When comparing special education teacher attrition rates, from 2013 to 2021, SPED attrition had nearly doubled (Billingsley & Bettini, 2019; Buttner, 2021). In fact, in their 2017 report on Teacher Turnover, Desiree Carver-Thomas and Linda Darling-Hammond stated that, when compared to general education teachers, special education teachers left the profession at a rate 46% higher than their general education counterparts.

In a report by the Minnesota Office of the Legislative Auditor, (Nobles, 2013) it was reported that, in Minnesota, the special education student population had grown by 10% in five years. Concurrently, the number of teachers with the appropriate qualifications to teach special education had dropped by nearly the same percentage.

In 2017, the Minnesota Office of Higher Education reported that there were statewide license shortage areas in nine of the 13 IDEA disability categories. Additionally, data from this

report also indicated that there were special education teacher shortages across all economic development regions in the state of Minnesota (MN OHE, 2017). Current data further indicated that SETs in Minnesota were in a high percentage group of those educators who teach on special permission, which included those who had been given permission to teach in a licensure area without having the full qualifications to teach in that field (MN OHE, 2017). For example, 10.4% of ASD teachers in Minnesota were teaching with special permission or out of compliance. In 2019, 324 Minnesota teachers of students with emotional and behavioral disorders, 526 teachers of students with mild handicaps, and 255 Minnesota teachers of students with learning disabilities worked under special circumstances or out of compliance (Wilder Research, 2019). Comparatively, 38.3% of all licensed K-12 EBD teachers (1,783) held an EBD license in Minnesota but were not teaching in the licensure area (Wilder Research, 2019).

Special Education Teacher Attrition

The concerns related to special education teacher shortages are not new. Administrators and policy makers have worked for more than 20 years to understand the factors that lead to SET shortages in the profession (Billingsley & Bettini, 2019). The issues surrounding the SET shortage are very complex, but research indicated that attrition was a major contributor (Ingersoll, 2001). Not only did attrition directly contribute to special education teacher shortages, but it also created costs for the schools the teachers leave behind (Carver-Thomas, & Darling-Hammond, 2017). Estimates have been reported that it cost more than \$20,000 to replace each teacher who left an urban school district. These costs were not recouped if teachers left within one or two years after being hired (Carver-Thomas, & Darling-Hammond, 2017).

Most importantly, high attrition rates reduced student achievement levels for students whose classrooms were directly affected, as well as for other students in the school (Carver-

Thomas & Darling-Hammond, 2017). Evidence suggested that special education teachers were more likely to depart than any other teacher group (Ingersoll, 2001). SETs entered the field and subsequently left in large numbers for teaching positions in general education, or they left the field altogether, thus creating a well-documented revolving door into and out of the teaching profession (Ingersoll, 2001). This phenomenon often negatively impacted students affected because when a teacher left a school, they were often replaced by a less-skillful teacher (Ronfeldt et al., 2013). This loss of experienced and qualified SETs was especially troublesome, as those teachers with more intensive preparation and experience elicited stronger student achievement gains than their less experienced and less qualified peers (Feng & Sass, 2013).

According to Sutchter et al. (2016), there was agreement among researchers that teacher turnover was to be expected and that some level of turnover could, in fact, be beneficial as teachers found schools or professions that demonstrated a good fit. However, Sutchter et al. (2016) further noted that teacher turnover took a well-documented toll on schools and students, both in the general education and special education arenas. For example, when teacher attrition or turnover led to teacher shortages, affected schools often reacted by hiring inexperienced or unqualified teachers, increasing class sizes, or dropping classes altogether, all of which could negatively impact student learning (Sutchter et al., 2016). Further, as reported by Carver-Thomas & Darling-Hammond, (2017), special education teacher turnover rates were reported as greater than those of most other categories of teachers. SETs had about the same turnover rates in Title I schools as they did in non-Title I schools. However, in high-minority schools, SET turnover rates were found to be considerably higher than turnover rates in low-minority schools, at 19.9% versus 10.8% (Carver-Thomas & Darling-Hammond, 2017). Special education teachers in high-minority schools were also more than 3.5 times more likely to be certified in alternative pathway

programs than special education teachers in low-minority schools, at 24.7% versus 6.9% (Carver-Thomas & Darling-Hammond, 2017).

Attrition research (Billingsley, 2004) identified several key characteristics and qualifications that influenced special education teachers' decisions to leave special education: 1) younger and less-experienced SETs were more likely to leave than their older, more experienced colleagues, 2) uncertified SETs were more likely to leave than certified SETs, 3) SETs with higher test scores (e.g., National Teacher Exam) were more likely to leave than those with lower overall scores, and 4) teachers' personal circumstances (e.g., pregnancy, a family move, a decision to stay home with children) often contributed to increased attrition rates (Billingsley, 2004).

In research by Hagaman and Casey (2018), it was noted that many new special education teachers listed specific factors such as stress related to their assigned role, a clear lack of cooperation and support from teachers and administration, large caseload numbers, lack of effective and meaningful training or professional development, lack of appropriate skillset or qualifications (e.g., those on provisional licensure) or difficult working conditions in a school (e.g., too large of caseload, lack of respect in the building, lack of administrative support) as primary reasons for teacher turnover. Further, Russ et al., (2001) stated that new SETs reported that heavy caseloads or caseloads with an abundance of high needs students caused significant stress in their day-to-day routines. Some of the special education teachers stated that specialized training related to high needs students could have helped alleviate some of the listed stressors. For others, the overall number of students on their caseload directly contributed to their difficulty with scheduling (e.g., paraeducator schedules, intervention/instruction schedules, IEP meetings)

which, in turn, negatively impacted their ability to perform other job responsibilities (Russ et al., 2001).

In a 2015 report by the Minnesota Department of Education, it was noted that the state was having trouble filling licensure areas in its school districts. The top six that were “impossible” to fill were in the field of Special Education and were noted as Emotional and Behavioral Disorders, Autism Spectrum Disorders, Developmental Disabilities, Specific Learning Disabilities, Speech Language Pathology, and Early Childhood Special Education (MN DoE, 2015b).

As shown in Table 1, the 2021 Minnesota Teacher Supply and Demand Report noted three of the top five licensure areas with the largest numbers of Tier 1, Tier 2, or Out-of-Field permissions were in the field of Special Education.

Table 1

Reported Out-of-Field Placements in Minnesota

Licensure Area	Placements
Elementary Education	746
Academic and Behavioral Strategist	657
Emotional Behavior Disorders	513
Career and Technical Education	458
Autism Spectrum Disorder	346

Teacher retirements and lower numbers of candidates graduating from accredited teacher preparation programs had a clear impact on the teacher shortage, but attrition did as well, and data indicated that this was a greater problem in teaching than in other, comparable professions (MN DoE, 2015a).

In a report by the National Commission on Teaching and America’s Future, researchers posited that overall teacher shortages (both general education and special education) were caused

largely by attrition (Achinstein et al., 2010). Researchers noted that retaining in-service teachers was a greater problem than training new teachers or pre-service teachers and should be seen as a key to solving the teacher shortage issue (Achinstein et al., 2010). In their 2003 study, Darling-Hammond and Sykes stated that, in the coming years, the main concern related to overall teacher attrition rates would not be producing more new teachers. The main concern would be the exodus of beginning teachers from the teaching profession. They noted that, as of 2003, 30% of teachers reported leaving the profession within five years (Darling-Hammond & Sykes, 2003).

Minnesota mirrored this national trend of mass exodus from education. While no disaggregated data specifically for Special Education teacher attrition rates in Minnesota was found in the research of related literature, the 2021 MN Biennial Teacher Supply and Demand report noted that approximately 11% of all Minnesota teachers were no longer teaching in Minnesota after their first year, 17% left teaching within two years of entering the profession, 22.5% left within three years, and nearly 33% left within five years of entering teaching. The 2021 Biennial report further noted that 41.9% of MN school districts considered the teacher shortage to be “a serious problem” (pg. 13). Further, 57.6% of school districts in the state reported the availability of teachers compared to five years ago to be significantly less with 12.7% of districts reporting that they needed to cancel courses per programs because of the lack of teachers to cover the assignments (MN DoE, 2021).

Special Education Teacher Induction

The goal of induction programs is to “both enhance and prevent the loss of teachers’ human capital, with the ultimate aim of improving the growth and learning of students” (Ingersoll & Strong, 2011, p. 203). Harry K. Wong (2004) defined teacher induction as being “a process—a comprehensive, coherent, and sustained professional development process—that is

organized by a school district to train, support, and retain new teachers and seamlessly progresses them into a lifelong learning program” (p. 42). Although induction had received a great deal of attention in general education since the 1980s, significantly less was known about induction in the area of special education. There was much related literature on teacher induction and mentoring in general education (Arends & Ragazio-DiGilio, 2000; Gold, 1996; Howe, 2006; Wang et al., 2008), with some focused specifically on mentoring and standards-based reform (Wang & Odell, 2002) as well as the effects of induction on teacher retention (Guarino et al., 2006; Strong, 2005). However, because there was no federal mandate on what induction support should entail, induction programs varied from state to state, and district to district, and the programs that were implemented tended to reflect the school culture and specific needs of the personnel (Kaufmann, 2007). Research indicated that new teachers, upon hire, were “expected to perform the full complement of duties immediately, learning as they go along” (Breux & Wong, 2003, p. 8).

In research by Espinoza et al., (2018), it was reported that implementation of specific strategies designed to target improving retention rates of new special education teachers could help to alleviate SET shortages. Evidence suggested that implementing meaningful and appropriate induction programs and supports for new SETs could be a viable and highly effective practice to aid in placing and retaining well-prepared SETs in the classroom. (Espinoza et al., 2018.)

In studies by Whitaker (2000), Israel et al. (2013), and Espinoza, et al. (2018), research showed that the first one to three years of a new teacher’s career required a quick transition from theory to practice. In a 2003 study for the Center on Educational Policy, Mandlawitz noted that the first three years of teaching represented a critical time-period to understanding and effecting

the attrition rates of special education teachers. New special education teachers often faced momentous challenges as they began the complicated and multi-faceted work of teaching while they were still developing the fine art of teaching. In addition to learning to become effective teachers, new SETs also needed to learn to work collaboratively with colleagues, adhere to administrative guidelines and mandates, manage paraprofessionals, and interact supportively with parents all while maintaining strict due process timelines and guiding children in their growth toward meeting goals and objectives. Further, new SETs faced significant challenges as they navigated the special education landscape, fraught with IEP writing and implementation, assessments and evaluations, meetings with administration, ongoing formative data collection and analysis, and more all while assuming the complex work of teaching (Espinoza, et al., 2018).

New special education teachers often found the demands of the first years to be immense and overwhelmingly stressful, and whether these teachers thrived in their roles and remained in the field as special educators depended, at least partially, on the extrinsic supports they received from their colleagues and administrators (Billingsley, et al., 2009). This support was often in the form of induction and mentorship (Israel, et. al, 2014). Special education teacher induction programs were specifically designed to provide novice SETs with appropriate professional learning opportunities and explicit guidance to aid in their development as highly effective teachers (Israel, et. al, 2014).

In 2016, Woods reported that 29 states required new teachers (general education and special education) to participate in some form of induction or mentoring program supports and, as a result, more beginning teachers received such support than ever before. By 2019, this number had risen to 31 states which required induction or mentorship support for new teachers (ECS, 2019). Research by Goldrick et al. (2014) further indicated that the breadth and financial

support of these state policies varied greatly across the country; however, they were created and implemented to provide induction support to beginning teachers in the profession and to ensure the assignment of a mentor or coach, thereby improving the beginning teachers' quality of instruction and positively impacting student learning (Goldrick et al., 2014). Even though more than half of the states (31) required some type of mentoring or induction (ECS, 2019), only 17 states required an induction program of at least two years, seven states required induction and/or mentoring for three years or no more than three years, and few differentiated between induction and mentoring for special education teachers (Goldrick et al., 2014).

As seen in Table 2, 271 Minnesota public school districts self-reported the following data gathered in 2014-15 related to their teacher induction programming (MN DoE, 2015b):

Table 2

Reported Length and Elements of Minnesota Induction Programs (n=271)

Statewide Teacher Induction Activities	<i>n</i>	%
<i>Induction Program Length</i>		
Program for Year 1 Teachers	233	86
Program for Year 2 Teachers	87	32
Program for Year 3 Teachers	46	17
<i>Induction Components</i>		
Collaboration time expectations for new teacher and mentor	222	82
Formative assessments to guide their professional growth	138	51
New teacher observations of master teachers	130	48
New teacher orientation to district, school, and classroom	266	98
New teacher seminars/workshops	157	58
Observations conducted by a mentor	14	54

The state of Minnesota historically had no requirement that all new teachers received induction or mentoring support, but the policy in place did encourage individual school districts to work to develop appropriate and viable mentoring programs for teachers new to the profession and the district (Minnesota Statute § 122A.70, 2020). Data from the Minnesota Department of

Education's 2015 staff development report noted that total statewide expenditures for staff development reduced from \$155,202,310 in 2008-09 to \$95,446,660 in 2014-15 (MN DoE, 2015b).

Minnesota statute § 122A.70 was amended in July, 2021 to require rather than encourage school districts to create teacher mentorship programs for all teachers new to the profession (Minnesota Statute § 122A.70, 2021). The state enacted a grant application program for all districts and schools interested in developing or expanding on mentorship programming. This demonstrated a shift in statewide support of beginning teachers when compared to traditional statewide support data (Minnesota Statute § 122A.70, 2021).

Research by Espinoza et al. (2018) pointed to several key elements of high-quality induction that were most strongly associated with reduced levels of teacher attrition (both general education and special education). These included having a mentor from the same field, common planning time with other teachers in the same subject, regularly scheduled collaboration with other teachers, and being part of an external network of teachers. (Espinoza et al., 2018). Research by Cornelius, et al. (2019) further affirmed the benefit to beginning special education teachers of being mentored by a colleague who had received specialized training in special education when it was not feasible to pair beginning SETs with veteran special education mentors in the field.

Further research (Smith & Ingersoll, 2004) of induction based on national data found that beginning teachers who received a comprehensive set of induction supports, including the elements above, stayed in teaching at rates more than twice that of teachers who lacked these supports (Smith & Ingersoll, 2004). Research further indicated that new SETs ranked mentorship

as their number one requested induction support, followed by disability-specific training and training on district policies (Hagaman & Casey, 2018).

Special Education Teacher Mentorship

In the review of related literature on effective mentorship programs for special education teachers, the impact of a positive and nurturing mentorship experience on a new SET's decision to remain in the field of special education was evident (Madigan & Schroth-Cavataio, 2012; Rowley, 1999). Madigan & Schroth-Cavataio (2012) reported:

A mentor's role is multifaceted. Building a relationship is the cornerstone of working with beginning special education teachers. Both supportive and collaborative relationships are crucial to teacher success and student achievement. Relationships that are supportive provide guidance and encouragement helping to create a safe environment where learning takes place. (p 108)

New teachers (general education and special education) struggled with a wide variety of issues, such as successful classroom management, working with difficult parents, thriving without sufficient support, dealing with apathy from colleagues, and managing problems with student behavior (Gold, 1996). Special education teachers, like their general education counterparts, needed to effectively engage in educational planning, clearly understand the curriculum, and quickly become familiar with school routines (Billingsley et al., 2004). SETs, however, had myriad responsibilities and concerns beyond those as they needed to apply additional skills and training to working with students with significant learning and behavioral difficulties (Gold, 1996).

In related literature, (Boyer & Gillespie, 2000; Kilgore & Griffin, 1998; Billingsley et al., 2004; Gersten et al., 2001) researchers documented problems of practice of beginning special

education teachers such as managing due process paperwork, making necessary accommodations and modifications for instruction and testing, effectively and accurately developing and monitoring IEPs, clearly understanding the system they are part of, flexibly scheduling students to address the need for inclusion, continually collaborating with teachers, paraprofessionals, parents, and related services personnel, and managing feelings of exhaustion. Billingsley et al. (2004) reported that most beginning general education and special education teachers (76.1% combined) indicated that paperwork and routine duties negatively impacted their plans to remain in the teaching profession to a moderate or great extent.

Related research also demonstrated that effective mentoring relationships contributed to the reduced stress levels of beginning teachers (Galvez-Hjornevik, 1985), improved overall teacher effectiveness (AIR, 2015), increased new teacher job satisfaction (Holloway, 2001), and assisted the professional development of beginning teachers (Darwin, 2000). Done well, effective mentoring became the bridge between preservice learning and classroom experience and guided the beginning special education teacher toward a deeper and more impactful teaching practice mitigating what Charlotte Danielson (1999) called a “sink or swim in the deep end of the pool” culture (p 251-7). Effective mentoring further guided beginning teachers through the stages of learning, growing from a level of conscious incompetence to a level of conscious competence (Peel & Nolan, 2015).

Historical Foundations of Mentorship

The term mentor had its origin in Homer's *Odyssey*. In Homer's epic poem about the Trojan War, Odysseus relinquished the responsibility for educating and protecting his son, Telemachus, to his trusted friend, Mentor (Whitaker, 2000). While Odysseus was fighting in the Trojan War, Mentor provided nurturing guidance, advising, and wise counsel to Telemachus,

helping him to flourish intellectually and emotionally as a young man. Mentor was, to a large degree, responsible not only for Telemachus' education, but for the "shaping of his character, the wisdom of his decisions, and the clarity and steadfastness of his purpose" (Bardness, 1995, p.3). Mentor (and the goddess Athena) ultimately guided Telemachus in his journey to find his father (Whitaker, 2000, Barondess, 1995). During this journey, Telemachus left the safety of his parents' home in order to mature and to develop into a wise and independent man, and Mentor guided him in this critical transformation. Definitions of mentoring and mentors have grown from this metaphor of mentors as a guide and influence our practices in schools today (Whitaker, 2000).

In a study on mentorship by Daniel J. Levinson (1978), it was reported that the mentoring relationship between 40 male subjects and their mentors was shown to be one of the most important relationships an individual can experience in early adulthood. The mentor, who was typically several years older and demonstrated greater experience and seniority in the world the mentee was entering, served various roles for the mentee to include teacher, sponsor, advisor, and model (Levinson, 1978). The mentor strove to enhance the mentee's individual skills and overall intellectual development. As a sponsor, the mentor endeavored to facilitate a smooth entrance into the profession. As a host and guide, the mentor helped to initiate the mentee into their new professional role, acquainting them with the customs, culture, resources, and values of the profession. As an advisor, the mentor gave counsel and moral support throughout the mentee's journey. The mentor provided direction and insight via their own achievements, providing the mentee with an exemplar to model (Levinson, 1978).

Theoretical Frameworks of Mentorship

Bandura (1989) proposed a theory of self-efficacy which was rooted in his Social Learning Theory. This theory of self-efficacy suggested that humans “exercise control over events that affect their lives” (p. 1175). Self-efficacy was defined as a person’s set of beliefs that help to determine how well he or she can accomplish a plan or work through given situations. Mentoring had long been linked to Bandura’s (1971) theories as there was a level of understanding between the mentor and the mentee, as “the observer acquires mainly symbolic representations of modeled activities” (p. 6). This meant the mentee would directly observe the mentor’s behaviors, derive personal meaning from the behavior, and then either mirror the behavior or formulate substitute behaviors. Additionally, Bandura (1971) referred to those who were being observed as the models and those who were modeling behaviors and expectations as the mentors. The behaviors being modeled were done intentionally so mentees learned how to assimilate into the teaching profession. According to Bandura, “the motivation to identify with a particular model is that they have a quality which the individual would like to possess” (McLeod, 2016 p.2).

To further understand the connection between Bandura’s (1971) theory and mentoring programs, Chapman (1984) related Bandura’s (1971) Social Learning Theory to the attrition rates of new teachers (general education and special education). Chapman developed a model that combined inquiry and training with support from school administration which subsequently affected retention. Chapman believed that a new teacher’s ability to function could be explained through his or her personal characteristics and environmental situations (Chapman, 1984). Both Bandura (1971) and Chapman (1984) posited that learning was a social process and social interaction could frame one’s perception, no matter if it was a positive or negative experience.

How this process unfolded depended heavily on the cumulative effect of the social interactions between the new teachers and their communities of practice during the induction period.

Wenger-Trayner (2015) defined communities of practice as groups of people who shared a mutual concern or a clear passion for something they did and, through intentional and regular interaction, learned how to do it better (Wenger-Traynor, 2015).

In Kram's (1988) foundational work on Mentor Role Theory, the author looked closely at the relationships and career supports in the workplace that could influence an individual's performance and their desire to stay in their careers. When focusing specifically on special education mentoring, Kram's career supports could have been interpreted as addressing the professional and instructional needs of new special education teachers, such as scheduling, developing and implementing individualized education programs, adhering to due process timelines, effectively managing behaviors, facilitating instructional strategies, and collaborating with paraeducators, parents, and colleagues (Algozzine et al., 2007; Griffin et al., 2003; White & Mason, 2006).

Definitions of Mentorship

When reviewing literature related to mentorship of special education teachers, it became clear that there were many divergent views and definitions of mentorship. In related literature, the most frequently cited roles of mentors involved emotional support, to include providing strategies for handling job-related stress of the first years (Gold, 1996; Whitaker, 2000), and specific professional supports, to include assistance with instruction, aligning instruction to the content standards, behavior management, adherence to due process, and understanding schoolwide policies (Algozzine et al., 2007; Heubeck, 2021).

Whitaker (2000) reported that mentoring in the field of education focused mainly on guiding the new teacher in making a successful transition from being a student who had spent years learning about teaching to being the teacher in charge of a classroom. This reflected the belief by Hagaman and Casey (2018) that a bridge from preservice to in-service teaching was a vital component of induction and mentoring new teachers in the field. According to Schlechty (1985), mentoring was a vital component of any successful induction program. Since there was no standardized format of induction among school districts and states, and there was no common definition of terms, there were times when the term mentoring was used interchangeably with induction (Woods, 2016).

As reported by the Glazerman et al., (2010), comprehensive induction programs tended to be initiations or introductions to a position which provided beginning teachers with the needed supports and tools for beginning their teaching careers as well as specific guidance focused on helping them meet expected performance standards (Glazerman et al., 2010). Induction programs may have included mentoring supports, planning assistance, professional development opportunities and performance evaluation. Mentors, conversely, tended to serve as advisors and guides for beginning teachers (Glazerman et al., 2010). Mentors had more overall experience in the teaching profession and tended to understand the processes and procedures of the educational system. Mentors focused on providing wisdom, building trust, and engaging in one-on-one support as advisors to the beginning teacher (Glazerman et al., 2010).

Models of Mentorship

In Kram's (1988) foundational work on Mentor Role Theory, the author looked closely at mentoring relationships that could influence an individual's performance and desire to stay in their careers. Kram (1988) asserted that mentoring relationships evolved over time and

eventually resulted in either separation of the mentor/mentee relationship or the development of a more collegial relationship between mentor and mentee. This development grew from the type of mentorship provided.

McLaughlin (2010) noted there were several types of mentoring relationships that ranged from formal to informal. Formal mentoring programs typically had a set time frame, which were often restricted by funding (Bartlett & Johnson, 2010) and consisted of assigned relationships, often affiliated with organizational mentoring programs. In well-designed formal mentoring programs, McLaughlin (2010) stated there were set program goals, schedules, training (for mentors and mentees), and evaluation. Often, in some of these highly structured programs, the mentor could be someone from a wholly different discipline, even a different department.

Conversely, informal relationships organically developed on their own between stakeholders. McLaughlin (2010) asserted that what had been historically seen as an:

Informal, unofficial, voluntary, mutually agreeable, and self-selected interaction between two people has become a program—an institutionalized strategy for trying to force what some observers think can only come about naturally. And, certainly, the idealized vision of the mentor devoting scarce time and energy to the mentee, and establishing a lifelong collegial relationship, almost certainly requires some kind of fit, both in terms of research interests and personal style. (pg. 876)

Wang and Odell's (2002) meta-analysis of mentoring research posited that most mentoring programs were designed from and executed in humanistic and/or technical terms, rather than from the perspective of directly supporting professional learning. When using a humanistic orientation, the role of mentoring was seen to provide emotional support to increase retention rates of beginning teachers (general education and special education) by helping new teachers deal with

the realities and emotional stress of starting a teaching career. Mentors using a humanistic orientation had strong interpersonal skills and were good listeners, tended to be encouraging, and were openminded (Wang & Odell, 2002).

