

## ABSTRACT

Title of Dissertation: BRIDGING THE GAP: PRINCIPALS'  
KNOWLEDGE OF SPECIAL EDUCATION

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The Individuals with Disabilities Education Act guarantees a Free Appropriate Public Education for students with disabilities in their Least Restrictive Environment. In the school year 2022–2023, over 7.5 million students received services under IDEA; however, only 23 states met IDEA Part B requirements, revealing systemic gaps in implementation. A critical factor contributing to these shortcomings is the limited preparation of school principals in special education. Many principals report feeling ill-equipped to support inclusive practices, which can impact service quality, student placement, and long-term outcomes as inclusive education becomes more prevalent. As of 2022, 67% of students with disabilities spend most of their day in general education classrooms, increasing the need for informed and prepared leadership.

This literature review investigates the relationship between principal knowledge of special education and its effects on students, educators, and school culture. A total of 27 peer-reviewed studies were analyzed using a structured framework that included study descriptions, population relevance, proposed solutions, research questions, design, sample characteristics,

procedures, and results. The studies were categorized according to three guiding research questions: principal preparation programs, principals' training needs, and the impacts of principals' knowledge.

Research indicates that principal preparation programs often lack sufficient training in special education, despite principals' critical role in supporting inclusive education. This leaves school leaders underprepared to navigate legal mandates, support staff, and lead inclusive schools. Research emphasizes the need to align leadership preparation with Council for Exceptional Children standards and include more training on inclusive education for students. Principals play a pivotal role in shaping Individualized Education Programs, supporting service providers, and fostering inclusive school cultures. Their knowledge influences teacher retention, litigation risks, and student achievement.

Although a direct causal link between principal training and student achievement remains limited, evidence suggests that enhanced preparation programs and training can improve legal compliance and inclusive practices. This review underscores the necessity for states to mandate targeted professional development and revise certification standards to reflect the evolving responsibilities of school leaders. Equipping principals with the knowledge of special education is essential to ensuring equitable educational opportunities and fostering inclusive environments for all learners.

*Keywords:* special education, principal leadership, preparation, professional development

BRIDGING THE GAP: PRINCIPALS' KNOWLEDGE OF SPECIAL EDUCATION

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## Dedication

This work is lovingly dedicated to my husband and children. To my daughter, Evalina, who has been with me every step of this journey, beginning at just 7 months old and growing up asking, “Does mommy have homework?” and joyfully pretending to type beside me whenever she could. To my daughter, Auralia, who made her debut midway through this program, despite the timing not being ideal, her smiles and joyful spirit reminded me to embrace the process, not just focus on the end goal. Lastly, to my husband, my partner in every sense, who stepped in and filled the gaps as a parent, spouse, and friend. Your unwavering support and willingness to bear the load gave me the strength to keep going. I am deeply grateful for your patience and love throughout this journey. I would be remiss not to acknowledge my ancestors, who paid the price to build a legacy that lives in me. I appreciate the burdens borne by my great ancestors, grandparents, parents, and siblings, who have stood beside me both spiritually and emotionally during the most difficult times. This journey began long before I submitted my application for acceptance. I am humbled and honored to be in a place now where I can express my gratitude for reaching the end of this beginning.

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## List of Abbreviations

<b>Abbreviation</b>	<b>Definition</b>
ADHD	Attention-Deficit/Hyperactivity Disorder
ASD	Autism Spectrum Disorder
CEEDAR	Collaboration for Effective Educator Development, Accountability, and Reform
CCD	Common Core of Data
CASE	Council of Administrators of Special Education
CEC	Council for Exceptional Children
CAEP	Council for the Accreditation of Educator Preparation
CCSSO	Council of Chief State School Officers
E/BD-EI	Emotional/Behavior Disability- Emotional Impairment
ELCC	Educational Leadership Constituent Council
FAPE	Free and Appropriate Public Education
IDEA	Individuals with Disabilities Education Act
IDEIA	Individuals with Disabilities Education Improvement Act
IEP	Individualized Education Program
IRB	Institutional Review Board
ISLLC	Interstate School Leadership Licensure Consortium

LRE	Least Restrictive Environment
MTSS	Multi-Tiered Systems of Support
NASSP	National Association of Secondary School Principals
NCATE	National Council for the Accreditation of Teacher Education
NCES	National Center for Education Statistics
NCSI	National Center for Systemic Improvement
NELP	National Educational Leadership Preparation
NPBEA	National Policy Board for Educational Administration
OSEP	Office of Special Education Programs
PLAAFPS	Present Levels of Academic Achievement and Functional Performance
PRISMA 2020	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PSEL	Professional Standards for School Leadership
SPA	Specialized Professional Association
SPED	Special Education (Historically referred term)
UCEA	University Council for Education Administration

## Legal History

Year	Law or Legislation
1954	Brown v. Board of Education, 347 U.S. 483 (1954)
1965	Elementary and Secondary Education Act of 1965, Pub. L. No. 89-10, 79 Stat. 27 (1965).
1971	Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania, 343 F. Supp. 279 (E.D. Pa. 1972)
1972	Mills v. Board of Education of the District of Columbia, 348 F. Supp. 866 (D.D.C. 1972).
1973	Rehabilitation Act of 1973, § 504, 29 U.S.C. § 794 (1973).
1975	The Education for All Handicapped Children Act of 1975, Pub. L. No. 94-142, 89 Stat. 773 (1975).
1990	Americans with Disabilities Act of 1990, 42 U.S.C. § 12101 et seq. (1990).
1997	Individuals with Disabilities Education Act, 20 U.S.C. § 1400 et seq. (2004).
1998	Carl D. Perkins Career and Technical Education Act of 2006, 20 U.S.C. § 2301 et seq. (2006).
2001	No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).
2004	Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 et seq. (2004).
2015	Every Student Succeeds Act, 20 U.S.C. § 6301 (2015).
2017	Endrew F. v. Douglas County School District RE-1, 580 U.S. ____, 137 S. Ct. 988 (2017).

## Section 1: Introduction Identifying the Problem

### **Clarifying Statement**

The Merriam-Webster Dictionary defines leadership as "the office or position of a leader, the capacity to lead, and the act or instance of leading" (Merriam-Webster, n.d.). In the context of education, leadership is seen as the ability to guide, inspire, and influence others toward achieving common goals (Northouse, 2021). In contrast, administration refers to the management and organization of resources, tasks, and people to accomplish specific objectives. It involves planning, coordinating, and overseeing activities within an organization (Hughes et al., 2019). School principals must embody both leadership and administrative qualities. Throughout many research articles, the terms "administrators" and "special education leadership" are frequently referenced. For this paper, "administration" refers explicitly to principals at the school level, excluding district and administrative staff who already possess specific knowledge in their respective areas. The target audience for this study includes educators, principals, administrative leadership, and district and state leadership entities.