Mentors using a technical orientation tended to take on the role of the local guide to help beginning teachers adapt to their new profession, setting, and environment. In this technical orientation, mentors offered advice, provided suggestions or solutions to problems of practice, explained specific school policies and procedures, and helped new teachers complete required administrative tasks. These functions helped to facilitate the necessary transition from being a university student to being the teacher and a valued member of the school community (Gardiner, 2011).

Feiman-Nemser (2001) noted an alternative form of mentoring which advocated for an educative style and a collaborative approach to improve new teachers' professional practice. The concept of educative mentoring expanded on John Dewey's (1938) construct of educative experiences, which were experiences that encouraged rather than hindered continued growth and tended to lead to meaningful and rich successive experiences (Feiman-Nemser, 2001). According to Dewey's construct (1938), the educator carried the responsibility for strategically organizing the physical and social conditions to allow the learners to have enriching experiences.

In an educative mentoring framework, mentors did more than provide emotional support, strategies, and suggestions. They endeavored to help beginning teachers refine their teaching practice by collaboratively engaging in analysis of classroom events, exploring their classroom environment in increasingly complex and diverse ways, and working together to develop the beginning teachers' disposition of reflective inquiry (Feiman-Nemser, 2001).

Forms of Mentorship Supports

For beginning special education teachers, expectations that centered around learning new curricula, classroom management, due process, inclusion, using technology, individualizing student programs, and being accountable to myriad stakeholders in education become evident on Day One of teaching (Garvey, 2000). Many school districts, acknowledging a need to nurture and support the new generation of teachers, introduced various forms of mentorship supports and programs. In the review of related literature (Garvey, 2000; Inzer, 2005; Whitaker, 2000, Ingersoll and Strong 2011), various forms of mentorship support emerged.

One form of mentorship was the informal mentorship model (Garvey, 2000). This was also referred to as the buddy system of mentoring. In this model, the beginning teacher's competence level typically and eventually reached the level of the mentor. This was a result of the mentorship opportunities not reaching beyond the initial orientation of the beginning teacher. The mentor provided teaching materials, instructional strategies, and curriculum plans for the mentee. This may also have been considered an apprenticeship model. The competence level of the mentor did not have an opportunity to increase under this model. No reflective practice was set into place, and no action research was carried out by mentor or beginning teacher (Garvey, 2000).

Informal mentoring had very little structure or was loosely structured based upon chemistry between two partners who wished to be involved in a mentoring relationship. Informal mentoring occasionally developed into a long-term friendship and was characterized by the natural coming together of a mentor and mentee through mutual friendship and respect for each other (Inzer, 2005). Billingsley (2004) found that 61% of a sample of 1,153 special education

teacher respondents reported that they had received mentoring. Further, 89% of that sample reported that informal support of colleagues was helpful to a moderate to great extent.

In a formal mentorship model, the mentee not only reached the competency level of the mentor but surpassed the established baseline side-by-side with the mentor. The mentor may have shared teaching materials and instructional strategies, but then moved beyond the act of sharing and engaged in the development of materials as a collaborative partnership. Through mutual engagement in reflective practice, action research, collaborative planning, the mentor and beginning teacher grew together professionally (Garvey, 2000). In a formal mentorship model, the mentor supported and encouraged assimilation into the culture of the school and district, developed and implemented a growth plan for the beginning teacher, maintained a positive and nurturing relationship, modeled high-leverage teaching practices and strategies, observed and provided actionable feedback, and encouraged professional growth (Garvey, 2000; Ingersoll and Strong, 2011). Formal mentoring was typically structured and based on a specific objective or goal. It was often measured or evaluated, and participants were connected based on compatibility. A formal mentorship relationship typically lasted for a pre-determined amount of time and then formally ended (Inzer, 2005).

Whitaker (2000) determined from the self-reports of 156 first year special education teachers that the provision of weekly mentor contact time increased overall program effectiveness and that unstructured, informal contacts between mentor and mentee appeared to be more effective than formal meetings and observations. Whitaker's study (2000) also noted six forms of support that effective mentors could provide. These were unscheduled meetings, scheduled meetings, telephone contacts, written communication, observations by the first-year special education teachers' mentor, and observations of the mentor.

Whitaker (2000) further noted that the overall frequency of contact with a mentor was shown to be an important factor which influenced the new special education teachers' satisfaction with mentorship supports provided and their perceived success in the first year of teaching. In Whitaker's study there was a significant correlation between the frequency of mentor contact and perceived effectiveness of the mentorship. She reported that even though frequency alone had not determined the perceived overall effectiveness of the mentoring, to be perceived as most effective, the mentor needed to have contact with the new special education teacher on at least a weekly basis (Whitaker, 2000). Factors that further influenced the frequency and extent of interactions in mentoring included the proximity of the mentor, provided release time for meetings, and routinely scheduled meetings (Whitaker, 2000).

Griffin et al. (2003) concluded that frequent contact between the mentor and mentee, use of mentors who were special educators, and a policy to ensure that the role of the mentor was non-evaluative were components of particularly effective mentoring programs. Similarly, Serpell (2000) noted that creating regular opportunities for interaction between mentor and mentee, both formally and informally, could occur in the form of classroom observations, spontaneous advice, grade-level meetings, and group conversations facilitated by veteran teachers. According to Zey's (1984) Mutual Benefits model, which is drawn from Homan's Social Exchange Theory (1958), an underlying premise of successful mentorship is the belief that the mentor and mentee enter into the relationship and remain part of it as they move forward with the goal of reaching certain outcomes and meeting specific needs for as long as the relationship remain symbiotic (Ingersoll and Strong 2011).

In related literature, (Johnson 2002), several specific but interconnected functions of mentorship prevailed. Kram (1988) noted that these functions centered on two primary areas: the

career and the psychosocial. Career functions were typically focused on career development and included aspects of mentorship that enhanced learning the systems and procedures as well as preparing for professional growth. Career functions tended to include sponsorship of the mentee, exposure and visibility within the systems and culture, coaching, provision of challenging assignments, and adherence to professional ethics (Welfel & Kitchener, 1992; Kram, 1988). Serpell (2000) recommended using formative assessment that informed development of individualized assistance to beginning teachers. Psychosocial functions enhanced the mentee's sense of self-competence, professional identity, and overall effectiveness in their role. Psychosocial functions included role modeling, providing acceptance and confirmation, counseling, and development of a mutual friendship (Kram, 1988; Swerdlick & Bardon, 1988; Wilde & Schau, 1991). Research also indicated that skillful mentors were adept at blending these functions in work with their mentees (Clark et al., 2000; Kram, 1988).

Content of Mentorship Supports

In a comprehensive analysis of the induction process for new special education teachers, Griffin et al. (2003) identified common elements of mentoring programs that were associated with successful first year teaching experiences, including: a) a culture of shared responsibility and support; b) interactions between new and experienced teachers, c) continuum of professional development, d) de-emphasized evaluation, e) clear goals and purposes, and f) diversified content. Griffin et al. (2003) further posited that “providing beginning teachers with opportunities for support, guidance, and feedback during the beginning years appears to be an important aspect of their early professional development, if not an ethical responsibility” (pg. 7).

Researchers (Rosenberg et al., 1997; Whitaker, 2000; Griffin et al. 2003) concluded that frequent contact between the mentor and mentee, use of mentors who were special educators,

and a policy to ensure that the role of the mentor was non-evaluative were components of particularly effective mentoring programs. As reported by Kueker & Haensly (1991), teachers new to the profession often looked for moral support and guidance as they navigated through their first year of teaching (Kueker & Haensly, 1991). In fact, as noted in Whitaker's 2000 report, first-year special education teachers reported emotional support from their mentors as the most effective mentorship support they received (Whitaker, 2000).

Boyer's (1999) study found that new special education teachers wanted procedural and policy information that related to their settings and their positions. The beginning teachers in Lane and Canosa's study (1995) noted that they valued their mentor's expertise in adapting and selecting functional instructional materials for instruction and in their adept use of natural incentives. Maddex (1993), as reported by Billingsley et al. (2009), posited that the most beneficial support that mentors provided to beginning teachers focused on lesson planning, instructional materials, classroom management, instructional strategies and pedagogy, and explicit discussion of curriculum. Gibb and Welch (1998) in their evaluation of the Utah Mentor Teacher Academy found that behavior management was the most frequent area of mentoring support provided.

Research by Anderson et al., (2001) and Billingsley, (2004), noted that the most frequently cited reasons for attrition were problems with administrators, a lack of opportunity to establish interpersonal relationships, a lack of personal and professional support, excessive paperwork, work overload, due process requirements, role conflict, poor school climate, overcrowded classes, lack of planning time, problems with obtaining materials, working with parents, and student behavior.

In a report by the Southern Regional Education Board (2018), it was stated that mentors were effective when they supported their mentees in navigating elements of their new professional lives, such as lesson planning, grading papers and communicating with parents. They acted as information providers for the new teachers (both general education and special education) and supported them by teaching how to log in and use district software, understanding and following district policies and procedures, and completing everyday functions such as using the copier (SREB, 2018).

Effective mentors further supported new teachers by acting as “thought partners” (SREB, 2018, pg. 8). Examples of this included discussions about effective room layouts, as well as assignment creation, dissemination, and grading methods. Mentors supporting at this level also engaged in imagining and creating scripts and materials for working with parents during conferences and meetings (SREB, 2018).

Effective mentors also engaged with new teachers as skill developers. In this way, mentors developed new teacher critical thinking and questioning that could be used as formative assessment. Mentors at this level of support further aided new teachers in differentiating assignments and participated in professional goal-setting sessions, instructional coaching opportunities, self-reflection, and an increased ease in the culture and climate of the school (SREB, 2018).

Rowley (1999) reported that beginning teachers were not often provided opportunities for shared experience, as mentors often limited instructional support to classroom-focused conversations. Although such interaction could be helpful, discussions based on shared experience were even more impactful and enriching. These shared experiences could take different forms such as mentors and mentees engaging in co-teaching or co-planning,

opportunities for mentees to observe their mentors and for the mentors to observe their mentees. Regardless the experience, the purpose of shared experiences was to promote a collegial dialogue centered on enhancing beginning teacher performance and student learning (Rowley 1999).

Schwille (2008) reported that there were common mentoring practices that could be generally housed in two categories: outside practices and inside practices. Outside practices referred to mentoring opportunities that occurred before or after instruction took place by the beginning teacher or when students were not present and the mentor and mentee had time to problem-solve and to reflect on the lessons taught. Schwille, 2008 and Gardiner & Weisling, 2016 noted that outside mentoring practices tended to be the norm for most mentors. These could include:

Quick on-the-fly conversations about challenges, successes, or observed practices, as well as longer, regularly scheduled blocks of time for guided, in-depth reflection and analysis of practice and data. Pairs might work together to create lesson plans; analyze student work; view and discuss video of the mentee, the mentor, or another educator in the classroom; or engage in practice teaching, in which the mentor models or a mentee rehearses an instructional practice outside the classroom. (Weisling and Gardner, 2018, pg. 66)

The other category of mentorship practice, as noted by Schwille, (2008) was inside mentoring. This category of mentorship support tended to be less common as it was perceived as taking a lot of time and effort to do well. Key strategies of inside mentorship included collaborative teaching where the mentor and beginning teacher taught a lesson together and the mentor modeled effective teaching practices while supporting the mentee with some of the

responsibilities of classroom teaching and management (Schwille, 2008). Modeling by the mentor was another facet of inside mentoring in which the mentor demonstrated lessons, strategies, practices, etc. while in the classroom with students. The third facet of inside mentoring was stepping in. This involved the mentor stepping in while the beginning teacher was instructing to provide nonverbal or whispered cues, to pose probing or clarifying questions, or to take over a part of the instruction to model best practice (Schwille, 2008). As noted in Oregon's Department of Education Research Brief (OMP, 2019):

Mentoring provides an opportunity for beginning teachers to build a solid foundation of skills when it comes to instructional practices. Programs have found that beginning teachers are more engaged in the process of joint inquiry with their mentor. Mentors are helping beginning teachers understand the importance of learning from practice while providing tools that are useful for planning lessons. Mentors use observations, feedback and analysis of student work to guide reflective conversations with their mentee. When mentors establish consistent expectations of instructional practices and beginning teachers are provided multiple opportunities to practice instructional strategies, they move from being novice to experts in instructional practices. (pg. 2)

High Leverage Practices and Mentorship

Research by the Council for Exceptional Children and the CEEDAR Center (McLeskey et al., 2017) reported that the use of High Leverage Practices (HLPs) as content of mentorship supports provided a specific and effective framework in which beginning teachers could learn how to differentiate or scaffold instruction for all students in the classroom, including those students with disabilities, learning differences, and language barriers (McLeskey et al., 2017).

McLeskey et al., (2018) found that HLPs were, in fact, foundational in effective

mentoring practices when used to support beginning teachers. For example, HLP #16 (Using Explicit Instruction) overtly taught the steps to understanding and applying an instructional construct or strategy. McLeskey et al., (2017) noted that components of effective explicit instruction included:

1. Direct instruction of new skills or concepts
2. Teacher modeling
3. Concrete examples and visuals
4. Clarity of language and purpose
5. Gradual release of responsibility
6. Immediate corrective feedback

High Leverage Practice #12 (Systematically Design Instruction Toward Specific Learning Goals) was another HLP that was reported to improve effective mentorship opportunities (McLeskey et al., 2018). This HLP included defining expectations and learning goals, breaking tasks down to increase student understanding, providing instruction in a logical sequence that moved students to higher order skills, providing meaningful and appropriate assessment as well as actionable feedback (McLeskey et al., 2017).

As noted by the Oregon Department of Education (ODE, 2019), mentor/mentee interactions using this HLP could have included:

1. the mentor working directly with the beginning teacher to identify appropriate learning goals, to determine instructional level of students, to understand given intervention or Individualized Education Plan (IEP) goals, and to align it to the given curriculum;

2. the mentor guiding the beginning teacher to deconstruct skills into explicit components using strategies such as such as task analysis, chunking information, and making connections to previous skills;
3. the mentor working with the beginning teacher to logically sequence skills and guiding them to encourage activating prior knowledge or schema;
4. and the mentor observing the beginning teacher's lesson and providing actionable feedback to mentee. (OMP, 2019).

Characteristics of Effective Mentors

As reported by the Education Commission of the States (2019), thirty-one states required induction and/or mentoring support for new teachers. Ten states required induction and/or mentoring for one year, 10 states required induction and/or mentoring for two years and seven states required induction and/or mentoring for three years or no more than three years.

A 2018 study (SREB, 2018) noted most states with mandates also required mentors to have taught for a minimum number of years and to have evidence of evaluated instructional effectiveness. They further posited that choosing mentors based solely on criteria such as overall years of experience and evaluation of instruction scores could be misguided (SREB, 2018). While agreeing there was some overlap in these skills and effective mentorship, the researchers noted that mentors needed to also be adept at providing personal and instructional support to adult learners (SREB, 2018).

Whitaker (2000) investigated what beginning special education teachers reported as effective mentoring programs and examined the impact of such programs on new SETs' plans to remain in special education. Whitaker (2000) found that new SETs often preferred mentoring provided through informal relationships to formal mentoring structures. In Whitaker's study,

data indicated that beginning SETs who had effective mentors were more likely to remain in the field of special education. Respondents further indicated that effective mentors had the following characteristics:

1. They were fellow special educators.
2. The mentor / mentee dyad met frequently.
3. The mentor provided emotional support.
4. The mentor shared system information that was related to the teaching environment in general and to special education specifically.
5. The mentor informed the SET of relevant materials and resources. (Whitaker, 2000)

Inzer and Crawford (2005) noted “the mentor is described as being an advisor, counselor, confidant, advocate, cheerleader and listener. The mentor should be confident, secure, sensitive to diversity, and be a good communicator” (pg. 32). As reported by Gibb and Welch (1998), personal characteristics of the mentor played a distinct role in the overall quality and ultimate success of a mentoring relationship. They noted characteristics that teachers believed to be important for special education mentors included being personable, open, caring, friendly, comfortable around others, exuding a positive attitude, presenting as unobtrusive and non-threatening, being available, and being flexible (Gibb and Welch, 1998). Additionally, beginning special educators identified that they needed a mentor who was trustworthy and who would keep their work confidential (Gibb & Welch, 1998).

Johnson (2002) noted that good mentors were interpersonally supportive, encouraging, and poised. They exuded emotional intelligence (Goleman, 1995). In addition to embodying these qualities, highly effective mentors tended to be ethical (Welfel & Kitchener, 1992), psychologically well-adjusted (Cronan-Hillix et al., 1986), and intentional and effective role

models (Clark & Zimmerman, 1986). In short, excellent and effective mentors were kind, healthy, and competent.

Related research (Bay & Parker-Katz, 2009; Kardos & Moore Johnson, 2010) also noted that, when possible, mentors and mentees should be matched by content or grade level which may have proven to have positive effects on the mentee's professional growth and retention. Weisling & Gardiner (2018) reported that mentors must not only be effective teachers, but they must also be able to provide needed professional support such as helping beginning teachers identify and analyze critical problems of practice.

Mentorship and Teacher Retention

Walker (2009) discussed several ways to encourage and keep new teachers in the profession: staff development, technology, administrative support, and an effective induction program. Walker (2009) described the induction/mentorship program as follows:

This should be comprehensive over at least a 3-year period and include having a grade or content specific mentor at the new teacher's school; observing peers' classes, being observed by mentors and one or two peers, and having follow-up conferences shortly afterward; having time to meet and plan with mentors, other new teachers, and/or additional professional as appropriate; and having the time and resources to do individual planning and to obtain suitable materials. (p. 76)

The National Comprehensive Center for Teacher Quality (2007) indicated that new teachers felt a lack of support, were overwhelmed by administrative requirements, or did not feel prepared for the demands of the job. In a 2020 study (Bettini et al., 2020) focusing specifically on students with emotional or behavioral disabilities (EBD) in self-contained classrooms, researchers noted that special education teachers who serve this specific population tended to be

less experienced than their colleagues in less rigorous and demanding roles, experienced higher degrees of teacher burnout, and had higher incidences of attrition than their special education counterparts. As noted by Billingsley & Bettini (2019), the cost of losing special education teachers was highly problematic as it directly and negatively impacted student achievement. McLeskey and Billingsley (2008) reported that the special education teaching profession was highly unstable, which exacerbated the difficulty to recruit and retain new teachers, and to provide meaningful and evidence-based special education programming. Waddell (2010) found that, when focusing specifically on urban educators, attrition rates were historically higher than their non-urban counterparts at 19-26% attrition annually, and attrition after five years hovered at approximately 50% or higher. Because of this, schools continue to allocate funds to the recruitment of teachers Waddell (2010) noted that these monies may be better utilized in the retention of teachers who demonstrate the skills and dispositions needed to be impactful in the urban setting. Further, Waddell (2010) noted recommendations provided by researchers which have been found to positively influence teacher retention rates to include:

1. professional learning communities,
2. mentor programming
3. systemic induction programming

Waddell (2010) also reiterated that employees who feel valued, supported, and needed are likely to exhibit organizational commitment, which in turn, positively impacts employee retention. When employees experience feelings of competence, personal responsibility, opportunities for growth, and personal relationships, they feel indebted to their organization and/or supervisor which can lead to longevity with the organization. Furthermore, when employees identify with their organization, feel cared about by the organization, and feel

ownership within the organization they become more loyal and committed, which leads to increased employee retention (pg. 71).

Effective Mentor / Mentee Relationships

Podsden and Denmark (2007) stated that “A central quality of mentoring is that it is intentional, nurturing, insightful, and supportive” (pg. 29). Similarly, Wildman et al., (1989) noted qualities that “Mentors must thus be excellent professional role models and possess qualities such as openness, non-judgmental attitude, flexibility, honesty and willingness to be available to a new teacher” (p. 489). Conversely, Lucas (1999) stated that if mentoring programs were to be instrumental in lowering new teacher attrition rates, it was vital that administrators must expand mentorship programs beyond the socialization model by partnering new teachers with competent mentors who can assist with the “ongoing process of planning and teaching lessons, reflecting on the results, and then making informed changes” (Lucas, 1999, p. 45). Brock (1999) provided several steps that principals must consider to successfully develop and manage an effective mentorship program:

1. defining the needs of beginning teachers,
2. selecting mentors,
3. defining mentors’ roles,
4. providing training for mentors,
5. staying personally involved with both mentors and protégés, and
6. evaluating the program.

Rowley (1999) offered six essential qualities of a good mentor. Rowley asserted that good mentors were committed to the role of mentoring. They were accepting of the beginning teacher, skilled at providing instructional support, and effective in different interpersonal

contexts. Good mentors were also a model of continuous learning and they communicated hope and optimism (Rowley 1999). Carl Rogers (1951) noted that an individual could not teach another person directly or force another person to learn; rather, that individual could only facilitate another's learning. He further held that teacher's acceptance in taking on a mentorship role where the mentor acted as the guide on the side rather than the sage on the stage was instrumental to his construct of experiential learning which was connoted as student-centered, non-threatening, and unforced learning (Rogers, 1951). Rogers believed that teachers had a profound impact on their effectiveness when focusing on fostering interpersonal relationships. Training in Rogers' tenets of congruence, unconditional positive regard, and empathy were shown to create a high level of trust in the teacher/student dyad (Rogers et al., 2014).

Giebelhaus and Bowman (2002) reported that effective mentors required appropriate training and support to successfully mentor teachers new to the field. They further found that mentors who received explicit training and had been given specific guidelines to follow had a significantly more positive impact on new teacher development than those with no training. Additionally, mentors needed to be trained to provide beginning teachers with meaningful and actionable feedback to encourage professional growth (Giebelhaus and Bowman, 2002).

Mentorship in Minnesota

In Minnesota, 52.5% of all teachers holding a teaching license (general education and special education) were not actively working as a teacher in a public school (Wilder Research, 2019). The Wilder Report (2019) and Goldrick (2016) further indicated that the state had no required participation mandate that all new teachers must receive mentoring support, yet approximately 84% of school districts in the state reported having some formalized support program for new teachers in the field. The state did, however, encourage its school districts to

create onsite mentoring programs for beginning teachers who were new to the district (Goldrick, 2016). Goldrick (2016) further reported that state law required school districts to develop a probationary teacher peer review process that could include trained observers serving as mentors for new teachers in the field. The report stated that 251 educational entities in Minnesota reported having some form of teacher induction program. Conversely, 16% reported having no formal new teacher induction program in place (Goldrick, 2016). Goldrick (2016) further noted that Minnesota required school districts to set aside two percent of their basic state education revenues for staff development, of which induction and mentoring was an allowable activity. The Minnesota Department of Education's staff development data showed that 87 % of school districts operated some type of teacher mentoring program, although only one-third of them extended that support beyond first-year teachers (Goldrick, 2016). The state had also created a set of induction guidelines but did not provide any criteria for the appropriate selection or training of mentors in the field (Goldrick, 2016).

The state of Minnesota prior to July, 2021 had no requirement that all new teachers received induction or mentoring support, but the policy in place did encourage individual school districts to work to develop appropriate and viable mentoring programs for teachers new to the profession and the district (Minnesota Statute § 122A.70, 2020). The Minnesota statute was revised by law enacted during the 2021 first Special Session to require rather than encourage development of mentorship programs for teachers new to the profession or district (Minnesota Statute § 122A.70, 2021).

In a review of state policies and recommendations from national agencies and non-profits, the Educator Policy Innovation Center (EPIC, 2019) provided recommendations for mentorship practice in the state of Minnesota. Researchers noted there was strong evidence that

the following practices would be beneficial when creating district induction / mentoring programs:

1. Create a multi-year program. Third-year teachers who received two years of comprehensive induction support produced greater student learning gains compared to colleagues served by prevailing induction programs. For teachers who received only one year of comprehensive induction, there was no impact on student achievement.
2. Mentor Selection. Induction models with more stringent requirements for mentor selection provide more intense mentoring and a stronger focus on instruction.
3. Full-Release Mentors. Reports indicate greater student achievement gains in classrooms of new teachers supported by full-time mentors.
4. An Assigned Mentor. Beginning teachers who are assigned a mentor are much less likely to leave their school or teaching entirely.
5. Frequency of Mentor Contact. Weekly contact between mentors and new teachers is a critical factor for program impact.