### **Introduction**

According to the Department of Education, the Individuals with Disabilities Education Act (IDEA) is the "law that makes available a free appropriate public education to eligible children with disabilities throughout the nation and ensures special education and related services to those children" (Individuals with Disabilities Education Act, 2024b). In the 2022-23 school year, the National Center for Education Statistics (2024) reported that 7.5 million students, representing 15% of all public-school students, received special education and/or related services under Part B of IDEA. In the 2012-13 school year, 6.4 million students were reported to have received services, representing an increase from 13% to 15% of all public-school students (National Center for Education Statistics, 2024). Unfortunately, despite this increase, in 2023, the Office of Special Education Programs (OSEP) reported that only 23 states and territories met IDEA Part B requirements (Individuals with Disabilities Act, 2024a). Noting that

31 states, including Washington, D.C., New York, Vermont, Oregon, and Michigan, needed extra support for two or more consecutive years.

Although it is evident that the number of students requiring special education and related services is increasing, the number of principals prepared to support students with disabilities has remained relatively unchanged over the decades. A survey conducted by RAND American Educator Panels asked more than 3,500 principals if they felt “completely prepared” to support the needs of students with disabilities; the results showed that only 12% did (Stelitano et al., 2020, p. 1). “Principals are not receiving the training necessary to fulfill their responsibilities as the instructional leaders of students with disabilities,” which results in principals' lack of foundational knowledge of special education policies and laws, leading to the mismanagement of special education programs within schools (Lynch, 2012, p. 42-43). The principal's ability to fully understand the concepts of a Free and Appropriate Public Education (FAPE) and a Least Restrictive Environment (LRE) significantly influences decisions regarding students' service locations and inclusive learning environments (Thompson, 2017, p. 36). These placement decisions, in turn, have lasting impacts on student outcomes (Brown et al., 2023). Sun and Xin (2020) found that teachers and service providers often receive misdirection or inadequate guidance from school leadership in special education competencies, resulting in direct and indirect effects on student outcomes. Despite this lack of training and knowledge, many principals still report regular participation and input in "(a) special education department meetings, (b) Individualized Education Plan (IEP) meetings, (c) special education teacher observations, and (d) review of special education lesson plans" (Lynch, 2012, p. 2). This leaves unprepared leaders who are then tasked with formulating and supporting decisions about special education policies and laws, which can lead to "long-lasting consequences for students, families, teachers, schools, districts, and state budgets" (Bellamy & Iwaszuk, 2017, p. 1). Data from labor statistics indicate that "young adults with disabilities become less integrated into employment, independent living, and community activities as they age" (Chadsey-Rusch, 1991).

According to Boscardin (2019), continuous involvement in special education programming may potentially compromise principals' ability to advocate effectively for students with disabilities. This can lead to inconsistent support for educators and varied outcomes for students. Principals are responsible for learning for all students as the school's instructional leader (Lynch, 2012). Students with disabilities are not consistently receiving adequate services from school-level providers (Billingsley et al., 2020). Research shows poorer outcomes for students with disabilities, which could be directly related to the lack of support and services in the school setting (Bouck & Chamberlain, 2017). According to Brown, Plotner, and Marshall (2023), instructional leaders should strive to improve student outcomes by modifying pedagogy and instructional techniques in schools. Without changes, such as the implementation of effective, inclusive instruction and principal participation, students with IEPs receive partial to no support in successful transition planning when preparing for post-secondary transitions (Bouck & Chamberlain, 2017).

Although limited research exists on the principal's direct impact on student outcomes, one longitudinal study focuses on students' experiences in school. This study reveals that, Youth with disabilities are more likely than youth in the general population to report having daily trouble paying attention, completing their homework, and getting along with teachers and students. They are also more likely to have little or no sense of affiliation with school and to report strong disagreement that they enjoy school (Wagner et al., 2007, p. 80).

Compared to nondisabled peers, "about 10 percent of youth with disabilities report they do not like or feel part of their school at all, and about three times as many say they never become involved at school, even when they have the chance" (Wagner et al., 2007, p. 78). Even though there is no direct data linking principal preparation to these issues, these are outcomes that principals need to be aware of to help address the problems. By adjusting leadership preparation, principals can effectively support students, service providers, and schools;

however, this requires principals to have a sufficient understanding of special education laws and policies to execute their roles accurately.

### **Problem of Practice: Research Questions**

This leads to the problem of practice: Throughout U.S. school systems, principals often lack sufficient knowledge of special education to effectively support their special education staff and students (Kleinhammer-Tramill et al., 2024). Evidence suggests that principals are frequently unaware of the legal requirements for special education within their schools and how these requirements impact students and staff (Sun & Xin, 2020; DeMatthews et al., 2020). Moreover, principals lack an understanding of how students' needs manifest in school, what this means for support, how providers execute their responsibilities to support students with special needs, and how to create and effectively implement inclusive cultures across the school (Melloy et al., 2022). As a result, many principals make decisions without proper knowledge or guidance. This leads to the primary research questions for this study:

RQ1: What knowledge and skills are required for principal certification or licensure? Do any of these qualifications relate to experience or knowledge in special education?

RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education?

RQ3: What are the impacts for students, teachers, and school culture when principals have limited special education knowledge or experience?

A better understanding of what principals know and what they need to know will help address the gaps in the research. It will also direct attention to the impact of these gaps on all affected parties. For example, school culture might be improved if principals know how to create an inclusive environment where all students excel (Billingsley et al., 2018). Teachers and service providers would benefit from receiving the support they need to implement instruction and strategies successfully, ultimately providing students with disabilities the skills and support necessary to achieve improved outcomes (Conley & You, 2017; Robertson et al., 2017; Resch,

2024). This information, in turn, could help policymakers and government leaders make informed decisions regarding funding and programming (Billingsley & Bettini, 2019).

### **History**

The year 1954 marked a landmark case in education; the U.S. Supreme Court ruled that racial segregation in public schools was unconstitutional (Brown v. Board of Education, 1954). This ruling supported future legislation for students with disabilities and the right to a FAPE; however, it was not until the 1970s that litigation for these rights led to the passage of Section 504 of the Rehabilitation Act of 1973 and the Education for All Handicapped Children Act of 1975. Watershed cases such as [Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania, 1972; or Mills v. Board of Education of the District of Columbia (1972)] have defined where and how special education services must be delivered; however, who ultimately is responsible for providing FAPE often falls to the innominate state. In 1975, the Education for All Handicapped Children Act PL 94-142, which was later amended and reauthorized in 1983, 1990, 1997, and 2004, is now known as the Individuals with Disabilities Education Improvement Act (IDEIA). This law was set forth as the abiding law for students with disabilities. Specifically assuring FAPE, Procedural Safeguards, funding, and the assessment and effectiveness of services. The reauthorizations of the IDEIA in 1997 (P.L. 105-17) and 2004 (P.L. 108-446) acknowledged the precedent set by the 1988 Supreme Court decision in Honig v. Doe, 484 U.S. 305, influencing the statutory provisions related to disciplinary actions for students with disabilities, including the requirement for a manifestation determination to safeguard their educational rights. Later during the 2000s, the Every Student Succeeds Act (2015), formerly known as the No Child Left Behind Act (NCLB, 2001), shifted education laws from access to accountability. Instead of focusing mainly on students' needing to make adequate gains and improved educational outcomes, quality services became the new focus. This resulted in students with disabilities receiving both beneficial and meaningful educational programs by raising the standard for instruction and using scientifically based practices (Individuals with

Disabilities Education Act, 2024c). The intention was to employ highly qualified special education teachers who use scientifically based practices to enhance academic outcomes. Although holding stakeholders accountable for adequate progress for students with disabilities is necessary, it has led to more litigation. In 2017, the U.S. Supreme Court issued a unanimous opinion in *Endrew F. v. Douglas County School District Re-1*, 137 S. Ct. 988, stating that “a school must offer an IEP that is reasonably calculated to enable a child to make progress appropriate in light of the child’s circumstances” emphasizing the requirement that “every child should have the chance to meet challenging objectives” (*U.S. Department of Education, 2022, para. 4*). This means that students with disabilities will be provided with a rigorous, standards-based curriculum regardless of their level of need. Consequently, schools must demonstrate that they are making meaningful progress in educating all students, including those with disabilities.

Concurrently, the roles and responsibilities of school principals in the United States have undergone significant shifts over the past few centuries. School principals began as teacher principals in the 1800s. These teachers, in addition to their teaching responsibilities, were also responsible for clerical and administrative duties, thereby granting them greater authority as the primary communicators with the district superintendent (Kafka, 2009). As the roles and responsibilities of a supervisor and instructional leader increased, the role of a teacher was removed, and the administrator became the new primary focus. At the turn of the century, organizations such as the National Association of Secondary School Principals (NASSP) established the mission to promote excellence in school leadership. The NASSP supported the role of a supervisory principal, allowing for certification and academic qualifications for the position (Rousmaniere, 2007). As the years passed, an increasing number of responsibilities were placed on principals. By the 1940s, as school attendance increased, the need for greater school supervision became evident. A decade later, the integration of schools and federal interference regarding who is and is not permitted in schools left principals as the gatekeepers

(Brown v. Board of Education, 1954). Then came the introduction of federal funding in schools and programs, such as the Elementary and Secondary Education Act (ESEA, 1954), which resulted in principals being required to manage budgets. In the 1970s, principals were also required to ensure compliance with students' rights and due process, as well as the inclusion of students with disabilities, by implementing procedural safeguards and funding for Title IX and PL 94-142 (Goodwin et al., 2005).

In the 1990s, the National Policy Board for Educational Administration (NPBEA) secured funding to develop national standards for school leaders, establishing the Interstate School Leadership Licensure Consortium (ISLLC). These standards focus on the linkage between educational leadership and student learning, setting the tone for instruction and inclusion of all students' learning and accountability through principal evaluation systems such as Race to the Top and NCLB (Leithwood et al., 2004; Murphy et al., 2017). Additionally, it gave rise to the need for principals to be facilitators who “help others identify and solve problems collaboratively” (Goodwin et al., 2005, p. 7). In 2008, the NPBEA approved the Educational Leadership Constituent Council (ELCC) to review the ISLLC standards and presented the findings to the National Council for the Accreditation of Teacher Education (NCATE), along with alternative preparation programs for universities, accompanied by a guide for program planning. The NPBEA approved the Professional Standards for School Leadership (PSEL), formally known as the ISLLC (National Policy Board for Educational Administration, 2011). PSEL standards, which are closely aligned to the National Educational Leadership Preparation (NELP) standards, focus on performance expectations for beginning-level building and district leaders (National Policy Board for Educational Administration, 2018). PSEL and NELP are currently reviewed by the Council for the Accreditation of Educator Preparation (CAEP), which replaced the NCATE legacy standards. Around the same time, and in addition to the PSEL standards, the Council for Exceptional Children, which has a history of establishing standards for special educators, also established the Administrator of Special Education Professional

Leadership Standards. In all, the standards established by these groups inform preparation programs, accreditation organizations, and credentialing agencies nationwide.

Since the turn of the 21<sup>st</sup> century, professional education associations have influenced significant changes in the roles and responsibilities of school principals. Schools now need to provide a FAPE in the LRE, and school leaders' roles have expanded beyond simply providing students with access to an education; principals now have standards that include ethical and managerial oversight of students with disabilities (Frick & Pazey, 2024).

### **Positionality**

Driven by my passion for the students I serve, I am committed to achieving better outcomes for this population as they transition to post-secondary life; hopefully, supported by principals who accurately implement special education laws, policies, and resources. As a Special Education Teacher, I recognize my perspective may be shaped by my experience working in some schools where some principals had limited knowledge of special education practices. I attempted to mitigate this influence by expanding the research topic to determine what principals already know, thereby establishing a baseline knowledge of principals across the United States. Despite these measures, it is essential to acknowledge the limitations and potential impact on the conclusions I have drawn in this review.

## Section 2: Comprehensive Research Review

### Introduction

As indicated in Section 1, critical laws and policies (IDEIA and Every Student Succeeds Act of 2015) guide how and when services are provided. Unfortunately, these laws fail to establish clear guidance and sanctions on who is ultimately responsible (Lashley, 2007). Principals are responsible for the well-being of all students, including students with disabilities. Over time, legal repercussions have increased. For example, in *Endrew F. v. Douglas County School District Re-1*, 137 S. Ct. 988, it was established that evidence must show that the student makes progress. Thus, principals face increasing demands as their roles and responsibilities continue to expand, and the number of students with disabilities requesting inclusive education is also increasing (Boscardin, 2019, p. 246).

In a study examining changes in national LRE placement trends for students with disabilities, McLeskey et al. (2010) reported that the proportion of students spending 80% or more of their school day in general education classrooms increased from 34% to 61% between 1990 and 2011. Based on data from the National Center for Education Statistics (NCES) in 2012, 61% of school-age students served under the IDEA spent 80% of their time during the school day in general education classes in regular schools. A decade later, in 2022, with consistent yearly growth, the population rose to 67%. These percentages indicate that over the past 30 years, the number of students educated for the majority of their day in general education classrooms has grown by more than 97%. Given the rise in special education needs and services, particularly regarding where these services are provided, school principals require knowledge to appropriately address the needs of students and staff. However, the question remains: How does school principals' knowledge of special education impact students, service providers, and schools? This literature review will evaluate principals' knowledge regarding special education and its impact on students, service providers, and schools. Twenty-seven quantitative and qualitative studies, systematic literature reviews, dissertations, and reports were identified on

this question. The information is described in the following section, organized thematically based on each research question:

RQ1: What knowledge and skills are required for principal certification or licensure? Do any of these qualifications relate to experience or knowledge in special education?

RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education?

RQ3: What are the impacts for students, teachers, and school culture when principals have limited special education knowledge or experience?