As reported by Rosenholtz (1989) and Yee (1990), beginning teachers who were given appropriate and reasonable assignments, were provided adequate and actionable feedback, and were given ongoing personal support were more apt to attain the skills and disposition required to establish a gratifying teaching career and to hone greater commitment to teaching.

Summary

When reviewing the literature related to SET induction, it became clear that no federal mandate existed that guided creation and implementation of effective induction and mentorship programs. Thus, induction and mentorship programs varied from state to state and district to district. Research indicated that new teachers, upon hire, were “expected to perform the full

complement of duties immediately, learning as they go along” (Breux & Wong, 2003, p. 8).

This was a contradictory practice when reflecting on the studies that had shown that the first one to three years of a new teacher’s career required a quick transition from theory to practice. New SETs often found the demands of the first years to be immense and overwhelmingly stressful, and whether these teachers thrived in their roles and remained in the field as special educators depended, at least partially, on the extrinsic supports they received from their colleagues and administrators (Billingsley et al., 2009). This support was often in the form of induction and mentorship. Even though there was no federal mandate, more than half of the states required some form of induction or mentoring, only 17 states required an induction program of at least two years in length, and few differentiated between induction and mentoring for special education teachers (Hirsch et al., 2009).

In the research reviewed, studies investigated what new special education teachers reported as effective mentoring programs and examined the impact of such programs on new teachers plans to remain in special education. Data indicated that beginning SETs who had effective mentors were more likely to remain in the field of special education (Whitaker, 2000).

Chapter III: Methodology

This study's purpose was to determine what constituted an effective mentoring program for beginning special education teachers in their first three years of teaching in Minnesota. Beginning special education teachers were surveyed to better understand thematic elements related to mentorship that may have positively or negatively influenced their decision to remain in the field of special education.

The goal of the research was to investigate the following three themes of mentorship: 1) how beginning special education teachers are being provided mentorship, 2) what content the mentees are being provided guidance in, 3) and what personal and professional characteristics mentees report as important for mentors to possess. The findings from this study are provided to contribute to the related research which supports providing effective mentorship programming to beginning special education teachers in Minnesota.

As summarized in the review of literature, special education teachers entered the field and subsequently left in large numbers for teaching positions in general education, or they left the field altogether (Ingersoll, 2001). In Minnesota, approximately 11% of all Minnesota teachers were no longer teaching in Minnesota after their first year, 17% left teaching within two years of entering the profession, 22.5% left within three years, and nearly 33% left within five years of entering teaching (MN DoE, 2021). In research by Hagaman and Casey (2018), it was noted that many new special education teachers listed specific factors such as stress related to their assigned role, a clear lack of cooperation and support from teachers and administration, large caseload numbers, lack of effective and meaningful training or professional development, lack of appropriate skillset or qualifications (e.g., those on provisional licensure) or difficult

working conditions in a school (e.g., too large of caseload, lack of respect in the building, lack of administrative support) as primary reasons for teacher turnover.

Research Questions

The following research questions aligned to the conceptual framework and guided this study:

1. How do select Minnesota special education teachers within their first three years of service rate the overall effectiveness of their mentoring experience?
2. What forms of mentorship support do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective forms of supports provided?
3. What mentorship support content do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective content provided?
4. What personal and professional characteristics do select Minnesota special education teachers within their first three years of service report as being most valuable for mentors to possess?
5. How do select Minnesota special education teachers within their first three years of service rate their plans to remain in the field of special education in relation to the overall effectiveness of the mentorship supports provided?

Research Design

To answer the given research questions, a quantitative study (Appendix B) was designed to explore participant perceptions of the overall effectiveness of their mentorship programs, the forms of mentorship supports provided, the content of the supports provided, and characteristics of mentors providing the supports, and to determine if these themes influenced beginning special

education teacher plans to remain in the profession. The study utilized a quantitative research methodology, focusing on basic descriptive statistics, specifically frequency counts and percentages. According to Bauer & Brazer (2012), quantitative research is “a type of educational research in which the researcher decides what to study; asks specific, narrow, questions; collects quantifiable data from participants; analyzes these numbers using statistics; and conducts the inquiry in an unbiased, objective manner” (p. 211).

Instrument Development

A questionnaire originally designed and validated by Dr. Susan Whitaker (2000) was referenced in the design of this study’s survey instrument. Dr. Whitaker’s work centered around mentorship in South Carolina and the researcher was interested in how mentorship supports in Minnesota compared 20 years later. After reading articles citing Dr. Whitaker’s work, the researcher contacted her via email and asked if she would share information about her research and Dr. Whitaker shared her dissertation. Dr. Whitaker also shared her questionnaire, and it was reviewed at length, with the researcher determining to keep relevant components and to change others to reflect the focus of the study and current trends in special education. Through an investigation of the related literature, and discussions with professionals in the field of special education and P-12 administrators, it was determined that the researcher would retain approximately 27% (17/62 items) of the original content from Dr. Whitaker’s questionnaire. The researcher then recreated the remainder of the survey instrument to ensure that the content aligned to the related literature and was appropriate for today’s professionals in terms of current technologies and data found in related literature and alignment to the study’s conceptual framework.

A review of related literature revealed that the first three years of a new teacher's career required a quick transition from theory to practice and represented a critical time-period for understanding and effecting the attrition rates of special education teachers (Whitaker, 2000; Isreal et al., 2013; Mandlawitz, 2013). Therefore, the study was designed to collect data from beginning special education teachers within their first three years of teaching special education.

The survey instrument (Appendix B) consisted of 61 items separated into five parts as described below. The five parts were organized by themes that aligned with the study's conceptual framework.

Part A consisted of nine statements related to the forms of mentorship supports provided to beginning teachers in the field. Respondents reported the frequency of the forms of mentorship provided on a 6-point nominal categorical Likert-type scale ranging from never to daily. Respondents then rated the effectiveness of each form of mentorship provided on a 5-point nominal categorical Likert-type scale ranging from not at all effective to extremely effective.

Part B consisted of 19 statements related to the content of mentorship supports provided to beginning teachers in the field. Respondents reported the frequency of content of mentorship provided on a 6-point non-numerical and categorical Likert-type scale ranging from never to daily. Respondents then reported which of the given content supports would be rated as highly effective. They were allowed to choose all that apply.

Part C consisted of two open-ended items related to what personal and professional characteristics effective mentors should exhibit. This section was originally designed as a rank-order item with respondents choosing from a prescribed list of personal and professional characteristics that effective mentors may possess. However, findings from the questionnaire's pilot study denoted the potential for bias when providing a prescribed list of characteristics

deemed valuable by the researcher. Therefore, the researcher chose to provide an open-ended opportunity for respondents to share what personal and professional characteristics effective mentors should exhibit for beginning special education teachers.

These responses were then manually coded for themes and analyzed for frequency. To eliminate potential bias, the themes were allowed to emerge from the data collected using an inductive coding style where the themes arose directly from the survey responses. To do so, all open-ended responses from year-1, year-2, and year-3 respondents were analyzed for recurring phrases and words. To maintain accuracy and consistency in coding, the researcher logged and reviewed decisions made during the coding process. Themes emerged based on the frequency of the words or phrases provided.

Once themes were determined, remaining words and phrases were reviewed and combined into appropriate themes as appropriate. To answer research question four, “valued” was interpreted to be reflected in the number of responses provided. For example, if a word or phrase was used often, it was interpreted by the researcher to indicate that this word or phrase was of value to the respondent.

Part D consisted of five statements, repeated for year-1, year-2, and year-3, for a total of 15 statements that respondents were asked to reflect on related to the overall effectiveness of their mentorship experience in each year of teaching, as applicable. For example, year-3 teachers were asked to reflect on their mentorship support provision from year-1 and year-2 as well as year-3. Respondents reported the overall effectiveness of mentorship supports provided them for each applicable year of teaching (year-1, year-2, year-3) on a 4-point nominal categorical Likert-type scale ranging from definitely false to definitely true. Responses gathered from these

statements indicated the level of overall effectiveness of the respondents' mentorship experience related to research question one.

Part E consisted of 16 multiple choice items related to demographics, and included items about licensure status, race and ethnicity, gender, economic development regions, mentorship models, teaching setting, and short-and long-term plans to remain in the profession. Part E contained three screening items that were designed to disqualify respondents from taking the survey who did not meet the criteria. The three screening items included were:

1. Item E1: I have been teaching for (choose the number of years). Those who chose four or more years were removed from the survey.
2. Item E2: I am (choose licensure type). Those who reported not being a licensed special education teacher and who were not currently teaching in special education were removed from the survey.
3. Item E3: Please choose your caseload description. Those who reported teaching in a program other than special education or not teaching at all were removed from the survey.

Pilot Study

A pilot test of the survey instrument was conducted in person with a Saint Cloud State University doctoral cohort. During the pilot testing, the background of the study was presented, and paper copies of the draft survey instrument were distributed to each participant with instructions to complete it in its entirety. The survey instrument was piloted for clarity, alignment to the research questions and the study's conceptual framework, and completion time. Completion time was collected to ensure that a valid timeframe was provided to the participants of the actual study.

During the pilot, participants noted the potential for inherent bias in Part C where respondents were given a list of predetermined personal and professional characteristics to rank in order of importance. The pilot participants suggested open-ended items instead to allow respondents an opportunity to provide responses that were free from influence and unintentional bias. The researcher took this suggestion into consideration and the Part C items were rewritten to provide for two open-ended responses in the final version of the survey instrument. Participants also reported that an important race and ethnicity demographic was missing. The researcher noted the omission and chose to follow the Minnesota Department of Education guidelines for rewriting the race and ethnicity item (item E13).

Upon completion of the pilot, the participants were asked to review the questionnaire once again and to answer subsequent items related to the clarity of the given cover letter (Appendix C) and survey directions. If statements were not clear, participants were asked to provide written and oral feedback. Participants were also directed to indicate if the given questionnaire statements clearly aligned with the stated research questions. Again, if statements were not clear, pilot participants were asked to provide written and oral feedback. Once feedback was obtained from the pilot participants, refinements were made to the survey instrument resulting in the final version. This final version was then created digitally in Qualtrics and provided via email to the participant population.

Population and Study Sample

Once the survey instrument was finalized, the participant population and study sample were selected. To do so, the following process was utilized:

1. In July, 2021, a data request was sent to the Minnesota Professional Educator Licensing and Standards Board (PELSB) requesting contact information for teachers in Minnesota who adhered to given criteria:
 - a. Teachers within their first, second, or third years of teaching
 - b. Teachers who were licensed in special education in Minnesota
 - c. Teachers who were teaching under an initial special education licensure
2. Upon receipt of the PELSB database, the data set was updated to remove duplicate entries and non-special education entries. The resulting database provided a database of 4,432 potential participants who were reported by PELSB to meet the given criteria.

Data Collection Procedures

An initial email was sent on August 20, 2021 to the 4,432 potential participants, including a cover letter (Appendix C) and an embedded link to complete the online Qualtrics survey. A follow up email was sent on September 16, 2021 to 4,403 potential participants, inviting non-respondents to complete the survey, including a revised cover letter and an embedded link to complete the online survey. A final email was sent on September 29, 2021 to 4,377 potential participants, inviting non-respondents to complete the survey, including a revised cover letter and an embedded link to complete the online survey. The survey officially closed on October 31, 2021. In all, 726 participants completed the online survey.

Sampling Technique

To determine the study sample from the population of 726 respondents, the researcher employed criterion sampling as a sampling technique. As reported by Creswell (2018), criterion sampling utilizes selected cases or criteria that intentionally sample a given group of people to provide the researcher with meaningful and valuable information about the problem being

examined. The criteria utilized in this study further delimited the population of 726 respondents to the following:

1. Minnesota special education teachers
2. who were in their first, second, or third year of teaching during the survey
3. with an initial MN special education license.

To do so, the survey instrument contained three screening items that were designed to disqualify specific respondents from the population of 726 who did not meet the sampling criteria. The three screening items included were:

1. Item E1: I have been teaching for (choose the number of years). Those who chose four or more years were removed from the survey.
2. Item E2: I am (choose licensure type). Those who reported not being a licensed special education teacher and who were not currently teaching in special education were removed from the survey.
3. Item E3: Please choose your caseload description. Those who reported teaching in a program other than special education or not teaching at all were removed from the survey.

As a result, 235 respondents were exited from the study through screening item E1 as they reported being teachers with four or more years of teaching experience. Additionally, 23 respondents were exited from the study through screening item E2 as they reported not being licensed in special education or not teaching special education at the time of the survey completion, and 22 respondents were exited from the study through screening item E3 as they self-reported teaching in a program other than special education or not teaching at all. Finally, 96

respondents who did not answer item E1, E2, and E3 were exited from the study. The total number of valid respondents was determined to be 350 ($n=350$).

Human Subjects Approval – Institutional Review Board

Upon completion of the preliminary proposal, the St. Cloud State University Institutional Review Board (IRB) application was completed. The application documented the research study's title, summary, plan for data collection, location of the research, name of the principal investigator, the type of research conducted, demographic information, any external funding streams, and an agreement to certification statement. IRB approval was received and is presented as Appendix A.

Data Security and Protections

In addition to employing ethical research practices for collecting and analyzing the data for this study, the researcher also ensured ethical modes of protecting and storing the gathered data. Bergin (2018) noted that data must be adequately protected and preserved using “sensible precautions” (p. 230) such as updating computer passwords, updating anti-virus software, and guarding computer hardware from theft. To ensure data security and protections, the researcher stored all raw data and analysis on a cloud-based platform that was only accessible through a password-protected log-in system.

Data Analysis

The data analysis utilized basic descriptive statistics which reported frequency counts and percentages, as these would be most helpful in answering the specific research questions. As described by Creswell (2009), descriptive statistics are used to describe the basic features of the data in a study. As Slavin (2007) noted, “Descriptive statistics are simply convenient ways of summarizing characteristics of data in a form everyone can understand and use” (p. 241). Bergin

(2018) further noted that descriptive statistics provided an overall understanding of the sampling data to guide the researcher in discovering extreme or atypical patterns in the data.

Summary

This chapter provided a description of the study which utilized a quantitative research methodology, focusing on basic descriptive statistics, specifically frequency counts and percentages. The study was designed to explore participant perceptions of the overall effectiveness of their mentorship programs, the forms of mentorship supports provided, the content of the supports provided, and the characteristics of the mentors providing the supports, and to determine if these themes influenced beginning special education teacher plans to remain in the profession. The sections in this chapter included a brief review of the related literature, a statement of the study's purpose and proposed problem, the study's research questions, the population, the sampling technique, the instrumentation design, the type of information gathered via the instrument, procedures for collecting the data, and an overview of the data analysis. Chapter four will provide detailed results of the study, and a synthesis of findings. Chapter five will discuss findings from Chapter four, as well as provide conclusions and recommendations for the field and for further research.

Chapter IV: Study Results

In Chapter four, the detailed results of the study will be shared to include a synthesis of findings. A discussion of the problem and purpose of the study will be followed by the findings of each research question as well as the aligned descriptive data summaries.

Statement of the Problem

The significance of this study was supported by three factors: 1) the growth of induction/mentoring programs across the United States, 2) the continued high attrition rate of special education teachers and the need to retain them in the field, and 3) the recommendations from previous research. Additionally, limited research was found specifically related to the influence of mentorship supports on special education teachers new to the profession in Minnesota. Therefore, this study researched specific themes of mentorship to better understand what constituted effective mentoring program supports for beginning special education teachers in Minnesota and to explore the influence on beginning special education teachers' plans to remain in the profession.

Purpose of the Study

The purpose of this study was to explore themes of new special education teacher mentorship supports in Minnesota to better understand perspectives of beginning special education teachers about what constituted effective mentor programming supports. The study also explored the influence of these supports on beginning special education teachers' plans to remain in the profession.

To do so, a quantitative survey was designed to examine themes aligned to the study's conceptual framework: 1) forms of mentorship support, 2) content of mentorship support, 3) personal and professional characteristics of effective mentors, and 4) plans to remain in the

profession in the short- and long-term. All data collected were categorical in nature, with results being reported using basic descriptive statistics in the form of frequency counts and percentages. All tables describe results in descending order, when possible, and include frequency counts and percentages.

Research Questions

Chapter four provides the findings for each research question as well as the descriptive data summaries. This study was guided by five research questions which aligned to the study's conceptual framework:

1. How do select Minnesota special education teachers within their first three years of service rate the overall effectiveness of their mentoring experience?
2. What forms of mentorship support do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective forms of supports provided?
3. What mentorship support content do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective content provided?
4. What personal and professional characteristics do select Minnesota special education teachers within their first three years of service report as being most valuable for mentors to possess?
5. How do select Minnesota special education teachers within their first three years of service rate their plans to remain in the field of special education in relation to the overall effectiveness of the mentorship supports provided?

Study Methodology and Return Rate

To answer the given research questions, a quantitative study was designed, including a participant survey (Appendix B), to explore participant perceptions of the overall effectiveness of their mentorship programs, the forms of mentorship supports provided, the content of the supports provided, and characteristics of mentors providing the supports, and to determine if these themes influenced beginning special education teacher plans to remain in the profession. The study utilized a quantitative research methodology, focusing on basic descriptive statistics, specifically frequency counts and percentages.

A total of 4,432 Minnesota teachers were reported by the Minnesota Professional Educator Licensing and Standards Board (PELSB) as eligible to complete the online Qualtrics survey. The number of returned surveys was 726. When teachers with four or more years of teaching experience ($n=235$), those who were not licensed in special education or not teaching special education at the time of the survey completion ($n=23$), those teaching in a program other than special education or not teaching at all ($n=22$), and those who did not complete Items E1, E2, and E3 ($n=96$) were removed from the study, the total number of valid respondents was determined to be 350 ($n=350$).

Study Demographics and Basic Descriptive Statistics Results

To discuss the results of the study, demographic information is first presented to include items such as respondent years of teaching, licensure, race or ethnicity, gender, location of teaching, and mentorship provision. This is followed by detailed descriptive results organized by each of the five posed research questions.

Demographic Information

Survey respondents were asked on item E1 of the survey using a multiple choice response to report their years of teaching ranging from one year to four or more years. Although the original request for a database from the state teacher licensing board specified the criteria of no more than three years of teaching and an initial teaching license in special education, 32.3% ($n=235$) of respondents reported teaching four or more years. Of the 726 survey respondents, 77 did not answer item E1. Responses in Table 3 are shown disaggregated by years of teaching.

Table 3

Item E1: Reported Years of Teaching ($n=726$)

Years of Teaching	1	2	3	4 or more	No Response	Total
<i>n</i>	114	108	192	235	77	726
%	15.7	14.9	26.4	32.3	10.6	100

As shown in Table 3, 114 (15.7%) respondents reported being year-1 teachers, 108 (14.9%) respondents reported being year-2 teachers, 192 (26.4%) respondents reported being year-3 teachers, and 235 (32.3%) respondents reported being teachers for four or more years. Finally, 77 (10.6%) respondents did not answer item E1.

Respondents were asked on item E2 of the survey using a multiple choice response to report their current level of special education professional licensure. Table 4 demonstrates aggregated responses for levels of state licensure based on the tiered licensure system in the state of Minnesota.

Table 4

Item E2: Reported Level of Professional SPED Teaching License Held by Respondents ($n=726$)

Professional Licensure	Tier 1-2	Tier 3-4	No license or not teaching in special education	No Response	Total
<i>n</i>	143	267	23	293	726
%	19.7	36.8	3.2	40.8	100

As shown in Table 4, 143 (19.7%) respondents reported holding a Tier 1 or Tier 2 special education teaching license. Additionally, 267 (36.8%) respondents reported holding a Tier 3 or Tier 4 special education teaching license and 23 (3.2%) respondents reported not holding a special education license or not currently teaching in special education. Finally, 293 (40.8%) respondents did not answer item E2.

Respondents were asked on item E3 of the survey using a multiple choice response to describe their current teaching placement in terms of how much time their students spent away from the general education peers. Of the 726 survey respondents, 340 did not answer item E3. Aggregated responses showed that respondents reported teaching in all given setting options.

Table 5

Item E3: Current Teaching Settings of Respondents (n=726)

Current Teaching Setting Description	<i>n</i>	%
No response	340	46.8
I teach in a setting where some of my students spend most of their day with General Education peers, some spend about half of their day with GE peers, and some spend a small part of their day with GE peers.	135	18.6
I teach in a setting where all (100%) of my students spend most of their school day (at least 81%) with their General Education (GE) peers.	101	13.9
I teach in a setting where all (100%) of my students spend approximately half of their school day (41-80%) with their GE peers.	47	6.5
I teach in a setting where all (100%) of my students spend a small part of their school day (0-40%) with their GE peers.	41	5.6
I teach all my students in a separate school facility which provides special education supports away from the GE school facility.	36	5.0
I am currently teaching in a program other than special education OR I am not teaching at all.	22	3.0
I teach all my students in a public residential facility.	2	0.28
I teach all my students in a private residential facility.	2	0.28
Total	726	100

As shown in Table 5, 340 (46.8%) respondents did not answer item E3 while 135 (18.6%) respondents reported working with students with a variety of setting needs. Additionally, 101 (13.9%) respondents reported working with students who spend at least 81%

of their day with their general education peers, and 47 (6.5%) respondents reported working with students who spend between 41 and 80% of their day with their general education peers. Further, 41 (5.6%) respondents reported working with students who spend 0 to 40% of their day with their general education peers, and 36 (5.0%) respondents reported working with students in a separate school facility which provides special education supports away from the GE school facility. Finally, 22 (3.0%) respondents reported currently teaching in a program other than special education or not teaching at all, 4 (0.4%) respondents reported working in residential facilities.

Respondents were next asked on item E4 of the survey using a multiple choice response to report if their current teaching license accurately reflected the level of disability represented in their caseloads. Table 6 demonstrates aggregated responses related to alignment of respondent licensure with their caseload demands.

Table 6

Item E4: Reported alignment of licensure to caseload needs (n=359)

License Alignment	Accurately reflects caseload needs	Partially reflects caseload needs	Does not reflect caseload needs	No response	Total
<i>n</i>	228	109	20	2	359
<i>%</i>	63.5	30.3	5.6	0.5	100

As shown in Table 6, 228 (63.5%) respondents reported that their current licensure aligns with their caseload needs and accurately reflects the disabilities represented in their caseloads. Additionally, 109 (30.3%) respondents reported that their current licensure only partially reflects the needs of their caseloads while 20 (5.6%) respondents reported that their current licensure does not reflect the needs of the disabilities in their caseload. Finally, 2 (0.5%) respondents did not answer this question.

Respondents were asked to provide basic demographic information related to gender, race and ethnicity, and economic development region where they taught at the time of the survey completion through multiple choice items E15, E13, and E14.

As shown in Table 7, respondents were first asked to report their self-identified gender through multiple choice item E15. All responses were presented in descending order of frequency.

Table 7

Item E15: Respondent Self-Identified Gender (n=359)

Gender	<i>n</i>	%
Female	271	75.5
Male	58	16.2
No response	24	6.7
Prefer to self-describe	4	1.1
Non-Binary/third gender	2	0.6
Total	359	100

As shown in Table 7, 271 (75.5%) respondents self-identified as female, 58 (16.2%) self-identified as male, 24 (6.7%) did not respond to the question, 4 (1.1%) preferred not to self-identify, and 2 (0.6%) self-identified as non-binary or third gender.

Respondents were next asked to report their self-identified race, ethnicity, or origin on multiple choice item E13. Results are reported in descending order by frequency.

Table 8*Item E13: Respondent Self-identified Race, Ethnicity, Origin (n=359)*

Race, Ethnicity, Origin	<i>n</i>	%
White	304	84.7
Hispanic or Latino	15	4.2
Black or African American	14	3.9
Asian	12	3.3
Other	7	2.0
American Indian or Alaska Native	5	1.4
Native Hawaiian or Pacific Islander	2	0.6
Total	359	100

As shown in Table 8, 304 (84.7%) respondents self-identified as White, 15 (4.2%) self-identified as Hispanic or Latino, 14 (3.9%) self-identified as Black or African American, 12 (3.3%) self-identified as Asian, seven (2.0%) self-identified as Other, five (1.4%) self-identified as American Indian or Alaska Native, and 2 (0.6%) self-identified as Native Hawaiian or Pacific Islander.