## **Methods**

### **Search Criteria**

The initial search began using the UMD Discover library system, Education Resources Information Center (ERIC), Elton B. Stephens CO (EBSCO), ProQuest, Education Source, APA PsycArticles and Info, Business Source Complete, E-Journals, Family & Society Studies Worldwide, Family Studies Abstracts, Open Dissertations, Professional Development Collection, SocINDEX with Full Text, Teacher Reference Center. Search criteria included peer-reviewed, published articles written in English and published after 2014, with a location limited to the United States. Search terms included the use of the Boolean method (truncation) to include variations of terms and phrases such as (1) Special Education Special Needs or Disabilities, (2) Principal, Admin\* Leader\* (3) Student Outcomes (4) Individual Education Plan (IEP) (5) Teacher Attrition (6) Law or Policy (7) Impact, (8) Knowledge (9) Principal Licensure Requirements (10) Professional Development or Principal Professional Learning or Principal Learning. Initially, the ERIC database was used with the following search term configuration: Principals, Admin\*, Leader\*, AND Knowledge AND Impact AND quantitative OR qualitative research (producing two results). Since limited results were shown for quantitative and qualitative studies, the search was broadened to include other databases and eliminate the study type. Various configurations of search terms yielded the following results: Principals, Admin\*,

Leader\* AND Knowledge AND Impact (resulting in 690 articles), and special education AND principals, Admin\*, Leader\* AND student outcomes (resulting in 180 articles). After seeking advice from an expert in the field, an additional search was conducted using the other databases listed above. The more extensive results provided a literature review and unpublished dissertations or gray literature (ProQuest and Open Dissertations). This resulted in numerous backward searches of the reference list, including title searching through hundreds of references.

Using a variation of the PRISMA 2020 systematic review method as a guide, articles were identified through the database search, and the titles of the abstracts were screened. Studies must include Principals, Special Education, OR Training, Impacts, OR Outcomes. If abstracts met the eligibility criteria, the entire text was then analyzed. Studies were excluded if they did not focus on principals, if the focus was limited to a single disability category, or if the focus was primarily on general education. After reviewing these records, the exclusionary factors reduced the number of articles from 50 to 27. A few literature reviews, policy briefs, and analyses (Gordon & Niemiec, 2020) were considered, as were articles and reports from the *Journal of Special Education Leadership (CASE)* or the *Sage Journal*. In addition, one historical reference piece (Valesky, 1992) and one report (National Policy Board for Educational Administration, 2011) were included despite their publication dates. As a result, 27 viable options were included in the final analysis.

Each of the 27 studies were analyzed in terms of study description, connection to the population, proposed solution, research questions, design, sample or participants, procedures, and results. The studies were grouped by theme in relation to proposed solutions, connection to the population, and results. Figure 2 illustrates the grouping of literature by content. Content matrices were used to compare the content and quality of articles. These tables were broken down into the three emerging themes of the research: RQ1: What knowledge and skills are required for principal certification or licensure? Do any of these qualifications relate to

experience or knowledge in special education? (Table 1). RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education? (Table 2). RQ3: What are the impacts for students, teachers, and school culture when principals have limited special education knowledge or experience? (Table 3). Each table compared different article features, yet all included the research purpose, the research questions, and the sample population. Table 1 included additional information related to ISLLC/ELCC Standards, education, experience, and training, whereas Table 2 highlighted targeted populations, depth of knowledge, and research implications. Table 3 also included the target and impacted populations, as well as proposed solutions, implications, or recommendations.

### **Research Synthesis**

#### **2.1 RQ1 What knowledge and skills are required for principal certification or licensure? Do any of these qualifications relate to experience or knowledge in special education?**

In this section, eight studies are identified that relate to principal licensure, training, and professional development, aiming to help us understand the type of training principals currently receive. Figure 3 illustrates the literature map for this section.

**2.1.1 General Requirements for Principal Licensure.** Vogel and Weiler (2014) conducted a qualitative document analysis to determine the alignment of state principals' standards and licensure requirements across all 50 states. The purpose of this study was to examine the similarities and differences between principal standards of practice across the United States in comparison to the 2008 ISLLC/ELCC building leader standards. The study also examined how licensure requirements align with these standards to ensure adequate preparation of school leaders. The researchers posed questions regarding the extent to which state standards reflected national leadership frameworks and how consistently licensure policies supported effective principal preparation. To gather data, Vogel and Weiler reviewed documents

available on the websites of State Departments of Education. When information was not publicly posted, they obtained it from state school leader organizations or directly from representatives of education departments. This process ensured comprehensive coverage of all 50 states. The methodology involved analyzing each state's principal standards to determine whether the ISLLC/ELCC standards were adopted, adopted with modifications, or replaced with alternative standards. NVivo software was used to code the phrasing of state standards by the ISLLC/ELCC framework. The analysis revealed that all 50 states required completion of a state-approved program, with 34 states requiring a master's degree. Additionally, 40 states required a valid education license, 32 required teaching experience, 16 required completion of a program internship with credit hours, 30 required passing a state test, and 19 required both initial and advanced licensure. Vogel and Weiler also developed a rubric of policies based on ELCC standards and best practices found in the research to increase understanding of special education within principal preparation for on-the-job expectations of school leaders. Although the researchers provided a wealth of background and context related to ELCC and ISLLC regarding administration licensure, they did not describe their positionality or mention how they established the credibility or trustworthiness of the research. The study also did not explicitly reference special education within the analysis of state principal standards and licensure requirements. The study could have been enhanced by incorporating a mixed-methods research design to more accurately quantify the state assessments. In the subsequent study, qualitative measures are also used to analyze principal licensure requirements.

Anderson and Reynolds (2015) developed research-based rubrics to examine the status of state policies for principal preparation programs and candidate licensure using Roach's policy analysis framework. The Roach framework emphasizes the use of approved rules and regulations as primary sources rather than relying on aspirational plans or subjective responses, thereby enhancing the reliability of the data. The researchers reviewed state board or department of education codes, rules, and regulations from all 50 states to determine the

policies governing principal preparation programs and licensure requirements. The rubrics developed in the study were designed to identify whether research-based components of high-quality principal preparation programs were legislated in state statutes, rules, regulations, or policies. These rubrics were pilot-tested on a sample of nine states (California, Florida, Kentucky, Massachusetts, Mississippi, North Dakota, New York, Oregon, and Virginia). Anderson and Reynolds analyzed data collected from August 2013 to April 2014 using NVivo 10 software. Coding was organized both by state and by standard, with interrater reliability between joint and individual coding reaching 85%. The findings revealed that all 50 states had adopted or adapted school leadership standards from nationally recognized organizations. Sixteen states required fieldwork integrated with curriculum, 25 states mandated supervision by expert veteran leaders, and 17 states required experiences in multiple sites with diverse populations. Additionally, 38 states required at least three years of teaching experience, 30 states required a master's degree in educational leadership or a closely related field, and 35 states required completion or passage of an assessment aligned with state standards. These findings closely mirrored those of Vogel and Weiler (2014), who also found significant alignment between state policy language and candidate licensure rubrics. However, neither study identified qualification standards specifically related to special education. The alignment of state policies with research-based standards underscored the need for and the use of organizations such as the University Council for Educational Administration (UCEA) to support unified efforts to standardize leadership preparation programs. While Anderson and Reynolds addressed the research question regarding whether high-quality components of principal preparation were legislated in state policies, they did not explore the relationship between principal certification scores and principal effectiveness. One key limitation of the study, like many others in this field, was the lack of up-to-date data due to the constantly evolving nature of state policies. Therefore, researchers acknowledged that they could not guarantee the complete accuracy of the information. This challenge also affected the subsequent study, Scott (2018).