Respondents were also asked in which economic development region of Minnesota they taught through multiple choice item E14. Aggregated responses showed that respondents reported teaching in all 11 economic development regions across the state.

Table 9*Item E14: Respondent Teaching Location by Economic Development Region (EDR) (n=359)*

Economic Development Region (EDR)	<i>n</i>	%
EDR 11 (7 County Twin Cities)	153	42.6
EDR 07W (Central)	41	11.4
No response	29	8.1
EDR 07E (East Central)	23	6.4
EDR 10 (Southeast)	20	5.6
EDR 05 (North Central)	17	4.7
EDR 09(South Central)	14	3.9
EDR 03 (Arrowhead)	13	3.6
EDR 04 (West Central)	13	3.6
EDR 08 (Southwest)	12	3.3
EDR 01 (Northwest)	7	1.9
EDR 02 (Headwaters)	6	1.7
EDR 06E (Southwest Central)	6	1.7
EDR 06W (Upper MN Valley)	5	1.4
Total	359	100

As shown in Table 9, 153 (42.6%) respondents reported teaching in EDR 11, 41 (11.4%) reported teaching in EDR 07W, and 29 (8.1%) did not respond to this item. Additionally, 23 (6.4%) reported teaching in EDR 07E, 20 (5.6%) reported teaching in EDR 10, 17 (4.7%) reported teaching in EDR 05, and 14 (3.9%) reported teaching in EDR 09.

Respondents were additionally asked to report the school setting in which they currently taught on multiple choice item E17. Aggregated data in Table 10 demonstrates that teachers from all levels of public K-12 education were represented in the study.

Table 10*Item E17: Respondent Current School Setting (n=359)*

School Setting	<i>n</i>	%
Elementary School	132	36.8
Both an elementary and a secondary school (K-12)	63	17.5
High School	58	16.2
Junior High or Middle School	53	14.8
No response	28	7.8
Both a Junior High and High School	25	7.0
Total	359	100

As shown in Table 10, 132 (36.8%) respondents reported teaching in an elementary setting at the time of survey completion, 63 (17.5%) reported teaching in a K-12 setting, and 58 (16.2%) reported teaching in a high school. Additionally, 53 (14.8%) reported teaching in a junior high or middle school, 28 (7.8%) did not respond, and 25 (7.0%) reported teaching in a combined junior high and high school.

Respondents were further asked about their current mentor provision through completion of multiple choice item E7. Respondents were specifically asked whether they were offered and provided mentorship supports as a beginning special education teacher. In Table 11, the aggregated responses of all the respondents are reported in descending order of frequency.

Table 11*Item E7: Mentorship support provided (n=359)*

Mentorship Support Provided	<i>n</i>	%
I was provided a mentor, and I accepted the support.	263	73.3
I was never provided a mentor, but I would have liked the support.	77	21.4
I was provided a mentor, but I declined the support.	11	3.1
No response	5	1.4
I was never provided a mentor, and I didn't want the support.	3	0.8
Total	359	100

As shown in Table 11, 263 (73.3%) respondents reported being provided a mentor and accepting the support, 77 (21.4%) reported never being provided a mentor, but they would have liked one. Additionally, 11 (3.1%) respondents reported being provided a mentor, but declining the support, 5 (1.4%) respondents did not provide an answer, and 3 (0.8%) respondents reported never being provided a mentor and not wanting the support.

Those respondents who reported being provided and accepting the support of a mentor ($n=263$, 73.3%) were asked two additional items related to their mentor experience to provide a clearer understanding of the mentoring supports provided.

Those respondents who reported being provided and accepting the support of a mentor ($n=263$, 73.3%) were asked whether the respondent's mentor taught in the same building or in another part of the district through multiple choice item E8.

Table 12

Item E8: Reported Mentor Teaching Location (n=263)

Mentor Teaching Location	<i>n</i>	%
My mentor and I teach in the same building.	203	77.2
My mentor teaches in a different building.	53	20.2
No response	7	2.7
Total	263	100

As shown in Table 12, 203 (77.2%) respondents reported that, at the time of survey completion, they taught in the same building as their mentor while 53 (20.2%) reported that their mentors taught in other buildings in the district. No response was provided by 7 (2.7%) respondents.

Respondents who were provided and accepted mentorship support ($n=263$, 74.3%) were also asked about their mentors' licensure, focusing on whether the mentors were licensed special education teachers or not through multiple choice item E9.

Table 13

Item E9: Reported Mentor Licensure (n=263)

Mentor Licensure	<i>n</i>	%
My mentor is a licensed SPED teacher.	219	83.3
My mentor is not a licensed SPED teacher.	36	13.7
No response	8	3.0
Total	263	100

As shown in Table 13, 219 (83.3%) respondents indicated that their mentor was a licensed special education teacher, and 36 (13.7%) respondents reported that their mentor was not a licensed special education teacher. No response was provided by 8 (3.0%) respondents.

Those respondents who reported having a mentor who was not a special education teacher ($n=36$) were asked through open-ended item E12 to describe their mentor's current educational assignment. Responses are provided in descending order of frequency.

Table 14

Item E12: Reported role of non-special education mentor (n=36)

Non-Special Education Mentor Role	<i>n</i>	%
General Education Teacher	11	30.6
Administration	10	27.8
No response	7	19.4
Educational or Instructional Coach / Mentor	6	16.7
School Psychologist / Social Worker	2	5.6
Total	36	100

As shown in Table 14, 11 (30.6%) reported that their mentor was a general education teacher and 10 (27.8%) respondents reported that their mentor was an administrator while no

response was provided by 7 (19.4%) respondents. Additionally, 6 (16.7%) respondents reported that their mentor was in a dedicated educational or instructional coaching or mentoring role and 2 (5.6%) reported their mentor was a school psychologist or social worker.

Respondents who were provided and accepted mentorship support ($n=263$) were next asked to report on the gender of their mentor through multiple choice item E11. Aggregated responses are provided in descending order of frequency.

Table 15

Item E11: My mentor and I identify as the same gender. ($n=263$)

Gender of Mentor	<i>n</i>	%
True	187	71.1
False	64	24.3
No response	8	3.0
Prefer not to say	4	1.5
Total	263	100

As shown in Table 15, 187 (71.1%) respondents reported that they and their mentor identified as the same gender, while 64 (24.3%) reported that they did not identify as the same gender. Additionally, 8 (3.0%) respondents did not answer, and 4 (1.5%) respondents preferred not to share this information.

Finally, respondents were asked to report their overall satisfaction with teaching special education as a career through multiple choice item E10. Responses are presented in aggregate and descending order by frequency.

Table 16

Item E10: Reported overall satisfaction with special education teaching as a career (n=350)

Overall Satisfaction	<i>n</i>	%
Mostly Satisfied	219	62.6
Mostly Dissatisfied	70	20.0
Extremely Satisfied	36	10.3
Extremely Dissatisfied	20	5.7
No response	5	1.4
Total	350	100

As shown in Table 16, 219 (62.6%) reported being mostly satisfied with their choice of teaching special education as a career, and 70 (20.0%) reported being mostly dissatisfied. Additionally, 36 (10.3%) respondents reported being extremely satisfied with teaching special education as a career and 20 (5.7%) reported being extremely dissatisfied. No response was provided by 5 (1.4%) respondents.

Research Question One

The focus of research question one was to determine the respondents' reported overall effectiveness of provided mentorship supports.

1. How do select Minnesota special education teachers within their first three years of service rate the overall effectiveness of their mentoring experience?

This construct was explored through a group of five statements in Part D (D1 to D5) of the survey where respondents were asked to respond to the five statements related to their mentorship support experience in their first, second, and third year of teaching. Respondents reported the overall effectiveness of mentorship supports provided them for each applicable year of teaching (year-1, year-2, year-3) on a 4-point nominal Likert-type scale ranging from definitely false to definitely true.

The five statements were divided into two constructs. The first construct was highly effective mentorship and aligned with Part D Items D1, D3, and D4. To ensure clarity for the reader, this construct will be labeled hereafter as “positive mentorship experience”. The second construct was ineffective mentorship and aligned with Part D Items D2 and D5. To ensure clarity for the reader, this construct will be labeled hereafter as “negative mentorship experience”. Data gathered from these statements indicated the level of overall effectiveness of the respondents’ mentorship experience related to research question one.

Positive Mentorship Experience

Responses related to positive mentorship experiences (items D1, D3, and D4) were disaggregated by year of respondent. It was determined that responses rated as “mostly true” and “definitely true” by respondents would be combined to a general response of “true”. Results from items D1, D3, and D4 follow this abbreviated format.

Table 17

Item D1, D3, D4: Positive Mentorship Experience Disaggregated for Year-1, Year-2, and Year-3 (Year-1 n=145, Year-2 n=78, Year-3 n=37)

Statements of Positive Mentorship Experience	Year	n	True %
D1. I grew in my effectiveness as a special education teacher because of the supports provided by my mentor.	1	108	74.5
	2	59	75.6
	3	25	67.6
D3. The mentoring support provided to me by my mentor was of the highest quality.	1	101	69.7
	2	57	73.1
	3	24	64.9
D4. I am more confident as a special education teacher because of the supports provided to me by my mentor.	1	98	67.6
	2	55	70.5
	3	24	64.9

As shown in Table 17, 108 (74.5%) year-1 respondents, 59 (75.6%) of year-2 respondents, and 25 (67.6%) of year-3 respondents reported growing in their effectiveness as a special education teacher because of the supports provided by their mentor. Additionally, 101

(69.7%) year-1 respondents, 57 (73.1%) year-2 respondents, and 24 (64.9%) year-3 respondents reported that the mentoring support provided was of the highest quality. Finally, 98 (67.6%) year-1 respondents, 55 (70.6%) year-2 respondents, and 24 (64.9%) year-3 respondents reported being more confident as a special education teacher because of the supports provided by their mentor.

Negative Mentorship Experience

Responses related to negative mentorship experiences (Items D2 and D5) were disaggregated by year of respondent. It was determined that responses rated as “mostly true” and “definitely true” by respondents would be combined to a general response of “true”. Results from items D2 and D5 follow this abbreviated format.

Table 18

Item D2, D5: Negative Mentorship Experience Disaggregated for Year-1, Year-2, and Year-3 (Year-1 n=145, Year-2 n=78, Year-3 n=37)

Statements of Negative Mentorship Experience	Year	n	%True
D2. My mentor provided very little support and assistance to me.	1	54	37.2
	2	24	30.8
	3	11	29.7
D5. I did not find my mentor to be very helpful to me as a special educator.	1	50	34.5
	2	23	29.5
	3	10	27.0

As shown in Table 18, 54 (37.2%) year-1 respondents, 24 (30.8%) year-2 respondents, and 11 (29.7%) year-3 respondents reported that their mentors provided very little support and assistance to them. Additionally, 50 (34.5%) year-1 respondents, 23 (29.5%) year-2 respondents, and 10 (27.0%) of year-3 respondents reported that their mentor was not very helpful to them as new special education teachers.

Research Question Two

The focus of research question two was on the various forms of mentorship support provided to beginning special educators in the field and how effective each form of support was rated.

2. What forms of mentorship support do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective forms of supports provided?

To gather this data, respondents who reported being provided and accepting a mentor through item E7 ($n=263$) completed Part A which consisted of nine statements related to the forms of mentorship supports provided to beginning teachers in the field. Respondents reported the frequency of the forms of mentorship provided on a 6-point nominal categorical Likert-type scale ranging from never to daily through survey items AF1-AF9. Respondents then rated the effectiveness of each form of mentorship provided on a 5-point nominal categorical Likert-type scale ranging from not at all effective to extremely effective through survey items AE1-AE9.

Frequency of Mentorship Support Delivery

The data in Appendix D note the forms of mentorship support delivery and the complete disaggregated frequency of provision. All forms of mentorship support studied were reported as being used to some extent by respondents. Of the 263 eligible respondents, approximately 82% completed Part A items related to the frequency of delivery.

In Table 19, the frequency of response for each item (A1-A9) is provided in descending order of forms of mentorship support provided either monthly, weekly, or daily and are reported in descending order of overall frequency.

Table 19

Most Frequently Reported Forms of Mentorship Delivery- Year 1 to 3 Combined

Frequency Counts in Descending Order (combined monthly, weekly, and daily responses)

Mentorship Delivery	<i>n</i>	Monthly	Weekly	Daily	Total
A4. Texts / emails	221	55 24.9%	93 42.1%	37 16.7%	185 83.7%
A2. Unscheduled face-to-face meetings	220	28 12.7%	77 35.0%	63 28.6%	168 76.4%
A1. Scheduled face-to-face meetings	223	69 30.9%	67 30.0%	12 5.4%	148 66.4%
A7. Online meetings (Zoom, etc.)	208	40 19.2%	30 14.4%	4 1.9%	74 35.5%
A3. Telephone check ins	221	35 15.8%	35 15.8%	6 2.7%	76 34.3%
A9. Scheduled collaboration time	206	36 17.5%	27 13.1%	6 2.9%	69 33.5%
A5. Classroom observations / feedback	221	30 13.6%	9 4.1%	8 3.6%	47 21.3%
A8. External teacher network	208	19 9.1%	10 4.8%	9 4.3%	38 18.3%
A6. Observe other teachers / mentor	208	11 5.3%	10 4.8%	3 1.5%	24 11.6%

Most Frequently Provided Forms of Mentorship

As shown in Table 19, when looking specifically at daily, weekly, and monthly responses, texts and emails was reported by 185 (83.7%) respondents as the most frequent form of mentorship delivery provided. Specifically, 93 (42.1%) respondents noted texts or emails between mentor and mentee as occurring most frequently weekly, 55 (24.9%) respondents reported monthly texts or emails between mentor and mentee, and 37 (16.7%) respondents reported daily texts or emails between mentor and mentee.

Unscheduled face-to-face meetings with mentors was reported by 168 (76.4%) respondents as being the second most frequent form of mentorship support delivery provided. Specifically, 77 (35.0%) respondents reported this occurring most frequently weekly, and 63

(28.6%) respondents reported this occurring daily. Additionally, 28 (12.7%) respondents reported unscheduled face-to-face meetings occurring monthly.

Finally, 148 (66.4%) respondents reported scheduled face-to-face meetings with mentors as the third most frequent form of mentorship support delivery provided. Specifically, 69 (30.9%) respondents reported this support as happening most frequently monthly, 67 (30.0%) respondents reported this occurring weekly, and 12 (5.4%) respondents reported daily scheduled face-to-face meetings.

While data collected was centered on the most frequent forms of support delivery provided to beginning special education teachers, the data as shown in Appendix D highlighted additional results related to forms of support that were not frequently provided. Findings related to the least frequent forms of support delivery are reported below.

Least Frequently Provided Forms of Mentorship

In Table 20, responses for those items reported as the least frequent forms of mentorship support delivery are shown in ascending order by percentage of total responses.

Table 20

Least Frequently Reported Forms of Mentorship Delivery- Year 1 to 3 Combined

Ascending Order by Percentage of Response (combined quarterly, yearly, or never)

Mentorship Delivery	<i>n</i>	Never	Yearly	Quarterly	Total
A9. Scheduled collaboration time	206	113 54.9%	3 1.5%	21 10.2%	137 66.6%
A5. Classroom observations / feedback	221	93 42.1%	18 8.1%	63 28.5%	174 78.7%
A8. External teacher network	208	124 59.6%	20 9.6%	26 12.5%	170 81.7%
A6. Observe other teachers / mentor	208	135 64.9%	20 9.6%	29 13.9%	184 88.5%

As shown in Table 20, 113 (54.9%) respondents reported never being provided scheduled collaboration time with their mentor or fellow teachers. Additionally, 21 (10.2%) respondents reported being provided this quarterly. Regarding mentee observations within their classrooms with mentors providing feedback, 93 (42.1%) respondents reported never being provided observation and feedback from their mentor with 63 (28.5%) reporting this as occurring only yearly.

Regarding being introduced to an external network of teachers, 124 (59.6%) respondents reported never being provided this form of mentorship support, 26 (12.5%) respondents reported this being provided quarterly and 20 (9.6%) reported this as occurring yearly. When asked if they were provided opportunities to observe their mentors or other veteran teachers teaching, 135 (64.9%) respondents reported never being provided an opportunity to observe other teachers or their mentor, 29 (13.9%) respondents reported this occurring quarterly, and 20 (9.6%) reporting this occurring yearly.

Effectiveness of Mentorship Support Delivery

In addition to reporting the most frequent forms of mentorship support delivery, respondents were asked to report the effectiveness of each support. The data in Table 21 note the reported effectiveness of the forms of mentorship support delivery. All year-1, year-2, and year-3 responses are provided in aggregate. All forms of mentorship support delivery were reported as being effective to some extent by respondents. Of the 263 eligible respondents, approximately 80% completed Part A items related to effectiveness of the support provided. The total number of responses for each item (A1-A9) is provided. Frequency count data gathered are depicted in Table 21 in descending order of reported effectiveness of mentorship support delivery.

Responses of Not Applicable denote never being provided the given form of mentorship support delivery.

Table 21

Reported Effectiveness of Forms of Mentorship Delivery- Year 1 to 3 Combined

(Frequency Counts in Descending Order by Reported Effectiveness)

Mentorship Delivery Effectiveness	<i>n</i>	Not Applicable	Ineffective	Moderately Effective	Very Effective
A1. Scheduled face-to-face meetings	214	23 10.7%	10 4.7%	64 30%	117 54.7%
A2. Unscheduled face-to-face meetings	213	24 11.2%	16 7.5%	63 29.6%	110 51.6%
A5. Classroom observations/feedback	213	74 34.7%	14 6.6%	44 20.7%	81 38%
A4. Texts/emails	214	15 7%	17 7.9%	104 48.6%	78 36.4%
A9. Scheduled collaboration time	203	95 46.8%	5 2.5%	39 19.2%	64 31.5%
A6. Observe other teachers/mentor	203	103 50.7%	11 5.4%	39 19.2%	50 24.6%
A3. Telephone check ins	213	97 45.5%	21 9.9%	51 23.9%	44 20.7%
A7. Online meetings (Zoom, etc.)	203	86 42.4%	16 7.9%	60 29.6%	41 20.2%
A8. External teacher network	202	111 55%	10 5%	50 24.8%	31 15.3%

Most Effective Forms of Mentorship Support Delivery

As shown in Table 21, the most effective form of support delivery reported by respondents was scheduled face-to-face meetings with mentors. When asked to report on the overall effectiveness of scheduled face-to-face meetings with mentors, 117 (54.7%) respondents reported that they were highly effective, and 64 (30%) respondents reported moderately effective.

The second most effective form of support delivery was reported as unscheduled or impromptu face-to-face meetings with the mentor. When asked to report on the overall effectiveness of unscheduled face-to-face meetings with mentors, 110 (51.6%) respondents

reported that they were highly effective, and 63 (29.6%) respondents reported them as moderately effective.

The third most effective form of support delivery was reported as classroom observation and feedback by the mentor. When asked to report on the overall effectiveness of using classroom observation and feedback as a form of mentorship delivery, 81 (38%) respondents reported that this form was highly effective, and 44 (20.7%) respondents reported it as moderately effective.

While data collected was centered on the most effective forms of support delivery provided to beginning special education teachers, the data gathered also highlighted additional results related to forms of support that were not considered effective or were not provide at all to beginning special education teachers. Those findings are reported below.

Least Effective or Unprovided Forms of Mentorship Support Delivery

While all forms of mentorship support delivery addressed were rated as effective to some degree, the gathered data as shown in Table 21 further indicated that all were also reported by some of the respondents to be ineffective. Additionally, five of the nine forms were rated most often as never being provided as a form of support delivery, thus not being ratable by respondents.

For example, when asked to report on the overall effectiveness of being introduced to an external network of teachers, 10 (5%) respondents reported it as not at all effective with 111 (55%) respondents choosing not applicable to indicate that this support was not provided to them during their mentorship experience. When asked to report on the overall effectiveness of online virtual meetings (Zoom, Google Meets, etc.), 16 (7.9%) reported it as not at all effective with 86 (42.4%) respondents choosing not applicable to indicate that this support was not provided.

When asked to report on the overall effectiveness of telephone check-ins as a form of mentorship delivery, 21 (9.9%) respondents reported it as not at all effective and 97 (45.5%) respondents chose not applicable to indicate that this support was not provided. Further, when asked to report on the overall effectiveness of observing the mentor teach or watching other teachers teach as a form of mentorship delivery, 11 (5.84%) respondents reported it as not at all effective and 103 (50.7%) respondents chose not applicable to indicate that this support was not provided. Finally, when asked to report on the overall effectiveness of collaboration as a form of mentorship delivery, 5 (2.5%) reporting not at all effective while 95 (46.8%) respondents chose not applicable to indicate that this support was not provided.

Research Question Three

The focus of research question three was on the content of mentorship support provided to beginning special educators in the field and how effective each content support was rated.

3. What mentorship support content do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective content provided?

To gather this data, respondents completed Part B of the survey which consisted of 19 statements related to the content of mentorship supports provided to beginning special education teachers in the field. Respondents reported the frequency of content of mentorship provided on a 6-point categorical Likert-type scale ranging from never to daily through survey items BF1-BF19. The data gathered is reported in full in Appendix E and denotes the content of mentorship supports provided and the frequency of provision reported in frequency counts and percentages for all 19 statements. All content of mentorship support studied were reported as being used to some extent by respondents. Of the 263 eligible respondents, approximately 65% completed Part

B items related to the frequency of delivery. The data gathered are depicted in Appendix E in descending order of total responses reported related to frequency of support provision.

Most Frequently Provided Content Support

As shown in Table 22, data gathered related to content as part of mentorship supports indicated that beginning special education teachers were being provided a variety of mentorship content either monthly, weekly, or daily. The data gathered are displayed in aggregate in Table 22 in descending order of total responses reported related to frequency of support provision.

Table 22

Part B: Most Frequent Content Support Provided – Years 1-3

(Disaggregated by monthly, weekly, or daily provision)

Most Frequent Mentorship Content Provided	<i>n</i>	Monthly	Weekly	Daily	Total
BF5. Work collaboratively with colleagues and service providers to increase student success.	173	44 25.4%	45 26.0%	23 13.3%	112 64.7%
BF3. Address work-related stress I may be experiencing.	173	35 20.2%	47 27.2%	21 12.1%	103 59.5%
BF4. Establish a consistent, organized, and respectful learning environment.	172	35 20.3%	41 23.8%	16 9.3%	92 53.4%
BF13. Address and manage problems with student behaviors.	163	37 22.7%	33 20.2%	21 12.9%	91 55.8%
BF15. Engage in a culture of shared responsibility and support.	163	23 14.1%	30 18.4%	38 23.3%	91 55.8%
BF8. Write and implement IEPs and other due process materials.	166	54 32.5%	24 14.5%	7 4.2%	85 51.2%
BF14. Provide positive and constructive feedback to guide students' learning and behavior.	163	40 24.5%	30 18.4%	14 8.6%	84 51.5%
BF7. Maintain my due process timelines.	166	47 28.3%	28 16.9%	9 5.4%	84 50.6%

As shown in Table 22, the most frequent content support provided was working collaboratively with colleagues and service providers to increase student success and was reported as such by a total of 112 (64.7%) respondents as occurring monthly, weekly, or daily. Addressing work-related stress that respondents may be experiencing was reported by 103 (59.5%) respondents as the second most provided content support occurring monthly, weekly, or daily.

Additionally, 92 (53.4%) respondents reported establishing a consistent, organized, and respectful learning environment was the third most frequently provided content support, and 91 (55.8%) respondents reported addressing and manage problems with student behaviors and engaging in a culture of shared responsibility and support as the fourth most frequently provided content supports occurring monthly, weekly, or daily.

Support with writing and implement IEPs and other due process materials was reported by 85 (51.2%) respondents as the fifth most frequently provided content, and 84 (51.5%) respondents reported providing positive and constructive feedback to guide students' learning and behavior as the sixth most frequent support provided. Finally, 84 (50.6%) respondents reported being provided support with maintaining due process timelines either monthly, weekly, or daily.