Similar to the last two studies, Scott (2018) developed a comparison report. Initiated by the Educational Commission of the States, the 50-State Comparison provided a widely cited report on how all states approach school leader certification and preparation policies. The comparison provided general requirements of the states, not focusing on special education. Researchers created an interactive report to determine whether states had adopted leadership standards, preparation programs, and the alignment of those standards, as well as field experience, experimental or innovative preparation programs, and initial versus out-of-state requirements and alternatives to those certifications (Scott, 2018). Data was collected from numerous state sources, including the Commission on Teacher Credentialing, the state department of education, and the Division of Educator Licensure and Accreditation. The results revealed that all 50 states had adopted standards to guide school leadership policies, and 38 required field experience as part of the leadership preparation programs. Additionally, in 37 states, the candidates held master's degrees and had at least three years of teaching experience. Unfortunately, this report and comparison tool were created by the Educational Commission of the States, which was not subject to peer review. Therefore, there is no evidence of the methods used for data collection. Although this report was not peer-reviewed, it provided valuable insight and baseline data on principal requirements across the nation by state, which was necessary.

**Summary.** These reports and qualitative studies indicated that all 50 states required completion of a state-approved program with adopted standards to guide school leadership policies. Addressing the question of whether principals are expected to be familiar with the ISLLC/ELCC standards, as outlined in their principal preparation programs, Hackmann (2016) explained it best,

Professional education associations have been influential in creating national standards and expectations for leadership preparation programs, working through state and national policy bodies, such as CCSSO. Through their efforts, they have advanced the ISLLC standards as a set of national standards, which numerous states have adopted for

administrative licensure and curriculum expectations for leadership preparation programs. (Hackmann, 2016, p. 58)

While all school leadership standards from a nationally recognized organization were adopted, there was, however, no mention of special education preparation or experience. The following section will examine five studies related to principal licensure and training, with a specific focus on special education skills and knowledge.

**2.1.2 Special Education Principal Licensure and Training.** In a historical reference study, Valesky and Hirth (1992) examined state certification endorsement requirements for school administrators to determine whether knowledge of special education law was mandated. The purpose of the study was to assess the extent to which state licensure policies required school leaders to demonstrate understanding of special education law, a critical area for ensuring compliance and equity in schools. The research questions focused on identifying which states required coursework or demonstrated knowledge in special education law for administrative endorsements. The researchers surveyed and interviewed 57 state directors of special education representing all 50 states, the District of Columbia, Puerto Rico, American Samoa, the Virgin Islands, Saipan, Guam, and the Bureau of Indian Affairs. Survey responses and follow-up phone interviews were tabulated by state. Data from 52 respondents were analyzed using the Statistical Package for the Social Sciences (SPSS) Version X. The results revealed that while every state offered at least one administrative endorsement, only 33% of regular administrative endorsements (excluding those specific to special education administrators) required knowledge of special education law. Only three states required a special education law course for principals, instructional supervisors, and superintendents, and just two states required such a course for general administrator endorsements. Valesky and Hirth argued that state boards of education should revise licensure requirements to include special education law and that university preparation programs should be redesigned to address this gap. Although the study did not examine the impact of these requirements on administrator

effectiveness and is now dated, it provides valuable historical context for understanding how principal licensure policies have evolved since the early 1990s.

Three decades after Valesky and Hirth's (1992) study, in 2014 a policy analysis conducted by the Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR) Center revealed similar findings regarding teacher and administrator certification and licensure. The purpose of the analysis was to establish a comprehensive knowledge base to inform the development and revision of policies that support effective teaching and school leadership, particularly for students with disabilities. The research questions focused on the extent to which state policies required preparation in special education for both teachers and school leaders. The study reviewed educator standards, preparation programs, certification, and licensure policies across all 50 states. The analysis found that 46 states had established standards for certifying or licensing school administrators and superintendents. As Goldrick et al. (2014) noted, "virtually every school served students with disabilities, and these schools, along with all other students in the schools, stood to benefit from high-quality school leadership" (p. 7). While 39 states required teacher preparation programs to include coursework on the learning needs of students with disabilities, only 16 states explicitly required the same for principal preparation programs. A key limitation of the study was that only 22 of the 50 states participated in the final review and approval of the policy summaries, which may have affected the accuracy of the findings. However, despite this limitation, the analysis contributes to the growing body of research emphasizing the need for targeted training in special education within principal preparation programs.

In a subsequent policy brief, Gordon and Niemiec (2020) examined the initial licensure process for principals across all 50 states and the District of Columbia. The purpose of the study was to classify each state's licensure process as traditional, transitional, or transformative, using criteria developed by a panel of expert practitioners. The study examined the extent to which state licensure processes incorporated transformative elements and offered recommendations

for improving principal preparation. The central research questions focused on how state licensure processes aligned with transformative leadership preparation and whether specific elements—such as teaching experience, fieldwork, and performance-based assessments—were embedded in state policies. The study also explored what components expert practitioners believed were essential for transformative principal licensure. To address these questions, Gordon and Niemiec assembled a panel of eight expert practitioners, including university faculty, principals, assistant principals, central office administrators, and two professors with doctoral degrees in educational leadership. This panel developed a rubric based on their survey responses, identifying eight transformative licensure elements: a teaching certificate, teaching experience, a master's degree, field experiences embedded in coursework, an internship, endorsement by a preparation program, a criminal background check, and a renewable certificate (Gordon & Niemiec, 2020, p. 111).

Using this rubric, Gordon and Niemiec analyzed data from all 50 states, sourced from the Education Commission of the States' Reports. The panel also recommended that assessment instruments be used to evaluate principals' knowledge, skills, and dispositions in areas such as instructional leadership, team building, special education, school-community collaboration, ethics, school law, diversity, curriculum development, and school improvement (Gordon & Niemiec, 2020, pp. 110, 118). The findings revealed that no state demonstrated transformative leadership preparation across all eight domains, and only four states met criteria in seven of the eight domains. Based on these results, the panel proposed several recommendations, including increasing partnerships among state agencies, universities, and school districts, as well as integrating performance-based assessments aligned with the Professional Standards for School Leadership and the National Educational Leadership Preparation standards. The panel recommended that these assessments include multiple formats, such as constructed responses, assessor discussions, and performance-based tasks. Although the analysis did not follow the structure of a comprehensive research article, it provided valuable insights from experienced

practitioners on the components necessary for transformative principal preparation. Limitations include the study's reliance on expert opinion and the use of secondary data sources, which also affect the generalizability and reliability of its conclusions. However, the study provided some recommendations related to special education and principles standards, noting that specific content, such as special education needs, should be integrated into assessment instruments for principals. Similar to Gordon and Niemiec (2020), the following study will also provide recommendations related to special education and the preparation of principals.

In 2020, Sun and Xin conducted a quantitative study using survey methodology to understand the perspectives of school principals on special education services. The purpose of the study was to assess principals' knowledge, skills, dispositions, and the extent to which they supported and provided special education services in their schools. Research questions focused on how well principals understood special education law, what resources participants were aware of and utilized, and how their leadership practices influenced the implementation of special education programs. The study also explored how principals acquired their knowledge and whether their preparation programs adequately addressed special education. The study surveyed 134 school principals. Most respondents were male, worked in elementary school settings, were between the ages of 40 and 50, and had between one and ten years of experience in the field. Participants were asked to complete a survey that included five-choice questions, a four-point Likert scale, and open-ended narrative response items. The survey was developed around five core areas identified by Wakeman et al. (2006) as essential for principal knowledge: professional practice—collaboration and reflection, all teachers teaching all students, characteristics of disabilities, legislation, and learning differences for inclusion. Survey responses were categorized into four factors: leadership in special education, leadership knowledge, leadership support, and leadership decision-making. Open-ended questions were used to explore participants' depth of knowledge and to identify discrepancies between their narrative responses and survey data. Sample questions included "What other resources have

helped support special education programs and students with disabilities?” and “What were the obstacles when implementing intervention programs for students with disabilities?” (Sun & Xin, 2020, p. 110). Results showed that only 23.8% of principals reported learning about special education through their university leadership programs, while 66% gained knowledge through mandatory school and district in-services. Furthermore, 75% of participants obtained their principal certification more than ten years ago, which may have affected their current knowledge level due to the content changes that have occurred since their initial certification. Sun and Xin concluded that ongoing professional development is essential to support principals in implementing best practices for students with disabilities. While the study noted the importance of special education knowledge for school leaders, it also revealed a gap in understanding how this knowledge translates into improved outcomes for students with disabilities. This limitation, along with the reliance on self-report data and the absence of longitudinal outcome measures, suggests the need for further research to explore the impact of principal preparation on student achievement in special education contexts. In the subsequent study, researchers also address the depth of knowledge of principles as it relates to special education.

A year later, Pregot (2021) conducted a qualitative study to examine the extent to which school principals felt knowledgeable about both general leadership practices and special education functions. The purpose of the study was to assess principals' self-perceived depth of knowledge in these two domains and to identify potential gaps in their preparation. The research questions focused on how principals rated their understanding of generic leadership skills compared to their knowledge of special education practices. Principals from New York, Georgia, Vermont, Oregon, and Michigan completed electronic surveys using Qualtrics, which asked them to rate their perceived depth of knowledge in generic leadership skills and special education practices. Of the 485 fully completed surveys analyzed, participants selected from four self-assessment options: “Excellent,” “Good,” “Adequate,” or “Non-Applicable.” While respondents rated their knowledge of inclusive practices and IEP requirements in the highest

performance quadrant, their understanding of “Types of IDEA Student Classifications” and “Alternative Student Testing” fell into the lowest quadrant. These findings revealed content gaps in leadership preparation programs, particularly in the area of special education. To address the deficit, Pregot (2021) recommended assigning each principal a dedicated special education mentor to support with legal compliance and the implementation of evidence-based practices. However, several limitations may influence the interpretation of the findings. First, the survey instrument did not include a “Poor” rating option, which may have constrained participants’ ability to accurately represent their perceived knowledge levels. Second, response bias may have skewed the results toward more ideal ratings, and the absence of a clear operational definition for “depth of knowledge” raised concerns about the consistency and validity of participants’ responses. Despite these limitations, the study contributes to the growing body of research supporting the enhancement of special education training in principal preparation programs.

**Summary.** Across these five studies, which included both quantitative and qualitative investigations and policy analysis, it was evident that every state offers administrative endorsements that often include standards for certification or licensure. However, many states lack transformative leadership skills among school principals, resulting in much of their knowledge related to special education being acquired through in-school and district in-services (Gordon & Niemiec, 2020; Sun & Xin, 2020). Principals reported understanding inclusive practices and IEP requirements; however, contrary data suggests that additional training was needed (Pregot, 2021). Several studies acknowledge a lack of up-to-date information from each state, which also affects the accuracy of these results (Goldrick et al., 2014; Pregot, 2021). In answering RQ1: What knowledge and skills are required for principal certification or licensure, it is evident that principals were required to have basic skills and licensure; however, not all included special education. The following section will shift focus from principals' current knowledge to the knowledge they need to acquire.

**2.2 RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education?**

To examine the evidence-based training, certification, or programs for principals that yield positive outcomes related to special education, seven studies were identified that reviewed current college and certification, professional development, and successful inclusive school models to address RQ2. Refer to Figure 4 for this section's literature map.

**2.2.1 College Courses and Certification.**

In 2018, the National Policy Board for Educational Administration (NPBEA) released a report outlining the National Educational Leadership Preparation (NELP) program recognition standards. The purpose of the report was to provide background on the development of the NELP standards for building-level leadership preparation and to identify essential knowledge and skills necessary for novice educational leaders. The standards were designed to guide advanced-level preparation programs for roles such as assistant principals, principals, curriculum directors, and other school-based leadership positions. Although the report did not pose formal research questions, it addressed key issues related to aligning leadership preparation standards with national expectations and the competencies required for effective school leadership. Specifically, it examined how the revised NELP standards aligned with the 2011 Educational Leadership Constituent Council (ELCC) standards and the 2015 Professional Standards for School Leaders (PSEL).

To develop the standards, a committee of stakeholders was assembled, including active school leaders, representatives from professional associations, state department personnel, educational leadership faculty, and preparation program leaders from institutions such as the University of Washington-Bothell, Indiana University, Wheelock College, University of Texas-El Paso, Vanderbilt University, University of Denver, University of Michigan–Ann Arbor, and the University of Virginia. The committee gathered input through focus groups with practitioners, higher education faculty, and state department personnel. Additionally, the Council for the

Accreditation of Educator Preparation (CAEP) Specialized Professional Association (SPA) standards committee provided public comment and revisions during the multiple review phases process. The NELP committee also conducted an internal review to eliminate duplication and overlap in the standards. The final NELP standards, published in 2018, reflected significant changes from the previous ELCC version. The eight revised standards emphasized inclusive school culture, equitable access to resources, assessment, reflective evaluation, and recruitment and hiring practices. A comprehensive crosswalk document was included to map the relationships between the NELP, ELCC, and PSEL standards. The report also introduced a NELP reviewer evaluation rubric to help program providers assess the quality of their leadership preparation programs. Although the report did not follow a traditional research design or include empirical data, it provided valuable insights into the collaborative development process. Additionally, it provided practical tools for evaluating leadership preparation programs. One limitation includes the absence of a formal research methodology, which may limit the study's generalizability as a research tool. However, the report remains a valuable resource for understanding national trends and expectations in principal preparation, as well as a guide for program development that aligns with current leadership standards.