Although the focus of research question three in part was on the most frequent content supports provided, data collected related to frequency denoted relevant information related to the infrequent provision of specific content supports. These results are discussed below.

Least Frequently Provided Content Support

As shown in Appendix E, when exploring the overall provision of content supports, 11 out of the 19 content supports (57.9%) were reported most often as occurring only quarterly,

yearly, or never. Additionally, as shown in Table 23, data gathered related to content as part of mentorship supports indicated that beginning special education teachers were being provided a variety of mentorship content either quarterly, yearly, or never. The data gathered are displayed in aggregate in Table 23 in increasing order of total responses related to infrequency of support provision.

Table 23

Part B: Least Frequent Content Support Provided – Years 1-3

(Disaggregated by provision quarterly, yearly, or never)

Mentorship Content	<i>n</i>	Never	Yearly	Quarterly	Total
BF18. Develop my critical thinking and questioning skills.	163	70 42.9%	9 5.5%	17 10.4%	96 58.9%
BF6. Collaborate with families to support student learning and secure needed services	166	61 36.7%	12 7.2%	29 17.5%	102 61.4%
BF19. Understand the laws and regulations related to my role in Special Education.	161	48 29.8%	14 8.7%	38 23.6%	100 62.1%
BF12. Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes.	163	66 40.5%	8 4.9%	28 17.2%	102 62.6%
BF11. Manage paraprofessionals.	163	76 46.6%	14 8.6%	17 10.4%	107 65.6%
BF10. Conduct student data, assessments, and evaluations.	168	70 41.7%	13 7.7%	28 16.7%	111 66.1%
BF1. Develop my classroom management plan	173	76 43.9%	27 15.6%	22 12.7%	125 72.3%
BF16. Organize and manage my time.	162	79 48.7%	15 9.3%	27 16.7%	121 74.7%
BF9. Conduct functional behavioral assessments to develop individual student behavior support plans.	168	106 63.1%	15 8.9%	19 11.3%	140 83.3%

The least frequently reported content support was conducting functional behavioral assessments to develop individual student behavior support plans with 140 (83.3%) respondents reporting this as a support provided only quarterly, yearly, or never. Support with organization and time management was reported by 121 (74.7%) respondents as being provided only quarterly, yearly, or never. Additionally, being provided support with development of a classroom management plan was reported by 125 (72.3%) respondents as occurring only quarterly, yearly, or never.

Further, 111 (66.1%) respondents reported being provided support in conducting student data, assessments, and evaluations either quarterly, yearly, or never and 107 (65.6%) respondents reported being provided support in managing paraprofessionals only quarterly, yearly, or never. Regarding using student assessment data to analyze instructional practices and to make necessary adjustments that improve student outcomes, 102 (62.6%) respondents reported being provided this support either quarterly, yearly, or never. Similarly, 100 (62.1%) respondents reported being provided support in understand the laws and regulations related to their role in special education only quarterly, yearly, or never, and 102 (61.4%) respondents reported being provided support in collaborating with families to support student learning and secure needed services either quarterly, yearly, or never. Finally, 96 (58.9%) respondents reported being provided support in developing critical thinking and questioning skills either quarterly, yearly, or never.

Most Effective Content Support

As the focus of research question three in part was on the effectiveness of the content of mentorship support provided to beginning special educators in the field, respondents were asked to report which of the given content supports would be rated as highly effective through survey items BE1-BE19. Respondents were able to choose all that apply. The top four content supports

reported as most effective are disaggregated by year and are provided in Table 24 in descending order of total responses.

Table 24

Part B: Most Effective Content Support Provided ~ Disaggregated by years of teaching

Most Effective Content of Mentorship	<i>n</i>	Year 1	Year 2	Year 3
BF5. Work collaboratively with colleagues and service providers to increase student success.	88	24 27.3%	24 27.3%	40 45.5%
BF7. Maintain my due process timelines.	78	24 30.8%	22 28.2%	32 41.0%
BF8. Write and implement IEPs and other due process materials.	77	23 29.9%	21 27.3%	33 42.9%
BF13. Address and manage problems with student behaviors.	67	22 32.8%	17 25.4%	28 41.8%

As shown in Table 24, respondents noted several highly effective content items provided as mentorship support. The most effective content provided to beginning special education teachers was working collaboratively with colleagues and service providers to increase student success and was reported as such by 88 respondents, specifically 24 (27.3%) year-1 respondents, 204 (27.3%) year-2 respondents, and 40 (45.5%) year-3 respondents. The second most effective content support provided was support in maintaining due process timelines and was reported as such by 78 respondents, specifically 24 (30.8%) year-1 respondents, 22 (28.2%) year-2 respondents, and 32 (41.0%) year-3 respondents.

Additionally, the third most effective content support provided beginning teachers was support with writing and implementing IEPs and other due process materials as reported by 77 respondents, with 23 (29.9%) year-1 respondents, 21 (27.3%) year-2 respondents, and 33 (42.9%) year-3 respondents reporting as such. The fourth most effective content support provided was support with addressing and managing problems with student behaviors and was

reported as such by 67 respondents, specifically 22 (32.8%) year-1 respondents, 17 (25.4%) year-2 respondents, and 28 (41.8%) year-3 respondents.

Research Question Four

The focus of research question four was on the personal and professional characteristics that beginning special education teachers reported that effective mentors should possess.

4. What personal and professional characteristics do select Minnesota special education teachers within their first three years of service report as being most valuable for mentors to possess?

To determine what personal and professional characteristics respondents reported as important for effective mentors to possess, two open-ended items for Part C of the survey were created. Item C1 related to what personal characteristics effective mentors should exhibit and item C2 related to what professional characteristics effective mentors should exhibit. These responses were then manually coded for themes and reported in aggregate.

To answer research question four, “valued” was interpreted by the researcher to be reflected in the number of responses provided. For example, if a word or phrase was used often, it was interpreted by the researcher to indicate that this word or phrase was of value to the respondent. Examples of written responses from the open-ended items are provided from the raw data. To aid in analysis, the frequency and use of words and phrases were quantified to gain a sense of value and importance.

Personal Characteristics

The following four themes emerged from the coding of responses to item C1 related to personal characteristics that respondents reported as being those characteristics that effective mentors should possess and are reported in rank order.

1. Emotional Support (47.1% of all responses)
2. Collaborative Support (19.2% of all responses)
3. Pedagogy Support (16.9% of all responses)
4. Special Education Support (16.7% of all responses)

Table 26

Personal Characteristics: Themes and related words and phrases

Personal Characteristics Themes	Emotional Support	Collaborative Support	Pedagogy Support	Special Education Support
Related words and phrases	<ul style="list-style-type: none"> • patience • kindness • being welcoming 	<ul style="list-style-type: none"> • willingness to collaborate • effective communication 	<ul style="list-style-type: none"> • being available for and invested in the mentee • being knowledgeable of teaching methods • demonstrating professionalism 	<ul style="list-style-type: none"> • being a problem-solver and providing guidance • being knowledgeable of due process and special education law • being able to answer mentee questions related to special education • showing enthusiasm and passion for special education.

Emotional Support

As shown in Table 26, aggregated responses coded and categorized under this theme included terms related to kindness, patience, openness, positivity, empathy, friendliness, approachability, honesty, and understanding. Within emotional support, three personal characteristics were most often reported by year-1, year-2, and year-3 respondents as those that effective mentors should possess: 1) patience, 2) kindness, and 3) being welcoming.

The following are examples of respondent comments related to emotional support and have not been edited from the original responses:

1. *“Welcoming, friendly, supportive, offer feedback, collaborative, communicate effectively and consistently, ensure understanding of questions that are asked, follow up with questions to ensure clarity, willing to offer guidance with difficult situations or conversations, honest, create a positive relationship, willing to vouch for new teachers if misunderstandings occur, reasonable expectations for new teachers, understand balancing work and life”*
2. *“Be welcoming, be kind and engaging. Get to know teacher on a personal level as well as professional.”*

Collaborative Support

As shown in Table 26, aggregated responses coded and categorized under this theme included terms such as willingness, positive mindset, accountability, flexibility, collaboration, helpful, professional, problem-solving, guidance, and communication. Within collaborative support, two characteristics were most often reported by year-1, year-2, and year-3 respondents as those that effective mentors should possess: 1) willingness to collaborate and 2) effective communication.

The following are examples of respondent comments related to collaborative support and have not been edited from the original responses:

1. *“Availability and open communication but not micromanaging or overly involved. My first year my mentor, another first year teacher, and I had lunch together every day. It was a great way to build relationship and to talk about things in an informal setting”*
2. *“Mentors should be patient and willing to guide new teachers. Mentors should be available to make time for new teachers. Mentors should facilitate collaboration between*

new teachers and teachers who have been there awhile. Mentors should be honest and willing to help.”

Pedagogy Support

As shown in Table 26, aggregated responses coded and categorized under this theme included terms such as feedback, fundamentals, questions, organization, resources, bias, intelligence, and time management. Within pedagogy support, three characteristics were most often reported by year-1, year-2, and year-3 respondents as those that effective mentors should possess: 1) being available for and invested in the mentee, 2) being knowledgeable of teaching methods, and 3) demonstrating professionalism.

The following are examples of respondent comments related to pedagogy support and have not been edited from the original responses:

1. *“Empathy and time management, flexibility, ability to say no, ask questions, ability to say, I don’t know, I will find out for you by asking my leadership or team, ability to say, that is not a realistic amount of work for one person to complete.”*
2. *“Organized. Shares systems that can benefit the teacher/classroom 3. Critical Thinker gives positive and constructive feedback more than criticism.”*

Special Education Support

As shown in Table 26, aggregated responses coded and categorized under this theme included terms such as due process, IEP, timelines, behavior management, chaos, licensure, disabilities, law, data, assessment, and schedules. Within special education support, the following four personal characteristics were most often reported by year-1, year-2, and year-3 respondents as those that effective mentors should possess: 1) being a problem-solver and providing guidance, 2) being knowledgeable of due process and special education law, 3) being

able to answer mentee questions related to special education, and 4) showing enthusiasm and passion for special education.

The following are examples of respondent comments related to special education support and have not been edited from the original responses:

1. *“A passion for what you are doing and for how you work with the students is key. When a mentor is passionate about their position and their students it really makes it a positive experience for the mentee.”*
2. *“Due process proficiency. Time in a day to meet with me - having a mentor is great unless they have zero time because they have too many things to do in a day. Interpersonal communication skills so they can adequately explain due process, data collection and others... Above all, I think an enthusiasm for special education. I want to learn from someone with a passion for this profession.”*

Professional Characteristics

The following three themes emerged from the coding of responses to item C2 related to professional characteristics that respondents reported as being those characteristics that effective mentors should possess and are reported in aggregate:

1. Special Education Knowledge (29.2% of all responses)
2. Professionalism (40.5% of all responses)
3. Mentor training (30.3% of all responses)

Table 27

Professional Characteristics: Themes and related words and phrases

Professional Characteristics Themes	Special Education Knowledge	Professionalism	Mentor Training
<p>Related words and phrases</p>	<ul style="list-style-type: none"> • due process and special education paperwork support skills • general special education field knowledge • being an experienced and effective special education teacher. 	<ul style="list-style-type: none"> • being reliable and accountable • demonstrating a strong work ethic • demonstrating solid organization and time management skills. 	<ul style="list-style-type: none"> • being an experienced special educator with a passion for teaching • being able to understand and guide mentees • demonstrating strong accountability and leadership skills.

Special Education Knowledge

As shown in Table 27, aggregated responses coded and categorized under this theme included terms related to exceptionalities, IEPs, due process, caseload, special education laws, and evidence-based practices. Within special education knowledge, the following three professional characteristics were most often reported by year-1, year-2, and year-3 respondents as those that effective mentors should possess: 1) due process and special education paperwork support skills, 2) general special education field knowledge, and 3) being an experienced and effective special education teacher.

The following are examples of respondent comments related to special education knowledge and have not been edited from the original responses:

1. *“Knowledgeable about due process, district guidelines. Being able to help navigate disabilities and understand student needs.”*
2. *“A wide and accomplished knowledge base for both teaching/interventions AND due process. Accessibility and availability. The belief that no question is bad ever.”*

Professionalism

As shown in Table 27, aggregated responses coded and categorized under this theme included terms such as organization, reliability, strong communication, time management, problem solving, work ethic, attitude, accountability, and creativity. Within professionalism, three characteristics were most often reported by year-1, year-2, and year-3 respondents as those that effective mentors should possess: 1) being reliable and accountable, 2) demonstrating a strong work ethic, and 3) demonstrating solid organization and time management skills.

The following are examples of respondent comments related to professionalism and have not been edited from the original responses:

1. *“I think an enthusiasm for special education. I want to learn from someone with a passion for this profession. Organizational skills so they may suggest or recommend ways to stay organized when managing the various tasks, classes, due process and other responsibilities a special education teacher needs to manage.”*
2. *“I think accountability is huge with beginning teachers. You are molding them into the educator that they are going to be and being able to hold them accountable to timelines, procedures, etc. is the best thing that you can do for them and for their future in teaching.”*

Mentor Training

As shown in Table 27, aggregated responses coded and categorized under this theme included terms such as compassion, goals, teaching, experience, examples, coach, expectations, relationship, and competence. Within mentor training, three characteristics were most often reported by year-1, year-2, and year-3 respondents as those that effective mentors should

possess: 1) being an experienced special educator with a passion for teaching, 2) being able to understand and guide mentees, and 3) demonstrating strong accountability and leadership skills.

The following are examples of respondent comments related to mentor training and have not been edited from the original responses:

1. *“Uphold high expectations for themselves as a teacher, willingness to continue to grow as a professional, share a common goal of wanting the best for our students, embody a compassionate and caring presence when working with students and staff, be able to balance job responsibilities and be available to mentees.”*
2. *“Organization, understanding of the material/subject, a good example of what to do to be effective, collaborative, they should help new teachers integrate into the professional aspects of the school community.”*

Research Question Five

The focus of research question five was to determine the respondents’ plans to remain in the field of special education in the short- and long-term based on their mentorship support experiences.

5. How do select Minnesota special education teachers within their first three years of service rate their plans to remain in the field of special education in relation to the overall effectiveness of the mentorship supports provided?

To do so, the respondents rated their plans to remain in the field of special education by responding to two multiple-choice items in the survey (E4 and E5). The first multiple choice item (E4) asked the respondents to complete the statement: “In the next school year, I plan to (or hope to)” and were given five options from which to choose ranging from remaining in their current position to leaving the profession altogether. This item explored respondents’ short-term

plans to remain in the profession. The second multiple choice item (E5) asked the respondents to complete the statement: “Five years from now, I plan to (or hope to)” and were again given five options from which to choose ranging from remaining in their current position to leaving the profession altogether. This item explored respondents’ long-term plans to remain in the profession.

Short-term Plans to Remain in the Profession

To explore short-term plans, respondents answered multiple choice item E4 related to their short-term plans to remain in the field. They were specifically asked about their plans “in the next school year”. Short-term was thus defined as “in the next school year”. Table 28 shows the aggregated responses gathered for this item ranging from remaining in their current position to leaving the profession altogether. The responses are reported in descending order of frequency.

Table 28

Item E4: Reported Plans to Remain in the Profession - Short-term (n=350)

Plans to Remain in the Profession ~ Short-term	<i>n</i>	%
Continue teaching special education in my current position	251	71.7
Continue teaching special education but in another position	32	9.1
Leave the teaching profession altogether	26	7.4
Continue working in the field of education but not as a teacher	21	6.0
Continue teaching but transfer out of special education into general ed	16	4.6
NA (no response provided)	4	1.1
Total	350	100

As shown in Table 28, 251 (71.7%) respondents reported short-term plans to remain in their current teaching position, followed by 32 (9.1%) respondents who reported short-term plans to continue teaching special education, but in another position. Additionally, 26 (7.4%)

respondents reported short-term plans to leave the teaching profession altogether. Finally, 21 (6.0%) respondents reported short-term plans to remain in the field of education, but not as a teacher and 16 (4.6%) respondents reported short-term plans to continue teaching, but to transfer out of special education into general education. No response was provided by 4 (1.1%) respondents.

Long-term Plans to Remain in the Profession

To explore long-term plans, respondents answered multiple choice item E5 related to their long-term plans to remain in the field. They were specifically asked about their plans “five years from now”. Long-term was thus defined as “five years from now”. Table 29 shows the aggregated responses gathered for this item ranging from remaining in their current position to leaving the profession altogether. The responses are reported in descending order of frequency.

Table 29

Item E5: Reported Plans to Remain in the Profession - Long-term (n=350)

Plans to Remain in the Profession in the Long-Term	<i>n</i>	%
Be teaching special education in my current position	152	43.4
Be teaching special education but in another position	77	22.0
No longer be in the field of education	30	8.6
Still working in the field of education but not as a teacher	50	14.3
Still be teaching but not in special education	24	6.9
NA (Respondents did not provide answers to this item.)	17	4.9
Total	350	100

As shown in Table 29, 152 (43.4%) respondents reported long-term plans of remaining in their current teaching position in the next five years, followed by 77 (22.0%) respondents who reported planning to be teaching in special education but in another position. Additionally, 30 (8.6%) respondents reported long-term plans to no longer be working in the field of education

and 50 (14.3%) respondents reported long-term plans of still working in the field of education but not as a teacher. Finally, 24 (6.9%) respondents reported long-term plans to still be teaching but not in special education and 17 (4.9%) respondents did not provide a response.

Effects of Mentorship Support on Plans to Remain in the Profession

To determine respondents' short-and long-term plans to remain in the profession, respondents rated their plans to remain in the field of special education by responding to two multiple-choice items in the survey (E4 and E5) as shown in Table 29 and Table 30. These results were then disaggregated into responses aligned with positive mentorship experience responses gathered from Part D items D1, D3, and D4, and negative mentorship experience responses gathered from Part D items D2 and D5. While Table 30 contains all the data gathered from the survey, this description will only present the highlights from the table.

Table 30

Plans to remain in the profession-disaggregated by year and type of mentorship experience (Positive or Negative) (Year-1 n=69, Year-2 n=45, Year-3 n=18)

Plans to Remain in the Profession	Year	Short-Term		Long-Term	
		Positive	Negative	Positive	Negative
Be teaching special education in my current position	1	58 84.1 %	20 74.1%	39 56.5%	9 33.3%
	2	37 82.2%	8 61.5%	29 64.4%	3 23.1%
	3	15 83.3%	-*	9 50.0%	-*
Be teaching special education but in another position	1	4 5.8%	4 14.8%	12 17.4%	10 37.0%
	2	2 4.4%	2 15.4%	9 20.0%	2 15.4%
	3	0 0.0%	-*	4 22.2%	-*
Leave SPED or no longer be in the field of education	1	7 10.1%	3 11.1%	18 26.1%	8 29.6%
	2	6 13.3%	3 23.1%	7 15.6%	8 61.5%
	3	3 16.7%	-*	5 27.8%	-*

Note. No data on year-3 respondents were available as the sample size was $n < 5$.

As shown in Table 30, when specifically examining short-term plans, 58 (84.1%) year-1 respondents, 37 (82.2%) year-2 respondents, and 15 (83.3%) year-3 respondents who engaged in a positive mentorship experience reported plans to remain in their current position.

Comparatively, 20 (74.1%) year-1 respondents and 8 (61.5%) year-2 respondents who reported engaging in a negative mentorship experience reported plans to remain in their current position. No data on year-3 respondents were available as the sample size was $n < 5$.

However, when asked about short-term plans to leave special education or the profession altogether, 7 (10.1%) year-1 respondents, 6 (13.3%) year-2 respondents, and 3 (16.7%) year-3 respondents who engaged in a positive mentorship experience reported plans to leave special education or the profession altogether in the next school year. Comparatively, 3 (11.1%) year-1 respondents and 3 (23.1%) year-2 respondents who reported engaging in a negative mentorship experience reported plans to leave special education or the field altogether in the next school year. No data on year-3 respondents were available as the sample size was $n < 5$.

When specifically examining long-term plans, 39 (56.5%) year-1 respondents, 29 (64.4%) year-2 respondents, and 9 (50.0%) year-3 respondents who reported engaging in a positive mentorship experience reported plans to remain in their current position in the next five years. However, 9 (33.3%) year-1 respondents and 3 (23.1%) year-2 respondents who reported engaging in a negative mentorship experience reported plans to remain in their current position in the next five years. No data on year-3 respondents were available as the sample size was $n < 5$.

Finally, when asked about their long-term plans to leave special education or the profession altogether, 18 (26.1%) year-1 respondents, 7 (15.6%) year-2 respondents, and 5 (27.8%) year-3 respondents who reported engaging in a positive mentorship experience reported plans to leave special education or the profession altogether in the next five years.

Comparatively, 8 (29.6%) year-1 respondents and 8 (61.5%) year-2 respondents who reported engaging in a negative mentorship experience reported long-term plans to leave special education or the field altogether in the next five years. No data on year-3 respondents were available as the sample size was $n < 5$.

Summary

Chapter four reported the quantitative and descriptive data that were collected in an online survey. Basic statistical computations, to include frequency counts and percentages, were employed to explore perceptions of mentorship, to determine what constituted an effective mentoring program for beginning special education teachers, and to understand the influence of mentorship programs on retention rates of new special education teachers in Minnesota. Data was also analyzed related to the overall perceived effectiveness of the given mentoring and beginning special education teachers' plans to remain in the field of special education in the short-term and long-term.

Chapter five will present the study's findings, explore the relationship of the findings to the current review of literature, draw conclusions, offer recommendations on increasing teacher retention rates through providing effective mentorship supports and offer recommendations for the field and further study.

Chapter V: Findings, Conclusions, and Recommendations

This study's purpose was to explore facets of new special education teacher mentorship supports in Minnesota to better understand their perspectives on what constituted effective mentoring program supports for new special education teachers in the profession. The study also explored the influence of these supports on beginning special education teachers' plans to remain in the field.

The results of this study were intended to supplement the gap in the literature related to the influence of effective mentorship on special education teacher retention rates in Minnesota and to provide greater insight into how mentorship was provided, what that mentorship consisted of, and who provided it to beginning special education teachers in our state.

Chapter five presents the findings of the study, draws conclusions, and provides a discussion about the findings for each research question. Additionally, the chapter explores connections to findings in the review of literature, discusses limitations of the study, and offers recommendations for practice and future research.

Conclusions and Discussion

Conclusions and discussion of the study results are provided for each research question and are supported by findings in the literature review and from the researcher's own professional knowledge and experiences.

Research Question One

The focus of research question one was to determine the respondents' reported overall effectiveness of provided mentorship supports.

1. How do select Minnesota special education teachers within their first three years of service rate the overall effectiveness of their mentoring experience?

Data gathered in Part D of the study indicated that, overall, nearly 70% of respondents reported having been provided a positive mentorship experience. These findings are consistent with those of Algozzine et. al (2007) who noted that 69% of their study respondents reported participating in effective mentorship and induction programming.

When disaggregating these data by year, year-2 respondents reported the most positive mentorship experience and year-1 respondents reported having the least positive mentorship experience overall. In their 2015 study, Andrews and Brown addressed this discrepancy in part by noting that their study results showed that year-1 special education teacher perceptions of their ideal teaching experience varied significantly from their actual experience, often leading to dissatisfaction and potential burnout. These results suggest that year-2 mentorship supports may be most effective in comparison to year-1 or that the mentorship provided changed in some way from year one to year two. These findings further indicate that there is a shift from year-1 supports that year-2 mentees find effective.

Unfortunately, no research was found in the related literature that specifically addressed the variance in mentorship provision from year to year and further research into this phenomenon is recommended. Additionally, when considering the journey from preservice to inservice, these data are not wholly surprising. From the researcher's professional experience, beginning special education teachers often enter the classroom with the expectation that they are able to manage all aspects of special education that they may encounter. Additionally, as noted in studies by Whitaker (2000), Israel et al. (2013), and Espinoza, et al. (2018), the first one to three years of a beginning special education teacher's career required a quick transition from theory to practice. This premise is likely based on unrealistic expectations and a potential misunderstanding of the gravitas of moving from theory to practice as a beginning special education teacher new to the

profession. This assumption is supported by Hageman and Casey (2018), who noted that factors such as stress, lack of cooperation and support, and lack of effective training and professional development may negatively influence beginning teachers' plans to remain in the profession in the short-term.