In a subsequent qualitative study, Robertson et al. (2017) explored the perceived level of expertise among graduate students enrolled in educational leadership administration programs regarding their ability to support individuals with severe disabilities and their families. The purpose of the study was to examine how well these future leaders felt prepared to meet the needs of students with complex disabilities and to identify gaps in their preparation. The research questions focused on participants' knowledge, perceived preparedness, and the barriers they encountered in supporting students with low-incidence disabilities. The study involved 11 graduate students—six in Educational Leadership, three in Curriculum and Instruction, and two in Counseling—all of whom were enrolled in the College of Education's master's or doctoral programs and had at least two years of professional experience in public schools. Data was

collected through demographic surveys and focus groups and was then coded and analyzed using a constant comparative method with NVivo software, peer debriefing, and cross-case analysis. Common codes included “lacking knowledge/formal preparation” and “inclusion.” The findings indicated that participants felt unprepared to support students with complex needs. Numerous barriers were cited when implementing effective inclusion for students with low-incidence disabilities, including fear of asking for clarification and support, limited opportunities for meaningful collaboration, a system that placed form over function, and students who experienced segregation, neglect, and isolation. These barriers provided valuable insights for preparing participants to serve all students effectively. One limitation of the study was the limited resources dedicated to developing collaboration skills in educator preparation programs and providing hands-on experiences. The proposed solutions, which included improving university-based preparation, professional development, hands-on learning opportunities, and developing a supportive system for educators, students, and their families, contributed to the existing literature supporting the need for improvements to university preparation programs and professional development. In the following study, the focus is also on graduate students enrolled in education leadership programs, examining their perceptions.

Melloy et al. (2022) aimed to evaluate the knowledge and skills of graduate students enrolled in education leadership programs when supporting students with disabilities in K–12 inclusive schools. The purpose of this study was to evaluate the effectiveness of educational leadership programs in preparing future school leaders to support inclusive practices and meet the needs of students with disabilities. The research questions focused on participants’ understanding of special education services, their perceived preparedness to lead inclusive schools, and their recommendations for improving program content and structure. The study surveyed 83 participants (a 28% response rate from 296 potential respondents), including general and special education teachers and school administrators, most of whom worked in public suburban or outlying city or town schools. Participants were pursuing principal or special

education administrator licensure or multiple licensures and had varying levels of experience, ranging from one year to 19 or more. Using a mixed-methods design, researchers collected data through 29 structured and unstructured questions, including open-ended items and Likert-scale responses, administered via Qualtrics. Quantitative data were analyzed using IBM SPSS Statistics, while qualitative responses were coded, categorized, and re-coded through a second cycle to identify final themes. The findings revealed that although participants expressed confidence in their understanding of IEP components, they needed more support in leading IEP development and implementation, as well as in applying multi-tiered systems of support (MTSS). Participants also recommended additional program content related to inclusion and special education services, as well as changes to the program structure, adult education, and activities such as courses that involve collaboration with special education teachers. Researchers reported varying levels of knowledge that extended beyond the content of leadership programs, indicating a need for more specialized training in special education within educational leadership curricula. The study concluded that preparation programs should incorporate field-based learning and ongoing professional development focused on inclusive leadership, particularly in addressing equity, achievement, and opportunity gaps for students with disabilities. Given the broad range of participants' experience, from one to 19 years, future research could benefit from comparing outcome measures across varying experience levels to assess potential impacts. Although the study's low response rate and lack of focus groups limited the generalizability and depth of insight in the survey responses, the findings, similar to previous research, contribute to the growing need for improved special education training in leadership preparation programs.

**Summary.** This section focuses on what principal certification programs need to know about special education. Overall, the studies and reports reviewed found a lack of content in preparation programs for education leadership related to special education (Melloy et al., 2022). Although these studies tended to have relatively low response rates and often lacked

generalizability, the studies provided valuable insights into areas where additional training was needed. Areas include inclusive culture, equitable access, and a basic understanding of what "low incidence" or "severe disabilities" meant (Robertson et al., 2017; National Policy Board for Educational Administration, 2018). The following section will focus on what principals need to know regarding professional development as it relates to special education.

**2.2.2 Professional Development.** The following two studies examined, through the framework of professional development, the essential knowledge that principals must possess regarding special education.

In a mixed-methods study, Thompson (2017) examined the essential knowledge that principals must possess regarding special education through the lens of professional development. The purpose of the study was to identify the skills and competencies that Special Education Administrators (SBSEAs) and directors of Special Education in Virginia perceived as essential for leading special education programs at the school level. The research questions focused on which competencies were considered most important and what variables influenced participants' self-reported proficiency in those areas. Participants included 62 special education directors and several SBSEAs, all of whom were asked to complete a survey that included demographic questions and items related to their educational background and knowledge of special education. The survey incorporated instruments developed by Rascoe (2007) and Wigle and Wilcox (1999), consisting of 25 items where respondents rated the importance of specific special education competencies for general education administrators. The survey responses were analyzed to generate descriptive statistics, and open-ended responses were collected from 22 directors and 14 SBSEAs. The results showed high internal consistency and revealed that both groups shared similar perceptions. The essential competencies identified were effective communication and a strong ethical foundation, particularly in the areas of special education law and procedures. Open-ended responses were also coded and categorized into themes, which included developing positive relationships with families, communicating effectively with

stakeholders, and managing time and funding. Although the study provided a wealth of data, its findings were limited by the relatively small sample size and narrow geographic scope, with a 62% response rate among directors and 59% among SBSEAs, all within the Commonwealth of Virginia. To improve generalizability, the study recommended expanding the research to include participants from other regions. The study could also have been strengthened by incorporating additional research on how to address the ethical foundation deficits principals in relation to special education law and procedures found in the research. However, the findings highlight the need for increased professional development, especially in interpreting case law and understanding federal, state, and local policies, due to inconsistencies between principals' self-assessments and their actual knowledge of special education.

In a separate study using quantitative analysis, Bai and Martin (2015) explored the professional development needs of school administrators based on the Council for Exceptional Children (CEC) standards for school administrators. The purpose of the study was to determine which areas school principals required additional training in special education and whether training needs varied based on demographic characteristics. The research questions focused on identifying specific areas of special education knowledge and skills that administrators felt needed more training in and whether those needs differed by education level, disability status, or years of employment. The study included 289 administrators with diverse backgrounds: 95% female, 72% aged 30–59, 62% Caucasian, 84% holding master's degrees, and 43% with 11 or more years of experience. Participants completed the Needs Assessment on Knowledge and Skills for Teaching Children with Disabilities (NAKSTCD), which was based on the Advanced Standards for Special Education Administrators (CEC, 2009). The survey used a Likert scale to assess training needs in areas such as communication, laws, and policies. The data were analyzed using MANOVA and Cronbach's alpha to assess internal consistency. The three independent variables were identified as level of education, principals' special learning needs, and employment history, while the dependent variables included measures of communication,

laws, and policies. The findings indicated that educational degrees, special learning needs of principals, and time spent employed impacted participants' need for knowledge and skills in special education. Specifically, participants expressed a need for training related to quality instruction, program development, mutual support, as well as communication, laws, and policies. The study concluded that professional development programs should be tailored to administrators' backgrounds, education levels, disability status, and years of experience. Although the study relied on self-reported data, which may be subjective and lacked qualitative insights, it contributed to the literature by reinforcing the need for differentiated professional development in special education for school leaders, particularly for those whose initial training occurred more than a decade ago.

**Summary.** In the two studies described above, surveys were used to determine the professional development needs of administrators related to special education. The studies suggest that school leaders need both communication skills and knowledge of special education laws and procedures. Additionally, administrators need time and experience working in the field (Thompson, 2017; Bai & Martin, 2015). Although self-reporting and location limitations restrict the generalizability of these studies, they underscore the need for professional development in special education for school leaders. The following section will review what principals need to know about inclusive schools.