When considering the Minnesota ABS licensure (Academic Behavioral Strategist), it is speculated that special education teachers new to the profession are, in fact, periodically placed in teaching positions outside the scope of their licensure as evidenced by responses to survey item E4 (see Table 7). When asked about licensure and placement alignment, less than two thirds of survey respondents reported that their current licensure aligned with their caseload needs and accurately reflected the disabilities in the caseloads. With a solid understanding of the needed expertise and training to be a successful special educator, the researcher posits that closer alignment between beginning special education teacher licensure and their teaching position should be attempted as this will likely support retention in the short-term.

Research Question Two

What forms of mentorship support do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective forms of supports provided?

Data gathered in Part A of the survey indicated that several forms of mentorship support delivery were utilized most frequently. These included texts and emails between mentor and mentee, unscheduled face-to-face meetings, and scheduled face-to-face meetings.

When looking at the results from this study, several key takeaways appeared. Texts and emails were reported as the most frequent form of mentorship support delivery and were reported as being provided weekly. However, respondents reported this form of support delivery as only

moderately effective. Additionally, respondents reported that unscheduled face-to-face meetings was the second most frequent form of support delivery. This result aligns with Whitaker's (2000) report that noted unscheduled face-to-face meetings were the top rated form of mentorship support in her study.

Similarly, respondents reported that scheduled face-to-face meetings occurred most often each month, but were considered to be a highly effective form of support delivery by more than half of all respondents. One third of all respondents noted infrequent (quarterly or yearly) or no scheduled meetings with mentors even though more than half of all respondents rated this as a highly effective form of mentorship support. These findings are supported by Whitaker's 2000 study which noted that scheduled face-to-face meetings rated second behind unscheduled meetings and occurred most frequently once to several times per month with 25% rating it as a highly effective form of mentorship support.

When looking specifically at forms of support delivery that were not utilized frequently, several key findings emerged. When asked about observations and feedback, nearly half of all respondents reported never having been observed or provided feedback on their teaching, while more than half deemed this to be an effective form of mentorship support. These findings align with Whitaker's 2000 findings where it was shown that more than one third of all respondents reported being observed only once or several times per year even though nearly one fourth of respondents reported this as a highly effective form of mentorship support.

Drawing on years of professional experience, the researcher believes that being observed by a skilled educator in the same field and being given actionable and corrective feedback is paramount to new teacher growth. Only through working directly with a mentor who can provide en vivo support can a novice educator apply and synthesize the feedback into improved teaching

skill. Related literature (McLeskey, et al., 2017) supports this belief and has determined that actionable and positive feedback is a high leverage practice that should be implemented in the classroom setting.

Similarly, two thirds of respondents reported never having an opportunity to observe other teachers teaching, while nearly half of all respondents felt this would be an effective form of mentorship support. Drawing on professional knowledge and experience, the researcher believes that having an opportunity to observe a more knowledgeable other who can model high-leverage teaching practices and strategies allows for the mentee to learn and grow in positive and meaningful ways. This notion is supported in the related literature as Whitaker (2000) reported that one of the forms of support that effective mentors should provide included opportunities for the mentee to observe the mentor teaching. This may require creative scheduling or unique support structures, but given time to observe, to discuss strengths and areas of growth, and to share ideas and strategies may well provide beginning special education teachers with the needed support that may influence their decisions to remain in the profession.

To that end, when asked about time to collaborate, more than 80% of respondents noted scheduled collaboration opportunities as occurring only quarterly, yearly, or never, with nearly 60% of respondents reporting no access to scheduled collaboration time with other teachers. However, when asked to report on the overall effectiveness of collaboration as a mentorship form, more than two thirds of all respondents believed it to be an effective form of mentorship support. This notion is supported by Ingersoll and Strong (2011) who reported that regularly scheduled collaboration time between the mentor and mentee was one of the strongest factors related to increased teacher retention. The researcher believes that through meaningful and rich collaborative discussions, beginning special education teachers are given opportunity to explore

integrating new ideas into their pedagogy, embedding innovative technologies, and utilizing appropriate and impactful strategies with their students, all within the safe and watchful eye of an effective mentor. This assertion is supported by the related literature, as researchers (Espinoza et al., 2018) reported that common planning time with other teachers in the same subject area as well as regularly scheduled collaboration time with other teachers were shown to be key elements of high-quality support that were most strongly associated with reduced levels of teacher attrition.

Overall, based on the findings of this study, there appears to be a clear disconnect between what beginning special education teachers find helpful and what they are actually being provided in terms of mentorship support delivery. Based on professional knowledge and experience, the researcher notes that creating regular opportunities for meaningful interaction between mentor and mentee, both formally and informally, could effectively occur in the form of interactive classroom observations, spontaneous advice and feedback opportunities, engaging grade-level meetings, and collaborative conversations facilitated by veteran teachers. Further, this could be an effective way to alleviate the disparity between what teachers need for support and what they receive, and increase the amount of time that mentors and mentees are able to spend together in meaningful ways. This is supported in related literature by Whitaker (2000) who reported that provision of meaningful weekly contact time between the mentor and mentee did increase overall mentorship effectiveness. She also reported that although frequency alone did not determine the overall effectiveness of the provided mentoring, to be perceived as most effective, the mentor needed to have contact with the beginning special education teacher on at least a weekly basis.

Research Question Three

What mentorship support content do select Minnesota special education teachers within their first three years of service rate as the most frequent and most effective content provided?

Data gathered in Part B of the survey related to content addressed as part of mentorship supports indicated that beginning special education teachers were being provided a variety of mentorship content supports.

The most frequent content support provided was working collaboratively with colleagues and service providers to increase student success. One fourth of all respondents reported being provided weekly collaborative work time to discuss problems of practice to increase student success, while another quarter reported receiving only monthly collaborative work time.

It is concerning, however, that one out of every four beginning special education teachers reported never being given time to work side-by-side with colleagues to grow and hone their teaching skills. As a seasoned educator, the researcher believes that this aspect of mentorship is vital to the development of effective special education teachers. This notion is supported in related literature by Billingsley et al. (2009) who reported that beginning special education teachers often found the demands of their first years in the profession to be overwhelmingly stressful, and whether these teachers thrived in their roles as beginning educators and remained in the field as special educators depended, at least partially, on the outside supports they received from their colleagues and administrators.

The second-most frequently provided mentorship content support was addressing work-related stress. More than one fourth of all respondents reported being provided support with stress they may be dealing with while at work. In related literature, support for this is provided by Hagaman and Casey (2018), who noted that many beginning special education teachers listed

stress related to their assigned role as a primary reason for teacher turnover. Unfortunately, more than one in five respondents of this study also reported never receiving any support related to stress. It is interesting to note this figure as it is similar to the attrition rates of year-2 and year-3 teachers. The researcher speculates that there may be a correlation here and further exploration is warranted.

For educators who provide support to our most vulnerable populations, work-related stress is a natural byproduct of the profession. Too often special educators encounter compassion fatigue or secondary trauma, often unknowingly, and grapple with managing or ameliorating the effects of it all while juggling the needs of the students and the needs of the profession with little to no meaningful support to guide them through. Mentors need to be trained in identifying and appropriately addressing work-related stress that their beginning special education teachers may be impacted by. This notion is supported in literature by Russ et al., (2001) who shared that beginning special education teachers reported that heavy caseloads or caseloads with an abundance of high needs students caused significant stress in their day-to-day routines.

Finally, it must be noted that, of the 19 content supports listed in the survey, in 16 (84%) of them respondents reported most often that they never received the given content support. For example, more than 40% of respondents reported never being provided support in using student assessment data to improve learner outcomes, nearly half of all respondents reported no support in learning to manage paraprofessionals, and nearly half of respondents reported never being given support in organization and time management. Espinoza (2018) and Billingsley et al. (2004) reported that, in addition to learning to become effective teachers, beginning special education teachers also needed to learn to collaborate effectively with colleagues, adhere to administrative guidelines and mandates, successfully manage paraprofessionals, and supportively

interact with parents, all while maintaining due process timelines and guiding their students' growth toward meeting their goals and objectives. For beginning special educators to have longevity and resilience in the short- and long-term, they need to be provided guidance and support in aspects of the profession that cannot easily be taught in a preservice program.

Drawing on professional experience, the researcher contends that professional development opportunities must be provided that specifically address special education teacher problems of practice as beginning special education teachers move from theory to practice. These content items are vital for a sound and efficacious professional practice in special education. This notion is supported in the related literature. Espinoza (2018) also reported that beginning special education teachers faced myriad challenges as they negotiated the special education landscape, replete with IEP writing and implementation, assessments and evaluations, meetings with administration, ongoing formative data collection and analysis, and more all while assuming the complex work of teaching.

Providing beginning special education teachers with opportunities for guidance, support, and actionable and positive feedback during the first three years of teaching are vital to the beginning special education teachers' professional development. The analysis from this study strongly suggests that focusing on several high impact supports, specifically providing actionable feedback, providing opportunities for meaningful collaboration, providing due process supports, and providing supports related to work stress are those that schools and administrators should implement and build upon for beginning teachers new to the special education profession.

Research Question Four

What personal and professional characteristics do select Minnesota special education teachers within their first three years of service report as being most valuable for mentors to possess?

Data gathered in Part C of the survey related to personal characteristics indicated that beginning special education teachers considered several themes of characteristics as most important for mentors to possess. Analysis of the study's findings note that personal characteristics such as kindness, making new teachers feel welcomed, relatability, approachability, open-mindedness, and patience were all reported by respondents as important characteristics for effective mentors to possess.

In the related literature by Whitaker (2000) and Kueker & Haensly (1991) it was noted that teachers new to the profession reported emotional support from their mentors as the most effective mentorship support they received as they often looked for moral support and guidance as they navigated through their first years of teaching. The researcher believes that centering mentorship supports on needed and preferred emotional characteristics may, in fact, bolster teacher retention rates as this may likely provide mentees with a sense of connectedness to their mentors, to their schools, and, ultimately, to the profession.

The findings from the study also suggest that beginning teachers within their first three years of teaching find value in working with a mentor who is willing to work collaboratively with new teachers. Throughout the analysis of collected data from this study, the theme of collaboration emerged as one of the most highly effective and sought-after supports by mentees. Through professional expertise, the researcher believes that mentors must endeavor to model and utilize strong collaborative skills for their mentees throughout the mentoring experience. Related

literature supports this belief as shown in Rowley's (1999) work where it was noted that beginning teachers were not often provided opportunities for shared experience, as mentors often limited instructional support to classroom-focused conversations. Although such interaction could be helpful, discussions based on shared experience were even more impactful and enriching. Regardless the experience, the purpose of shared experiences was to promote a collaborative dialogue centered on enhancing beginning special education teacher performance and, ultimately, student learning. The researcher believes that districts and schools must strive to connect mentor/mentee partnerships who will be successful with collaboration. This may take explicit instruction and professional development to ensure success, but it will likely be worth the effort and commitment.

Year-1, year-2, and year-3 respondents further agreed that personal characteristics such as being available and invested in the mentee's journey, being knowledgeable of the pedagogy of the area you are mentoring, and showing professionalism were all important to beginning teachers within their first three years of teaching. These results align with the related literature by Inzer and Crawford (2005) who noted that an effective mentor was one who was seen as advisor, an advocate, a counselor, a confidant, a cheerleader, and a listener. Further, they noted that an effective mentor should be confident, secure in their expertise and abilities, sensitive to diversity, and be a strong communicator. This researcher firmly believes that when one takes on a mentorship role, it needs to be for more than potential monetary gain. It must be accepted in service to others. Mentors hold the power to affect change within the field related to teacher retention, which in turn, unequivocally impacts student success. Mentors must engage in the work of mentorship through a lens of compassion, positivity, and grace, and districts must

endeavor to align this vital role with educators who embody the necessary personal characteristics.

Overall, the data analysis suggests that, when provided a special education mentor, new special education teachers can more seamlessly transition to higher order problems of practice. This is supported in related literature by Espinoza (2018) when the researcher posited that, when possible, mentors and mentees should be matched by content or grade level which may have proven to have positive effects on the mentee's professional growth and retention. Additionally, Cornelius, et al. (2019) indicated that beginning SETs who had effective mentors were more likely to remain in the field of special education if their mentors were fellow special educators.

Data gathered in Part C of the survey related to professional characteristics indicated that beginning special education teachers considered several themes of characteristics as most important for mentors to possess. Year-1, year-2, and year-3 respondents agreed that professional characteristics such as being knowledgeable of due process and special education paperwork and having a mentor who was an experienced and effective special educator were most important for effective mentors to possess.

These results suggest that beginning special education teachers within their first three years in the profession find value in working with a mentor who is versed in due process and special education paperwork procedures and who is experienced at employing effective special education teaching methods. This is supported in the related literature by Boyer & Gillespie (2000) and Kilgore & Griffin (1998) who reported problems of practice such as completing due process paperwork, providing necessary accommodations and modifications, developing and monitoring IEPs, and collaborating with teachers, related service providers, and families as those that should be addressed and supported through the mentor/mentee partnership.

Finally, regarding overall professionalism, respondents noted that working with a mentor who was consistent, provided positive and corrective feedback, and who was efficient, reliable, and dependable was highly valued for beginning teachers in the profession. Unfortunately, there was no research found in the related literature that explored the variability of mentorship provision from year to year.

Based on the results of this study and professional experience, the researcher believes that effective mentors can have a profound impact on their mentees' effectiveness when they focus on fostering positive professional relationships. As noted in the related literature by Rogers (1951), training in the tenets of congruence, unconditional positive regard, and empathy were shown to create a high level of trust in the teacher/student dyad, and this training may well benefit mentor/mentee partnerships similarly. These findings were further supported by Rowley (1999) who asserted that good mentors were committed to the role of mentoring by modeling continuous learning and communicating hope and optimism. They were accepting of the beginning teacher, skilled at providing instructional support, and effective in varying and vital interpersonal contexts.

Research Question Five

How do select Minnesota special education teachers within their first three years of service rate their plans to remain in the field of special education in relation to the overall effectiveness of the mentorship supports provided?

Data gathered in Part E (items E5 and E6) of the survey related to short- and long-term plans to remain in the field of special education indicated that beginning special education teachers consider a variety of options when thinking about remaining in the profession in the short- and long-term. Although research question five focused on teacher retention rates, the

related literature typically provided analysis and results in terms of attrition rates. The following analysis is based on both provided retention and attrition rates.

The short-term plan that was rated highest by all respondents was to continue to teach special education in their current position regardless of having a positive or negative mentorship experience. When disaggregating by years of service, more than 80% of year-1 respondents who reported having a positive mentorship experience indicated short-term plans to remain in their current teaching position.

Conversely, when considering the reported attrition rates of year-1 special education teachers, approximately 10% of year-1 teachers noted short-term plans to leave the profession altogether. This analysis demonstrated an alignment with state special education teacher attrition data that indicated a 11% attrition rate for year-1 special education teachers as supported in related literature by the Minnesota Department of Education (2021) as well as national literature by Carver-Thomas and Darling-Hammond (2017) noting that approximately 13% of licensed special education teachers leave the profession each year.

When comparing this to year-1 respondents who reported having a negative mentorship experience, nearly three fourths of respondents still planned to remain in their positions, with 11% planning to leave special education of the profession altogether, again aligning with state reported attrition rates (MDE, 2021). It is speculated that beginning special education teachers in their first year may not rely solely on mentorship as their litmus for remaining in the profession. Other factors may, in fact, weigh as heavily. Related literature by Breaux and Wong (2003) noted that beginning teachers upon hire were expected to “perform the full complement of duties immediately, learning as they go along” (p. 8). Considering this, as well as results from the study, year-1 teachers appear to thrive when they feel part of a larger caring community of

educators, when they feel safe, welcomed, and supported emotionally and professionally. This can certainly be addressed through effective mentorship when the emotional component is held in high regard for year-1 teachers. This is supported in findings by Whitaker (2000) who noted that year-1 special education teachers tended to receive more mentorship in the form of emotional support personal support rather than the day-to-day supports related to pedagogy and practice.

When considering year-2 respondents, more noticeable variation occurred. As shown in the results of this study, more than 80% of year-2 respondents who reported having a positive mentorship experience indicated short-term plans to remain in the profession in their current position while nearly 14% of respondents indicated short-term plans to either leave special education or leave the teaching profession altogether. This was slightly less than the statewide finding in the 2021 Biennial MN Teacher Supply and Demand report which reported a year-2 attrition rate of 17%. (MN DoE, 2021).

However, when addressing year-2 teachers who reported negative mentorship experiences, less than two thirds reported short-term plans to remain in their current positions with nearly 25% reporting plans to leave special education or teaching altogether in the next school year. When reflecting on this variance, results from the study and professional experience and knowledge, the researcher notes that it appears likely that the supports needed by year-2 teachers differ from year-1 and center more on problems of practice and sound special education guidance as they navigate their way through due process, etc. As little research was found focused on year-2 mentorship specifically, the researcher draws from professional experience and the findings of this study and notes that districts should consider providing year-2 mentees with explicit guidance on special education due process items as they become more independent

in their roles. Further, providing them with increased meaningful collaboration time to discuss problems of practice would likely be beneficial and may positively impact retention rates.

Finally, more than 80% of year-3 respondents indicated short-term plans to remain in the profession in their current position. Unfortunately, nearly 17% of respondents indicated short-term plans to either leave special education or leave the teaching profession altogether. Again, this was somewhat aligned with findings in the 2021 Biennial MN Teacher Supply and Demand report which reported year-3 attrition rates in Minnesota currently at 22.5% (MN DoE, 2021). When considering the variation in the findings, it is speculated that the reported teaching location of respondents may have influenced these results. As noted in the study, 43% of respondents reported teaching in the 7 County Twin Cities area (EDR 11) and another 11% reported teaching in the Central region (EDR 07W). These two regions comprised 54% of responses and overall, reflect two of the most urban settings in the state. Consideration must be noted for the level of mentorship supports potentially available as compared to other rural locations across the state. Further research may be warranted.

This continued increase in attrition in the short-term is alarming. Despite being provided mentorship supports, beginning special education teachers continue to leave the field mirroring findings by Ingersoll and Strong (2011) and Swanson (2008) who reported that although the number of teacher mentorship programs has risen, there has also been a documented rise in teacher attrition rates indicating a potential disconnect between these two variables.

Understanding beginning special education teachers' short-term plans to remain in the profession is of high importance when considering the current landscape of education in Minnesota as noted by the 2021 Minnesota Biennial Report. Additionally, a solid understanding of beginning special education teachers' long-term plans is equally important and even more alarming. When

considering the long-term plans of beginning special education teachers in Minnesota, the long-term plan that was rated highest was to be teaching special education in the respondent's current position. While this appears to be a positive statistic, concerning patterns emerge.

When disaggregating by years of service, more than half of all year-1 respondents who reported being provided a positive mentorship experience indicated long-term plans to remain in the profession in their current position. Yet, more than one in four year-1 respondents indicated long-term plans to either transition out of special education or leave the teaching profession altogether within the next five years. Conversely, when looking at those who reported engaging in a negative mentorship experience, only one third reported plans to remain in their current position while 30% reported plans to leave within five years. This finding aligns with work by Achinstein et al. (2010) that noted that retaining inservice teachers was more problematic than training new or preservice teachers and could well aid in increasing the retention rates of special education teachers.

This pattern continued when looking at year-2 respondents. Of those who reported a positive mentorship experience, nearly two thirds reported long-term plans to remain in their current position. However, of those who reported being provided a negative mentorship experience, less than one fourth reported plans to remain in the current role in the next five years. Of those year-2 respondents who reported a positive mentorship experience, nearly 16% still noted long-term plans to leave special education or the profession altogether. However, it is most concerning to note that of those year-2 respondents who reported being provided a negative mentorship experience, nearly 66% reported that within five years they would no longer be teaching in special education or would be leaving the profession altogether. This finding is supported by Darling-Hammond and Sykes (2003) who reported that the main concern related to

overall teacher attrition rates would not be producing more new teachers. The main concern would be the exodus of beginning teachers from the teaching profession.

The analysis of this study's findings indicates that providing effective mentorship supports may positively impact beginning teachers' plans to remain in the field of special education rather than transitioning into the general education setting or out of teaching altogether. This is supported by related literature from Walker (2009) who noted that comprehensive induction and mentorship programming was an effective way to keep teachers in the profession. When looking at short- and long-term plans to remain in the profession, the researcher asserts that this trend is not sustainable as we may well be headed toward a crisis from which we cannot easily recover. Districts, institutions of higher education, and other stakeholders must collaborate to address this crisis. We must come together armed with actionable and proactive solutions to the impending exigency.

Limitations of the Survey Instrument and Study

The study included several limitations that should be noted.

1. A new mentoring program and funding stream was provided by the state of Minnesota while the study was being conducted. This new program may have provided participants with more favorable impressions about mentoring, causing potential changes to answers on their survey.
2. The study design allowed for respondents to skip some of the given items on the survey. Despite embedding display logic into the Qualtrics survey, respondents did not complete all items. It appears as though the survey was too long to ensure completion and may have added to the non-response or non-completion rate overall.

3. To determine overall effectiveness of provided mentorship supports, respondents were asked to respond to items denoting effective or ineffective mentorship. This may have been confusing as they were also asked to report perceived effectiveness for given items in Part A and Part B. The terms should have been more clearly defined as positive and negative, and may have ultimately led to some potential respondent confusion.

Recommendations for Practice

The findings in this study may prove helpful for districts as they determine how to best provide effective mentorship supports to beginning special education teachers new to their districts. This statewide study endeavored to identify the most beneficial forms of mentorship support to provide new teachers, the most effective content to address in the mentorship experience, the most valued personal and professional characteristics that effective mentors possess, and the influence of all of these on beginning special education teachers' plans to remain in the field over the short- and long-term. The following recommendations for the field are drawn from the analysis of this study's data.

1. Districts should provide opportunities for beginning special education teachers to be observed within their classroom by their mentors who are trained to provide positive and actionable feedback.
2. Districts should provide weekly opportunities for scheduled and meaningful collaboration time for mentors and mentees where beginning special education teachers are given an opportunity to explore integrating new ideas into their pedagogy, embedding innovative technologies, and utilizing appropriate and impactful strategies with their students, all within the safe and watchful eye of an effective mentor.

3. Districts should provide mentees frequent and recurring opportunities to observe a more knowledgeable other who can model high-leverage teaching practices and strategies.
4. Mentors should be trained in identifying and appropriately addressing work-related stress that their beginning special education teachers may be impacted by.

Recommendations for Future Research

Several topics for future research have been identified from the findings of this study. The following recommendations for the further research are drawn from the analysis of this study's data.

1. Conduct a follow up qualitative study with a small group of representative teachers to explore perceptions and needs related to year-1, year-2, and year-3 mentorship supports.
2. Conduct qualitative studies of beginning special education teachers in urban settings to delineate needs and perceptions related to effective mentorship.
3. Conduct qualitative studies of beginning special education teachers in suburban settings to delineate needs and perceptions related to effective mentorship.
4. Conduct qualitative studies of beginning special education teachers in rural settings to delineate needs and perceptions related to effective mentorship.
5. Conduct a follow up quantitative study to explore potential relationships between licensure pathways, race and retention rates.

Summary

This study was conducted to explore the perceptions of the overall effectiveness of mentorship programs in the state of Minnesota. The questions posed in this study centered on themes of mentorship that were derived from the review of related literature, specifically 1) the forms of mentorship supports provided, 2) the content of the supports provided, and 3) the

personal and professional characteristics of the mentors providing the supports. Research was then conducted to determine if these supports influenced beginning special education teachers' plans to remain in the profession. Results gathered from the analysis of this study's data add to the body of research focusing on mentorship in Minnesota and its influence on teacher retention.

The findings as shown in chapter five revealed that the forms of mentorship support provided, the content of the supports, and the personal and professional characteristics of mentors all influenced beginning teachers' plans to remain in the field.

Considering the themes explored in this study and their influence on retention rates, it is apparent that provision of positive and effective mentorship supports for beginning special education teachers in their first, second, and third years in the profession impacts their retention rates in a positive way. To best support new teachers in the field of special education, we must endeavor to support the whole person by providing impactful and appropriate supports that are relevant to their lived experience, by acknowledging their funds of knowledge and building upon that in meaningful ways, and by providing a safe and nurturing environment in which they can flourish. Only then will these beginning teachers, the future of our profession, be able to rise to the call of guiding and supporting the children in our charge toward lifelong success.

References

- Achinstein, B., Ogawa, R., Sexton, D. & Freitas, C. (2010). Retaining teachers of color: A pressing problem and a potential strategy for “hard-to-staff” schools. *Review of Educational Research*, 80(1), 71-107.
- Algozzine, B., Gretes, J., Queen, A. J., & Cowan-Hathcock, M. (2007). Beginning teachers’ perceptions of their induction program experiences. *The Clearing House*, 80(3), 137–143. Retrieved from <https://www.jstor.org/stable/30192137>
- American Institutes for Research [AIR], (2015). *Promoting teacher effectiveness: Teacher induction and mentoring brief*. Retrieved from <https://lincs.ed.gov/publications/te/mentoring.pdf>
- Anderson, D, Menlove, R, & Salzberg, C.L. (2001). Special education teacher attrition: How many are leaving? Where are they going? *The Researcher*, 16(1), 28-35.
- Andrews, A. & Brown, J.L. (2015). Discrepancies in the ideal perceptions and current experiences of special education teachers. *Journal of Education and Training Studies*, 16(6), 126-131.
- Angelou, M., (2017, January). *Mentoring Month - Maya Angelou Interview* [Video]. Retrieved from <https://youtu.be/rgQOi-aTwNY>
- Aragon, S. (2016). *Teacher Shortages: What We Know*. Retrieved from Education Commission of the States website <https://www.ecs.org/wp-content/uploads/Teacher-Shortages-What-We-Know.pdf>
- Arends, R.I., & Rigazio-Digilio, A. J., (2000). Beginning teacher induction: Research and examples of contemporary practice. *Japan-United States Teacher Education Consortium (JUSTEC)*. Retrieved from <https://files.eric.ed.gov/fulltext/ED450074.pdf>
- Bandura, A. *Social learning theory*. New York: General Learning Press, 1971.
- Bandura, A. (1989). Human agency in social cognitive theory. *Stanford University, American Psychologist*, 44(9), 1175-1184. Retrieved from <https://www.uky.edu/~eushe2/Bandura/Bandura1989AP.pdf>
- Barondess, J. A. (1995). A brief history of mentoring. *New York Academy of Medicine* [President's Address]. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376519/pdf/tacca00082-0062.pdf>
- Bartlett, L. & Johnson, L.S. (2010). The evolution of new teacher induction policy: Support, specificity, and autonomy. *Education Policy*, 24(6), 847-871. <https://doi.org/10.1177/0895904809341466>

- Bauer, S. C., & Brazer, S. D. *Using research to lead school improvement: Turning evidence into action*. Thousand Oaks, CA: SAGE, 2012.
- Bay, M., & Parker-Katz, M. (2009). Perspectives on induction of beginning special educators: Research summary, key program features, and the state of state-level policies. *Teacher Education and Special Education*, 32(1), 17–32.
<https://doi.org/10.1177/0888406408330871>
- Bergin, T. *An Introduction to Data Analysis*. Los Angeles, SAGE Publishing, 2018.
- Bettini, E., Cumming, M.M., Merrill O'Brien, K., Brunsting, N. C., Rangunathan, M., Sutton, R., & Chopra, A. (2020). Predicting special educators' intent to continue teaching students with emotional or behavioral disorders in self-contained settings. *Exceptional Children* 86(2), 209-228. <https://doi.org/10.1177%2F0014402919873556>
- Billingsley, B. S. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, 38(1), 39–55. Retrieved from <https://doi.org/10.1177/00224669040380010401>
- Billingsley, B., Carlson, E., & Klein, S. (2004). The working conditions and induction support of early career special educators. *Exceptional Children*, 70(3), 333–347. Retrieved from <https://doi.org/10.1177/001440290407000305>
- Billingsley, B.S., Griffin, C.C., Smith, S.J., Kamman, M. & Isreal, M. (2009). A review of teacher induction in special education: Research, practice, and technical solutions. (NCIPP Doc. No.RS-1). Retrieved July 20, 2020 from *University of Florida, National Center to Inform Policy and Practice in Special Education Professional Development Website*: http://ncipp.education.ufl.edu/files_6/NCIPP_Induc_010310.pdf
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697–744. Retrieved from <https://doi.org/10.3102/0034654319862495>
- Boe, E. E., Cook, L. H., Sunderland, R. J. (2008). Teacher turnover: Examining exit attrition, teaching area transfer, and school migration. *Exceptional Children*, 75, 7–31.
<https://doi.org/10.1177%2F001440290807500101>
- Boyer, K. L. W. (1999). *A qualitative analysis of the impact of mentorships on new special educators' decisions to remain in the field of special education*. (Doctoral dissertation). Retrieved from <https://files.eric.ed.gov/fulltext/ED438643.pdf>
- Boyer, L., & Gillespie, P. (2000). Keeping the committed: The importance of induction and support programs for new special educators. *TEACHING Exceptional Children*, 33(1), 10–15. Retrieved from <https://doi.org/10.1177/004005990003300102>

- Breaux, A.L. & Wong, H.K. *New teacher induction: How to train, support, and retain new teachers*. Harry K. Wong Publications, 2003.
- Britton, E., Paine, L., Pimm, D., & Raizen, S. (Eds.). (2003). *Comprehensive Teacher Induction*. doi:10.1007/978-94-010-0133-5
- Brock, B.L. (1999). The principal's role in mentor programs. *Mid-Western Educational Researcher*, 12(4), 18-21. Retrieved from <https://www.mwera.org/MWER/documents/MWER-1999-Fall-12-4.pdf>
- Buttner, A., (2021, August). Special education and the teacher shortage. *Frontline Education*. Retrieved from <https://www.frontlineeducation.com/blog/special-education-teacher-shortage/>
- Carver-Thomas, D., & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it*. Palo Alto, CA: Learning Policy Institute.
- Chapman, D. W. (1984). Teacher retention: The test of a model. *American Educational Research Journal*, 21(3), 645–658. <https://doi.org/10.2307/1162922>
- Clark, G. & Zimmerman, E. (1986). Clarifying the meaning of role models in "A walk in the right direction". *Studies in Art Education*, 27(3), 149-150. <https://doi.org/10.2307/1320479>
- Clark, R. A., Harden, S. L., & Johnson, W. B. (2000). Mentor relationships in clinical psychology doctoral training: Results of a national survey. *Teaching of Psychology*, 27(4), 262–268. https://doi.org/10.1207/S15328023TOP2704_04
- Cornelius, K. E., Rosenberg, M. S., & Sandmel, K. N. (2019). Examining the impact of professional development and coaching on mentoring of novice special educators. *Action in Teacher Education*, 42(3), 1–18. <https://doi.org/10.1080/01626620.2019.1638847>
- Creswell, J. W. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson, 2012.
- Creswell, J. W. *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE, 2014.
- Cronan-Hillix, T., Gensheimer, L. K., Cronan-Hillix, W. A., & Davidson, W. S. (1986). Students' views of mentors in psychology graduate training. *Teaching of Psychology*, 13(3), 123–127. https://doi.org/10.1207/s15328023top1303_5
- Danielson, C. (1999). Mentoring beginning teachers: The case for mentoring. *Teaching and Change*, 6(3), 251-257.

- Darling-Hammond, L., & Sykes, G. (2003). Wanted, a national teacher supply policy for education: The right way to meet the “highly qualified teacher” challenge. *Education Policy Analysis Archives*, 11, 33. <https://doi.org/10.14507/epaa.v11n33.2003>
- Darwin, A. (2000). Critical reflections on mentoring in work settings. *Adult Education Quarterly*, 50(3), 197-211.
- Davis, R. (2020, February 13). *Key findings to the 4first annual report to congress on the implementation of the Individuals with Disabilities Education Act, Parts B and C. 2019* [Policy Guidance; Annual Reports; Reports]. US Department of Education (ED). <https://www2.ed.gov/about/reports/annual/osep/2019/parts-b-c/key-findings.html>
- Dewey, J. *Experience and education*. New York: Kappa Delta Pi, 1938.
- Education Commission of the States (ECS). (2019, October 23). *50-state comparison: Teacher recruitment and retention*. Retrieved from <https://www.ecs.org/50-state-comparison-teacher-recruitment-and-retention/>
- Educator Policy Innovation Center [EPIC], (2019). *Teacher Induction and Mentoring: Fund Robust Teacher Induction and Mentorship Programs That Align With Best Practices*. Retrieved from https://www.educationminnesota.org/EDMN/media/edmn-files/advocacy/EPIC/EPIC_v5n1-02_Induction_Booklet.pdf
- Espinoza, D., Saunders, R., Kini, T., & Darling-Hammond, L. (2018). Taking the long view: State efforts to solve teacher shortages by strengthening the profession. *Palo Alto, CA: Learning Policy Institute*. Retrieved from <https://learningpolicyinstitute.org/product/long-view-report>
- Feiman-Nemser, S. (2001). Helping novices learn to teach. *Journal of Teacher Education*, 52, 17–30. <https://doi.org/10.1177/0022487101052001003>
- Feng, L., & Sass, T. R. (2013). What makes special-education teachers special? Teacher training and achievement of students with disabilities. *Economics of Education Review*, 36, 122–134. <https://doi.org/10.1016/j.econedurev.2013.06.006>
- Galvez-Hjornevik, C. (1985), Mentoring: A review of literature with a focus on teaching. *Texas Univ., Austin. Research and Development Center for Teacher Education*. Retrieved from <https://files.eric.ed.gov/fulltext/ED262032.pdf>
- Garcia, E., & Weiss, E., (2019a). The teacher shortage is real, large and growing, and worse than we thought. *Economic Policy Institute*. Retrieved from <https://www.epi.org/publication/the-teacher-shortage-is-real-large-and-growing-and-worse-than-we-thought-the-first-report-in-the-perfect-storm-in-the-teacher-labor-market-series/>

- Garcia, E., & Weiss, E., (2019b). U.S. schools struggle to hire and retain teachers *Economic Policy Institute*. Retrieved from <https://www.epi.org/publication/u-s-schools-struggle-to-hire-and-retain-teachers-the-second-report-in-the-perfect-storm-in-the-teacher-labor-market-series/>
- Gardiner, W. (2011). New urban teachers experience induction coaching: "Moving vision toward reality. *Action in Teacher Education*, 33, 359-373.
<https://doi.org/10.1080/01626620.2011.620525>
- Gardiner, W., & Weisling, N. (2016). Mentoring 'inside' the action of teaching: Induction coaches' perspectives and practices. *Professional Development in Education*, 42(5), 671–686. <https://doi.org/10.1080/19415257.2015.1084645>
- Garvey, R., & Alred, G. (2000). Educating Mentors. *Mentoring and Tutoring*, 8, 113–126.
<https://doi.org/10.1080/713685525>
- Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children*, 67(4), 549–567. <https://doi.org/10.1177/001440290106700408>
- Gibb, G. S., & Welch, M. (1998). The Utah mentor teacher academy: Evaluation of a statewide mentor program. *Teacher Education and Special Education*, 21(1), 22–33. <https://doi.org/10.1177/088840649802100104>
- Giebelhaus, C. R., & Bowman, C. L. (2002). Teaching mentors: Is it worth the effort? *The Journal of Educational Research*, 95(4), 246–254.
- Glazerman, S., E. Isenberg, S. Dolfin, M. Bleeker, A. Johnson, M. Grider, and M. Jacobus. (2010). Impacts of comprehensive teacher induction: Final results from a randomized controlled study (NCEE 2010-4028). *Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education*. Retrieved from <https://ies.ed.gov/ncee/pubs/20104027/pdf/20104028.pdf>
- Gold, Y. (1996). Beginning teacher support. Attrition, mentoring, and induction. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), *Handbook of Research on teacher Education* (second Edition, pp. 548-594). New York: Macmillan Library.
- Goldrick, L. (2016). Support from the start: A 50-state review of policies on new educator induction and mentoring. *New Teacher Center*. Retrieved from <http://newteachercenter.org/>
- Goldrick, L., Sindelar, P., Zabala, D., & Hirsch, E. (2014). The role of state policy in preparing educators to meet the learning needs of students with disabilities (Document No. PA-1). Retrieved from *University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website*:
<http://ceedar.education.ufl.edu/tools/literature-syntheses/>

Goleman, D. *Emotional intelligence*. New York: Bantam Books, Inc., 1995.

Griffin, C.C., Winn, J.A., Otis-Wilborn, A., & Kilgore, K.L. (2003). New teacher induction in special education. (COPSSE Document Number RS-5). *Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education*. Retrieved from <http://copsse.education.ufl.edu/docs/RS-5/1/RS-5.pdf>

Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173–208. <https://doi.org/10.3102/00346543076002173>

Hagaman, J. L., & Casey, K. J. (2018). Teacher attrition in special education: Perspectives from the field. *Teacher Education and Special Education*, 41(4), 277–291. <https://doi.org/10.1177/0888406417725797>

Heubeck, E. (2021, May 4). Mentors matter for new teachers. Advice on what works and doesn't. *Education Week*. Retrieved from <https://www.edweek.org/leadership/retaining-great-teachers-in-a-time-of-turmoil>

Hirsch, E., Rorrer, A., Sindelar, P. T., Dawson, S.A., Heretick, J., & Jia, C. L. (2009). *State policies to improve the mentoring of beginning special education teachers*. (NCIPP Doc. No.PA-1) Retrieved from http://www.ncipp.org/reports/pa_1.pdf

Hobson, A., Ashby, P., Malderez, A., & Tomlinson, P. (2009). Mentoring beginning teachers: What we know and what we don't. *Teaching and Teacher Education*, 25, 207–216. <https://doi.org/10.1016/j.tate.2008.09.001>

Holloway, J. (2001). The benefits of mentoring. *Educational Leadership*, 58(8), 85- 86.

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 63, 597-606. <https://doi.org/10.1086/222355>

Howe, E. R. (2006). Exemplary teacher induction: An international review. *Educational Philosophy and Theory*, 38(3), 287–297. <https://doi.org/10.1111/j.1469-5812.2006.00195.x>

Individuals With Disabilities Education Act (IDEA), 20 U.S.C. § 1400 (2004). Retrieved from <https://sites.ed.gov/idea/about-idea/>

Ingersoll, R. M. (2001). Teacher turnover, teacher shortages, and the organization of schools. *Center for the Study of Teaching and Policy*. Retrieved from https://www.cpre.org/sites/default/files/researchreport/824_turnover-ing-01-2001.pdf

- Ingersoll, R. M. (2012). Beginning teacher induction: What the data tell us. *The Phi Delta Kappan*, 93(8), 47–51. Retrieved from <https://www.jstor.org/stable/23210373>
- Ingersoll, R., Merrill, L., & Stuckey, D. (2014). *Seven trends: the transformation of the teaching force*, updated April 2014. CPRE Report (#RR-80). Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Ingersoll, Richard M.; Merrill, Elizabeth; Stuckey, Daniel; and Collins, Gregory. (2018). Seven trends: The transformation of the teaching force – Updated October 2018. *CPRE Research Reports*. Retrieved from https://repository.upenn.edu/cpre_researchreports/108
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81(2), 201–233. <https://doi.org/10.3102%2F0034654311403323>
- Inzer, L. D. & Crawford, C. B., (2005). A Review of Formal and Informal Mentoring: Processes, Problems, and Design. *Journal of Leadership Education*, 4(1), 31-50.
- Israel, M., Kamman, M. L., McCray, E. D., & Sindelar, P. T. (2014). Mentoring in action: The interplay among professional assistance, emotional support, and evaluation. *Exceptional Children*, 81(1), 45–63. <https://doi.org/10.1177/0014402914532231>
- Johnson, W. B. (2002). The intentional mentor: Strategies and guidelines for the practice of mentoring. *Professional Psychology: Research and Practice*, 33(1), 88–96. <https://doi.org/10.1037/0735-7028.33.1.88>
- Kardos, S., & Johnson, S. M. (2008). New teachers' experiences of mentoring: The good, the bad, and the inequity. *Journal of Educational Change*, 11, 23–44. <https://doi.org/10.1007/s10833-008-9096-4>
- Katsiyannis, A., Yell, M. L., & Bradley, R. (2001). Reflections on the 25th anniversary of the Individuals with Disabilities Education Act. *Remedial and Special Education*, 22(6), 324–334. <https://doi.org/10.1177/074193250102200602>
- Kaufmann, J. (2007). *State induction programs and mentoring for new and beginning teachers*. Retrieved from the Education Commission of the States (ECS) website: <https://www.ecs.org/clearinghouse/76/65/7665.pdf>
- Kilgore, K.L. & Griffin, C.C. (1998). Beginning special educators: Problems of practice and the influence of school context. *Teacher Education and Special Education*, 21(3):155-173. doi:10.1177/088840649802100302
- Kram, K. E. *Mentoring at work: Developmental relationships in organizational life*. Lanham, Maryland: University Press of America, 1988.

- Kueker, J., & Haensly, P. (1991). Developing mentor/induction year teacher dyads in a generic special education teacher-training program. *Teacher Education and Special Education, 14*(4), 257–262. <https://doi.org/10.1177/088840649101400407>
- Lane, G. M., & Canosa, R. (1995). A mentoring program for beginning and veteran teachers of students with severe disabilities. *Teacher Education and Special Education, 18*(4), 230–239. <https://doi.org/10.1177/088840649501800403>
- Levinson, D. J. *Seasons of a man's life*. New York, NY. Knopf, 1978.
- Lucas, C. A. (1999). Developing competent practitioners. *Educational Leadership, 56*(8), 45-48. Retrieved from <https://www.ascd.org/el/articles/developing-competent-practitioners>
- Maddex, J. S. (1993). *Survey of ten mentoring programs in Virginia*. (Doctoral dissertation, Virginia Polytechnic Institute and State University, 1993).
- Madigan, J. C., & Scroth-Cavataio, G. (2012). Support for the beginning special educator through high quality mentoring. *National Teacher Education Journal 5*(1).
- Mandlawitz, M., & Center on Education Policy (Washington, D. C.). (2003). A tale of 3 cities: Urban perspectives on special education. *Center on Education Policy*. <https://books.google.com/books?id=vs-ZvAEACAAJ>
- McLaughlin, C. (2010). Mentoring: What is it? How do we do it and how do we get more of it? *Health Services Research, 45*(3), 871–884. <https://doi.org/10.1111/j.1475-6773.2010.01090.x>
- McLeod, S. A. (2016). Bandura - social learning theory. *Simply Psychology*. Retrieved from <https://www.simplypsychology.org/simplypsychology.org-bandura.pdf>
- McLeskey, J., Tyler, N.C., & Saunders Flippin, S. (2004). The supply of and demand for special education teachers: A review of research regarding the chronic shortage of special education teachers. *The Journal of Special Education, 38*(1), 5-21.
- McLeskey, J., & Billingsley, B. (2008). How does the quality and stability of the teaching force influence the research-to-practice gap? A perspective on the teacher shortage in special education. *Remedial and Special Education, 29*(5), 293-305. <https://doi.org/10.1177%2F0741932507312010>
- McLeskey, J., Barringer, M-D., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., Lewis, T., Maheady, L., Rodriguez, J., Scheeler, M. C., Winn, J., & Ziegler, D. (2017, January). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children & CEEDAR Center.

- McLeskey, J., Billingsley, B., & Ziegler, D. (2018). Using high-leverage practices in teacher preparation to reduce the research-to-practice gap in inclusive settings. *Australian Journal of Special and Inclusive Education*, 42(1), 3-16. doi:10.1017/jsi.2018.3
- Minnesota Department of Education (2015a). *Teacher supply and demand: Fiscal year 2015 report to the legislature*. Retrieved from <https://www.educationevolving.org/files/blog/MDE-Teacher-Supply-Demand-Report-2015.pdf>
- Minnesota Department of Education (2015b). *Staff development report of district and site results and expenditures for 2014-15*. Retrieved from <https://www.leg.mn.gov/docs/2016/mandated/160204.pdf>
- Minnesota Department of Education. (2021). *2021 Biennial report: Supply and demand of teachers in minnesota*. Retrieved from https://mn.gov/pelsb/assets/Supply%20and%20Demand%202021_Final_tcm1113-463801.pdf
- Minnesota Office of Higher Education (OHE) (2017). *Designated teacher shortage areas*. Retrieved from <https://www.ohe.state.mn.us/mPg.cfm?pageID=2294>
- Minnesota Statute § 122A.70 (2020). Retrieved from <https://www.revisor.mn.gov/statutes/cite/122A.70>
- Minnesota Statute § 122A.70 (2021). Retrieved from <https://www.revisor.mn.gov/statutes/cite/122A.70>
- National Comprehensive Center for Teacher Quality, (2007). *Lessons learned: New teachers talk about their jobs, challenges, and long-range plans [Issue 2]*. Retrieved from <https://files.eric.ed.gov/fulltext/ED499415.pdf>
- Nobles, J. (2013). *Evaluation report: Special education*. Retrieved from the Office of the Legislative Auditor State of Minnesota website <https://www.auditor.leg.state.mn.us/ped/2013/sped.htm>
- Oregon Department of Education Mentoring Program [OMP], (2019, June). *High leverage instructional practices in mentoring*. Retrieved from <https://www.oregon.gov/ode/schools-and-districts/grants/mentoring/Documents/OMPHighLeveragePracticResearchBrief.pdf>
- Peel, J.L. & Nolan, R.J. (2015). You can't start a central line? Supervising residents at different stages of the learning cycle. *Journal of Graduate Medical Education* 7(4), 536-538. <https://dx.doi.org/10.4300%2FJGME-D-15-00025.1>

- Podsen, I. J., & Denmark, V. *Coaching and mentoring first year and student teachers*. New York: Taylor & Francis, 2007.
- Quality counts 2006: State of the states: Overview. (2006, January 3). *Education Week*. Retrieved from <https://www.edweek.org/teaching-learning/state-of-the-states-overview/2006/01>
- Quality counts 2010: National highlights report. (2010, January). *Education Week*. Retrieved from <https://epe.brightspotcdn.com/2c/49/43dff33a424abceeaf9b21edb7c5/17shr.us.h29.pdf>
- Rogers, C. R. *Client-centered therapy*. Boston: Houghton-Mifflin, 1951.
- Rogers, C. R., Lyon Jr., H. C., & Tausch, R. (2014). *On becoming an effective teacher: Person-centered teaching, psychology, philosophy, and dialogues with Carl R. Rogers and Harold Lyon* (pp. xxxiv, 251). Routledge/Taylor & Francis Group.
- Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal*, 50(1), 4–36. <https://doi.org/10.3102/0002831212463813>
- Rosenberg, M. S., Griffin, C. C., Kilgore, K. L., & Carpenter, S. L. (1997). Beginning teachers in special education: A model for providing individualized support. *Teacher Education and Special Education*, 20(4), 301–321. <https://doi.org/10.1177/088840649702000403>
- Rosenholz, S. J. (1989). Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. *The Elementary School Journal*, 89(4). <https://doi.org/10.1086/461584>
- Rowley, J. (1999, May). The Good Mentor. *Educational Leadership*. Retrieved from <http://www.ascd.org/publications/educational-leadership/may99/vol56/num08/The-Good-Mentor.aspx>
- Russ, S., Chiang, B., Rylance, B. J., & Bongers, J. (2001). Caseload in special education: An integration of research findings. *Exceptional Children*, 67(2), 161–172. <https://doi.org/10.1177/001440290106700202>
- Schlechty, P.C. (1985). A framework for evaluating induction into teaching. *Journal of Teacher Education*, 36(1), 37-41. <https://doi:10.1177/002248718503600109>
- Schwille, S. A. (2008). The professional practice of mentoring. *American Journal of Education*, 139–167.
- Serpell, Z., (2000). *Beginning teacher induction: A review of the literature*. American Association of Colleges for Teacher Education, Washington, DC.

- Shulman, J. H., & Colbert, J. A. (1988). The intern teacher casebook. *Far West Laboratory for Educational Research and Development*. San Francisco, CA. Retrieved from <https://files.eric.ed.gov/fulltext/ED296998.pdf>
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681–714. Retrieved from <https://www.jstor.org/stable/3699442>
- Southern Regional Education board [SREB], 2018. Mentoring new teachers: A fresh look. Retrieved from <https://www.sreb.org/mentoring>
- Strong, M. (2005). Induction, mentoring and teacher retention: A summary of the research. *The New Educator*, 1(3), 181–198. <https://doi.org/10.1080/15476880590966295>
- Strong, M. *Effective teacher induction & mentoring: Assessing the evidence*. New York: Teachers College Press, 2009.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.. Palo Alto, CA: Learning Policy Institute.
- Swanson, C.B., (2008, January 3). Grading the stats. *Education Week*. Retrieved from <https://www.edweek.org/teaching-learning/grading-the-states/2008/01>
- Swerdlik, M. E., & Bardon, J. I. (1988). A survey of mentoring experiences in school psychology. *Journal of School Psychology*, 26(3), 213–224. [https://doi.org/10.1016/0022-4405\(88\)90001-5](https://doi.org/10.1016/0022-4405(88)90001-5)
- U.S. Department of Education. (2015). *Teacher shortage areas*. <https://tsa.ed.gov/#/reports>
- U.S. Department of Education. (2021). *Teacher shortage areas*. <https://tsa.ed.gov/#/reports>
- Waddell, L., (2010). Fostering relationships to increase teacher retention in urban schools. *Journal of Curriculum and Instruction*, 4(1), 70-85. <https://doi.org/10.3776/joci.2010.v4n1p70-85>
- Walker, K. (2009). Excavating the millennial teacher mine. *NASSP Bulletin*, 93(1), 73-77. <https://doi.org/10.1177/00192636509336278>
- Wang, J. & Odell, S.J. (2002). Mentored learning to teach according to standards-based reform: A critical review. *Review of Educational Research Fall 2002*, 72(3), pp. 481–546. Retrieved from <https://journals.sagepub.com/doi/pdf/10.3102/00346543072003481>
- Wang, J., Odell, S. J., & Schville, S. A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education*, 59(2), 132–152. <https://doi.org/10.1177/0022487107314002>

- Weisling, N. F., & Gardiner, W. (2018). Making mentoring work. *Phi Delta Kappan*, 99(6), 64–69. <https://doi.org/10.1177/0031721718762426>
- Welfel, E. R., & Kitchener, K. S. (1992). Introduction to the special section: Ethics education: An agenda for the '90s. *Professional Psychology: Research and Practice*, 23(3), 179–181. <https://doi.org/10.1037/0735-7028.23.3.179>
- Wenger-Traynor, E. (2015). *Introduction to communities of practice*. Retrieved from <https://wenger-trayner.com/introduction-to-communities-of-practice/>
- Whitaker, S. D. (2000). What do first-year special education teachers need? Implications for induction programs. *TEACHING Exceptional Children*, 33(1), 28–36. <https://doi.org/10.1177/004005990003300105>
- White, M., & Mason, C. Y. (2006). Components of a successful mentoring program for beginning special education teachers: Perspectives from new teachers and mentors. *Teacher Education and Special Education*, 29(3), 191–201. <https://doi.org/10.1177/088840640602900305>
- Wilde, J. B., & Schau, C. G. (1991). Mentoring in graduate schools of education: Mentees' perceptions. *Journal of Experimental Education*, 59(2), 165–179. <https://doi.org/10.1080/00220973.1991.10806559>
- Wilder Research (2019). *2019 Biennial Minnesota Teacher Supply and Demand*. Retrieved from https://mn.gov/pelsb/assets/2019%20Supply%20and%20Demand%20Report_tcm1113-370206.pdf
- Wildman, T. M., Niles, J. A., Magliaro, S. G., & McLaughlin, R. A. (1989). Teaching and learning to teach: The two roles of beginning teachers. *The Elementary School Journal*, 89(4), 471–493. <https://doi.org/10.1086/461587>
- Wong, H. (2004). Induction programs that keep new teachers teaching and improving. *NASSP Bulletin*, 88(638). Retrieved from <http://newteacher.com/pdf/Bulletin0304Wong.pdf>
- Woods, J. R. (2016). Mitigating teacher shortages: Induction and mentorship. *Education Commission of the States*. Retrieved from <https://www.ecs.org/wp-content/uploads/Mitigating-Teacher-Shortages-Induction-Mentorship.pdf>
- Yee, S. M. *Careers in the classroom: When teaching is more than a job*. New York: Teachers College Press., 1990.
- Zey, M. G. *The mentor connection*. Homewood, IL: Dow Jones-Irwin, 1984.

Appendix A: IRB Approval



Institutional Review Board (IRB)

720 4th Avenue South AS 210, St. Cloud, MN 56301-4498

Name: Michele Barron-Albers
Email: malbers@stcloudstate.edu

**IRB PROTOCOL
 DETERMINATION:
 Exempt Review**

Project Title Mentorship and Teacher Retention: Analysis of Beginning Special Education Teachers' Experiences in Minnesota

Advisor John Eller

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects. Your project has been: **APPROVED**

PI should consider requesting a friend or a colleague to share recruitment emails on their behalf in order to retain the implied consent form with the survey in order to prevent having access to identifiable information (email addresses) from potential participants.

Please note the following important information concerning IRB projects:

- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).

- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.

-Exempt review only requires the submission of a Continuing Review/Final Report form in advance of the expiration date indicated in this letter if an extension of time is needed.

- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal is requested and approved, new consent forms will be officially stamped and reflect the new approval and expiration dates.

- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

If we can be of further assistance, feel free to contact the IRB at 320-308-4932 or email ResearchNow@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Chair:

Dr. Mill Mathew
 Chair and Graduate Director
 Assistant Professor
 Communication Sciences and Disorders

IRB Institutional Official:

Dr. Claudia Tomany
 Associate Provost for Research
 Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB#: 2039 - 2650	Type: Exempt Review	Today's Date: 7/20/2021
1st Year Approval Date: 7/20/2021	2nd Year Approval Date:	3rd Year Approval Date:
1st Year Expiration Date:	2nd Year Expiration Date:	3rd Year Expiration Date:

Appendix B: Survey Instrument

Mentoring Questionnaire for Beginning Special Education Teachers

Thank you for choosing to participate in this study. The data collected will provide insight into what constitutes effective mentoring supports for beginning special education teachers in Minnesota. The data you provide will also allow for exploration into how these provided supports influence retention rates in the state. Your thoughtful and honest responses to the following questions are greatly appreciated.

Did you work with a mentor during the first, second, and/or third year of your teaching career? YES NO

If **YES**: please complete the entire questionnaire.

If **NO**: please complete the demographic questions only below.

DEMOGRAPHICS (Part E)

DIRECTIONS: Please choose the letter of the ONE response for each given item that is TRUE for you.

1. I have been teaching for:

- a. 1 year
- b. 2 years
- c. 3 years
- d. 4 or more years

3. Please choose the statement that best describes your current teaching caseload.

- a. All my students spend most (at least 81%) of their school day with their GE peers.
- b. All my students spend approximately half (41-80%) of their school day with their GE peers.
- c. All my students spend a small part (0-40%) of their school day with their GE peers.
- d. Some of my students spend most of their day with GE peers, some spend about half, and some spend a small amount of time with their GE peers.
- e. I teach in a separate school facility which provides special education supports away from the GE school facility.
- f. I teach in a public residential facility.
- g. I teach in a private residential facility.
- h. I am currently teaching in a program other than special education OR I am not teaching at all.

6. Five years from now, I plan to (or hope to):

- a. be teaching special education in my current position.
- b. be teaching special education, but in another position.
- c. be teaching, but not in special education.
- d. still be in education, but no longer teaching.
- e. no longer be in the field of education.

2. I am:

- a. fully certified (MN Tier 3 or 4) to teach special education in my current position.
- b. teaching special education on a MN Tier 1 or 2 license.

4. My current teaching licensure:

- a. accurately reflects the disabilities represented in my caseload.
- b. partially reflects the disabilities represented in my caseload.
- c. does not reflect the disabilities represented in my caseload.

5. In the next school year, I plan to (or hope to):

- a. continue teaching special education in my current position.
- b. continue teaching special education, but in another position.
- c. continue teaching, but transfer out of special education into general education
- d. continue working in the field of education, but not as a teacher.
- e. leave the teaching profession altogether.

7. How satisfied are you today with teaching special education as a career?

- a. extremely dissatisfied
- b. mostly dissatisfied
- c. mostly satisfied
- d. extremely satisfied

8. As a beginning special education teacher, which statement most accurately describes your situation related to mentorship supports provided by your school or district?

- a. I was never provided a mentor, and I didn't want the support.
- b. I was never provided a mentor, but I would have liked the support.
- c. I was provided a mentor, but I declined the support.
- d. I was provided a mentor, and I accepted the support.

10. My mentor is:

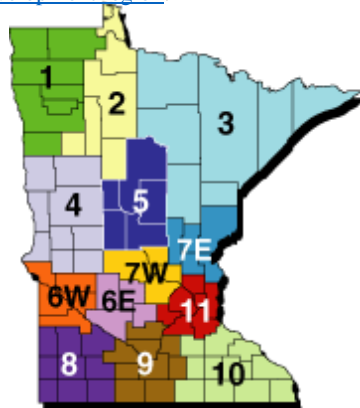
- a. a special education teacher
- b. not a special education teacher (*Please answer question 12.*)

12. My mentor is NOT a special education teacher. His/her/their current teaching assignment is:

(Written response) _____

14. My school is located in the following [education development region](#):

- a. EDR 01 Northwest
- b. EDR 02 Headwaters
- c. EDR 03 Arrowhead
- d. EDR 04 West Central
- e. EDR 05 North Central
- f. EDR 06E Southwest Central
- g. EDR 06W Upper MN Valley
- h. EDR 07E East Central
- i. EDR 07W Central
- j. EDR 08 Southwest
- k. EDR 09 South Central
- l. EDR 10 Southeast
- m. EDR 11 7 County Twin Cities



9. My mentor and I:

- a. teach in the same building
- b. teach in different buildings

11. My mentor and I identify as the same gender.

- a. true
- b. false
- c. prefer not to say

13. Which category or categories best describe you? (Choose all that apply.)

- a. Hispanic or Latino
- b. Black or African American
- c. American Indian or Alaska Native
- d. Asian
- e. Native Hawaiian or Other Pacific Islander
- f. White
- g. Other

15. Gender: I self-identify as:

- a. male
- b. female
- a. non-binary / third gender
- b. prefer not to say

16. The school where I teach is best described as:

- a. an elementary school
- b. a junior high or middle school
- c. a high school
- d. both a junior high and high school
- e. both an elementary school and a secondary school (K-12)

Did you work with a mentor during the first, second, and/or third year of your teaching career? YES NO

If **YES**: please complete the entire questionnaire.

If **NO**: please stop here.

FORMS OF MENTORSHIP DELIVERY (Part A)

DIRECTIONS for PART A: For each item, please choose the number that best reflects how often your mentor provided the form of mentorship support delivery to you. Then choose the number that best reflects how effective that form of mentorship support delivery has been to you.

(If you choose 0 for frequency, do NOT choose anything under effectiveness. Instead go to the next item.)

FREQUENCY

- 0=never
- 1=Once to several times per year
- 2=Once to several times per quarter
- 3=Once to several times per month
- 4=Once to several times weekly
- 5=Daily

EFFECTIVENESS

- 0=not at all helpful
- 1=
- 2=
- 3=
- 4=
- 5= extremely effective

Use these numbers to indicate values between the two extremes.

PART A: Forms of mentorship support delivery provided:

<i>My mentor assists me by:</i>	<i>FREQUENCY</i>						<i>EFFECTIVENESS</i>					
	<i>never</i>	<i>yearly</i>	<i>quarterly</i>	<i>monthly</i>	<i>weekly</i>	<i>daily</i>	<i>Not at all</i>	←————→				<i>extremely</i>
A1. Meeting with me in scheduled face-to-face meetings	0	1	2	3	4	5	0	1	2	3	4	5
A2. Meeting with me in unscheduled or impromptu face-to-face meetings (<i>ie. stopping by to check on me or catching me briefly in the hall.</i>)	0	1	2	3	4	5	0	1	2	3	4	5
A3. Calling me on the telephone to check in with me.	0	1	2	3	4	5	0	1	2	3	4	5
A4. Communicating with me in writing such as through texts or email.	0	1	2	3	4	5	0	1	2	3	4	5
A5. Observing me in my classroom and providing feedback.	0	1	2	3	4	5	0	1	2	3	4	5
A6. Arranging for me to observe my mentor or other teachers.	0	1	2	3	4	5	0	1	2	3	4	5
A7. Meeting with me in online meetings (<i>ie. Zoom, Google Meets, etc.</i>)	0	1	2	3	4	5	0	1	2	3	4	5
A8. Introducing me to an external network of teachers.	0	1	2	3	4	5	0	1	2	3	4	5
A9. Providing scheduled collaboration time with other teachers.	0	1	2	3	4	5	0	1	2	3	4	5

DIRECTIONS for PART B: For each item, please choose the number that best reflects how often your mentor provided the content of mentorship support to you. Then choose the number that best reflects how effective that content of mentorship support has been to you. Please use the scale shown above in Part A to guide your responses.

<i>My mentor assists me to:</i>	FREQUENCY						EFFECTIVENESS					
	<i>never</i>	<i>yearly</i>	<i>quarterly</i>	<i>monthly</i>	<i>weekly</i>	<i>daily</i>	<i>Not at all</i>	←—————→				<i>extremely</i>
B1. Develop my classroom management plan.	0	1	2	3	4	5	0	1	2	3	4	5
B2. Use multiple sources of information to develop a comprehensive understanding of my students' strengths and needs.	0	1	2	3	4	5	0	1	2	3	4	5
B3. Address work-related stress I may be experiencing.	0	1	2	3	4	5	0	1	2	3	4	5
B4. Establish a consistent, organized, and respectful learning environment.	0	1	2	3	4	5	0	1	2	3	4	5
B5. Work collaboratively with colleagues and service providers to increase student success.	0	1	2	3	4	5	0	1	2	3	4	5
B6. Collaborate with families to support student learning and secure needed services.	0	1	2	3	4	5	0	1	2	3	4	5
B7. Maintain my due process timelines.	0	1	2	3	4	5	0	1	2	3	4	5
B8. Write and implement IEPs and other due process materials.	0	1	2	3	4	5	0	1	2	3	4	5
B9. Conduct functional behavioral assessments to develop individual student behavior support plans.	0	1	2	3	4	5	0	1	2	3	4	5
B10. Conduct student data, assessments, and evaluations.	0	1	2	3	4	5	0	1	2	3	4	5
B11. Manage paraprofessionals.	0	1	2	3	4	5	0	1	2	3	4	5
B12. Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes.	0	1	2	3	4	5	0	1	2	3	4	5
B13. Address and manage problems with student behaviors.	0	1	2	3	4	5	0	1	2	3	4	5
B14. Provide positive and constructive feedback to guide students' learning and behavior.	0	1	2	3	4	5	0	1	2	3	4	5
B15. Engage in a culture of shared responsibility and support.	0	1	2	3	4	5	0	1	2	3	4	5
B16. Organize and manage my time.	0	1	2	3	4	5	0	1	2	3	4	5
B17. Assimilate into the school and district culture.	0	1	2	3	4	5	0	1	2	3	4	5
B18. Develop beginning teacher critical thinking and questioning skills.	0	1	2	3	4	5	0	1	2	3	4	5
B19. Understand the laws and regulations related to my role in Special Education.	0	1	2	3	4	5	0	1	2	3	4	5

DIRECTIONS for PART C: Please read the following questions and provide a listing of all items you wish to share. *Thoughtful responses are encouraged.*

Question C1: What **personal** characteristics should effective mentors exhibit for beginning special education teachers?

Question C2: What **professional** characteristics should effective mentors exhibit for beginning special education teachers?

DIRECTIONS for PART D: Below is a list of statements about the mentoring supports provided to you within your first three years of teaching. Please rate each statement focusing on how true you feel the statement is for you **for each year that you received mentorship support**. Please use the following scale:

IMPORTANCE

NA = no mentorship provided in the given year (or you haven't taught those years yet)

0= not at all true

1=

2=

3=

4=

5= very true

Use these numbers to indicate values between the two extremes.

Part D: Overall effectiveness of the mentoring supports provided:

YEAR 1 ~ Statement		<i>How true is this for you?</i>					
D11. I grew in my effectiveness as a special education teacher in Year 1 of teaching because of the supports provided by my mentor.		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D12. My mentor provided very little support and assistance to me in Year 1.		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D13. The mentoring support provided by my mentor was of the highest quality.		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D14. I am more confident as a special education teacher because of the supports provided by my mentor in Year 1.		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D15. I did not find my mentor to be very helpful to me as a special education teacher in Year 1.		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>

YEAR 2 ~ Statement		<i>How true is this for you?</i>					
D21. I grew in my effectiveness as a special education teacher in Year 2 of teaching because of the supports provided by my mentor.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D22. My mentor provided very little support and assistance to me in Year 2 of teaching.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D23. The mentoring support provided by my mentor was of the highest quality.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D24. I am more confident as a special education teacher because of the supports provided by my mentor during Year 2 of teaching.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D25. I did not find my mentor to be very helpful to me as a special education teacher.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>

YEAR 3 ~ Statement		<i>How true is this for you?</i>					
D31. I grew in my effectiveness as a special education teacher in Year 3 of teaching because of the supports provided by my mentor.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D32. My mentor provided very little support and assistance to me in Year 3.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D33. The mentoring support provided by my mentor was of the highest quality.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D34. I am more confident as a special education teacher because of the supports provided by my mentor in Year 3.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
D35. I did not find my mentor to be very helpful to me as a special education teacher in Year 3 of teaching.	NA	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>

Appendix C: Survey Cover Letter



Dear Special Education Teacher,

You are invited to participate in a research study designed to examine mentorship supports provided to new teachers in Minnesota, to expand our insights regarding why teachers are leaving the field of special education, and to determine what supports would be the most beneficial for new teachers to aid in retention.

Insights gained from this study will allow us to integrate knowledge into preparation programs, to alleviate the research to practice gap regarding teacher mentorship, and to empower education professionals to be agents of change for improved teacher retention rates. Results will be disseminated through presentations, publications, and used at the university level to inform program design.

You are invited to participate in this study because you are a Special Education teacher within the first three years of service. Your email was gathered through the Professional Educator Licensing and Standards Board (PELSB).

There are no known risks if you decide to participate in this study. Your perspective and input will help to inform best practice in mentorship and will increase understanding of teacher mentorship needs to improve retention rates.

This Qualtrics survey will take approximately 12-15 minutes to complete, depending on the detail of your responses. All responses to this survey are anonymous. Your IP address will not be collected, and your answers will not be identifiable.

Your participation in this survey is voluntary. By completing this Qualtrics survey, you are voluntarily agreeing to participate. You are free to end participation at any time you choose. Choosing not to participate in this study will not affect your relationship with the researcher and your place of work or school district and will in no way impact your relationship with SCSU.

If you have any questions about this study or would like to request a summary of findings, please contact Michele Barron-Albers, SCSU Assistant Professor in Special Education at the email below.

To voluntarily participate in the survey, please [click here](#). We appreciate your consideration.

Michele Barron-Albers

Michele Barron-Albers
mbalbers@stcloudstate.edu
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Dr. John Eller, Advisor
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Appendix D: Forms of Mentorship Supports Data

Mentorship Delivery	<i>n</i>	Never	Yearly	Quarterly	Monthly	Weekly	Daily
A4. Texts / emails	221	20 9.1%	1 0.5%	15 6.8%	55 24.9%	93 42.1%	37 16.7%
A2. Unscheduled face-to-face meetings	220	34 15.5%	6 2.7%	12 5.5%	28 12.7%	77 35.0%	63 28.6%
A1. Scheduled face-to-face meetings	223	32 14.4%	8 3.6%	35 15.7%	69 30.9%	67 30.0%	12 5.4%
A7. Online meetings (Zoom, etc.)	208	101 48.6%	6 2.9%	27 13.0%	40 19.2%	30 14.4%	4 1.9%
A3. Telephone check ins	221	132 59.7%	2 0.9%	11 5.0%	35 15.8%	35 15.8%	6 2.7%
A9. Scheduled collaboration time	206	113 54.9%	3 1.5%	21 10.2%	36 17.5%	27 13.1%	6 2.9%
A5. Classroom observations / feedback	221	93 42.1%	18 8.1%	63 28.5%	30 13.6%	9 4.1%	8 3.6%
A8. External teacher network	208	124 59.6%	20 9.6%	26 12.5%	19 9.1%	10 4.8%	9 4.3%
A6. Observe other teachers / mentor	208	135 64.9%	20 9.6%	29 13.9%	11 5.3%	10 4.8%	3 1.4%

Note. Reported Effectiveness of Forms of Mentorship Delivery- Year 1 to 3 Combined
(Frequency Counts in Descending Order by Reported Effectiveness)

Appendix E: Content of Mentorship Supports Data

Mentorship Content	<i>n</i>	Never	Yearly	Quarterly	Monthly	Weekly	Daily
BF5. Work collaboratively with colleagues and service providers to increase student success.	173	40 23.1%	3 1.7%	18 10.4%	44 25.4%	45 26.0%	23 13.3%
BF3. Address work-related stress I may be experiencing.	173	37 21.4%	8 4.6%	25 14.5%	35 20.2%	47 27.2%	21 12.1%
BF4. Establish a consistent, organized, and respectful learning environment.	172	55 32.0%	11 6.4%	14 8.1%	35 20.3%	41 23.8%	16 9.3%
BF13. Address and manage problems with student behaviors.	163	42 25.7%	4 2.5%	26 16.0%	37 22.7%	33 20.2%	21 12.9%
BF15. Engage in a culture of shared responsibility and support.	163	43 26.4%	7 4.3%	22 13.5%	23 14.1%	30 18.4%	38 23.3%
BF8. Write and implement IEPs and other due process materials.	166	39 23.5%	14 8.4%	28 16.9%	54 32.5%	24 14.5%	7 4.2%
BF14. Provide positive and constructive feedback to guide students' learning and behavior.	163	53 32.5%	5 3.1%	21 12.9%	40 24.5%	30 18.4%	14 8.6%
BF7. Maintain my due process timelines.	166	49 29.5%	9 5.4%	24 14.5%	47 28.3%	28 16.9%	9 5.4%
BF2. Use multiple sources of information to develop a comprehensive understanding of my students' strengths and needs.	172	55 32.0%	13 7.6%	26 15.1%	41 23.8%	31 18.0%	6 3.5%
BF17. Assimilate into the school and district culture.	163	48 29.4%	17 10.4%	22 13.5%	32 19.6%	31 19.0%	13 8.0%
BF18. Develop my critical thinking and questioning skills.	163	70 42.9%	9 5.5%	17 10.4%	27 16.6%	32 19.6%	8 4.9%
BF6. Collaborate with families to support student learning and secure needed services	166	61 36.7%	12 7.2%	29 17.5%	35 21.1%	25 15.1%	4 2.4%
BF19. Understand the laws and regulations related to my role in Special Education.	161	48 29.8%	14 8.7%	38 23.6%	26 16.1%	25 15.5%	10 6.2%
BF12. Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes.	163	66 40.5%	8 4.9%	28 17.2%	31 19.0%	22 13.5%	8 4.9%
BF10. Conduct student data, assessments, and evaluations.	168	70 41.7%	13 7.7%	28 16.7%	37 22.0%	16 9.5%	4 2.4%
BF11. Manage paraprofessionals.	163	76 46.6%	14 8.6%	17 10.4%	21 12.9%	22 13.5%	13 7.9%
BF1. Develop my classroom management plan	173	76 43.9%	27 15.6%	22 12.7%	29 16.8%	16 9.2%	3 1.7%
BF16. Organize and manage my time.	162	79 48.7%	15 9.3%	27 16.7%	16 9.9%	23 14.2%	2 1.2%
BF9. Conduct functional behavioral assessments to develop individual student behavior support plans.	168	106 63.1%	15 8.9%	19 11.3%	15 8.9%	11 6.5%	2 1.2%

Note. The content of mentorship supports provided and the frequency of provision reported in frequency counts and percentages for all 19 statements.