**2.2.3 Need for Knowledge of Inclusive Schools.** Two studies that examined leaders' need for understanding inclusive practices in schools.

Resch (2024) conducted a qualitative study to examine the practices that contributed to high levels of student achievement at two high schools in Wisconsin, focusing on how educators created continuous, equitable access to opportunities for students with disabilities and how school leaders supported these efforts. The purpose of this study was to identify the specific practices employed by educators to support students with disabilities and to examine how leadership contributes to fostering inclusive, high-achieving school environments. The research

questions focused on understanding how inclusive practices were implemented and sustained, as well as how school culture supported these efforts. Using a snowball sampling approach, Resch identified 11 participants—six from one school and five from the other—including a special education coordinator, three special education teachers, a transition coordinator, social workers, literacy and math instructional coaches, an associate principal, a social studies teacher, and an equity and engagement support teacher. In addition to conducting virtual semi-structured interviews, Resch observed student planning meetings and took field notes to document the observations. Interviews explored how participants defined and supported student achievement. The data recorded in interviews and observations were coded line by line to generate short descriptive themes. The results revealed several emerging themes. A central theme was that faculty in both schools shared the belief that students with disabilities could learn and that it was the collective responsibility of all school members to ensure their success. Another key theme was the establishment of a culture of equitable learning opportunities supported by administrative leadership and schoolwide professional development. As Resch (2024) noted, “Instead of viewing students through a deficit-based lens, the participants acknowledged that schools had been traditionally designed to benefit students without disabilities and continually worked to review student data to remove existing barriers” (p. 37). Processes such as MTSS and multidisciplinary teams were highlighted as practical strategies, with suggestions to eliminate silos and implement schoolwide approaches. Resch emphasized the need for future research to examine the process of assimilation of new faculty into the culture and how they are made aware of resources and schoolwide processes. One limitation of the study was that it was conducted during the COVID-19 pandemic, which necessitated the use of virtual platforms, such as Zoom and Google Meet, for interviews. Another limitation was the inconsistency in stakeholder roles between the two schools—one site included mostly general education teachers, while the other focused on specialists, making cross-site comparisons less consistent. Despite these limitations, the study provided valuable insights into inclusive school

practices and emphasized the importance of cultivating a shared belief system and leadership structures that support all students.

In the last qualitative study conducted in West Texas, DeMatthews, Kotok, and Serafini (2020) examined the pre-service learning experiences of principals who had successfully created inclusive schools for students with disabilities. Their purpose was to understand how principals described their university-based preparation in special education and inclusion and to identify the practices and skills they believed were essential for leading inclusive reforms. Research questions focused on the nature and quality of special education training received during principal preparation programs and how that training influenced inclusive leadership practices. A pilot survey was administered to all principals ( $n = 43$ ) in a mid-sized urban district. From the survey responses, nine principals were identified as demonstrating a high degree of preparedness and commitment to inclusion. Based on recommendations from district directors and the superintendent, the sample was narrowed to six principals, each with one to eight years of leadership experience at their current campus. Data collection included initial interviews, school walkthroughs, classroom observations, debriefings, and follow-up interviews. Interviews were conducted in an open-ended manner, transcribed, and verified for accuracy before being uploaded to NVivo 9 for line-by-line coding. Member checks were conducted by allowing participants to review and correct their transcripts. The findings were consistent with prior research, indicating that principals often lacked adequate preparation in special education and that inclusion and equity awareness were essential components of effective leadership. Although participants reported receiving three to nine hours of special education coursework, they noted that the instruction was minimal in key areas, such as disciplining students with disabilities, fostering collaborative school cultures, using data effectively, and improving instructional quality. Notably, four of the six principals had prior experience in special education, suggesting a potential area for future research on how background influences leadership success. While the study provided valuable insights into the need for improved principal preparation and in-service

training in special education, it was limited by its small, localized sample, as well as the lack of detailed descriptions of the specific training content received. The study also referenced general concepts, such as FAPE and LRE, without providing in-depth explanations of how these were addressed in the training; nonetheless, the study reinforced the importance of equipping school leaders with the knowledge and skills necessary to lead inclusive schools effectively.

**Summary.** These two qualitative studies both suggest that principals play a key role in creating environments that offer a shared responsibility and equitable learning opportunities (Resch, 2024). Similar to Bai and Martin (2015), principals with prior experience in special education achieved better outcomes for inclusion within their schools (DeMatthews et al., 2020). To conclude this section, answering RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education? Despite having some training, many principals who participated in these studies still lack content-specific knowledge related to special education. Across the nation, states have access to PSEL standards (National Policy Board for Educational Administration, 2018); however, principals still report that they require additional preparation in terms of communication and understanding of special education laws and procedures, as well as time and experience working in the field (Thompson, 2017; Bai & Martin, 2015).

### **2.3 RQ3: What are the impacts for students, teachers, and school culture when principals have limited special education knowledge or experience?**

This section examines the consequences of principals' gaps in knowledge related to special education and how this lack of understanding affects students, teachers, and the school culture. According to Billingsley, DeMatthews, Connally, and McLeskey (2018), "school leadership is a broad concept that extends beyond the actions of a single leader to include relationships among people holding various positions, including teachers, and the actions they take to improve instruction" (p. 307). The 12 studies in this section explore the impact of school principals both directly and indirectly. Reference Figure 5 for this section's literature map.

**2.3.1 Service Providers.** Service providers have been identified as a group affected by principals' limited knowledge of special education. Service providers work under the guidance of their supervisors and require their support to execute their jobs accurately (Billingsley et al., 2020).

In a secondary analysis of existing data from the Michigan Indiana Early Career Teacher (MIECT) study, Bettini et al. (2017) conducted a quantitative study to examine the workload manageability of novice special education and general education teachers. The research questions focused on whether differences existed between special education and general education teachers in their perceptions of workload manageability and how those perceptions predicted emotional exhaustion and intentions to remain in the profession. The study surveyed 61 novice special education teachers and 184 general education teachers using Dillman's (2007) five-contact approach, which included a pre-notification letter, a mailed survey, a reminder postcard, a secondary mailed survey, and a final contact. Surveys were administered via email in the fall of 2007 and the spring of 2008 and 2009. The survey included items from the Maslach Burnout Inventory (Maslach & Jackson, 1981) and questions related to workload manageability, defined as a teacher's perception of whether their responsibilities could be completed within the allotted time. The data was analyzed using confirmatory factor analysis (CFA) with robust maximum likelihood estimation as well as a two-way ANOVA. The three independent variables included levels of education, principals' special learning needs, and employment history, while the dependent variables measured communication, laws, and policies. The findings indicated that educational degrees, special learning needs of principals, and time spent employed significantly impacted participants' need for knowledge and skills in special education. Specifically, participants expressed a need for training related to quality instruction, program development, mutual support, as well as communication, laws, and policies. Results also showed that perceptions of workload manageability predicted emotional exhaustion and career intentions at later time points for both special and general education teachers. The study

emphasized the role of school leaders in supporting novice special education teachers by cultivating a school culture of shared responsibility for students with disabilities. Although principals were not directly studied, the findings suggested that those with a better understanding of special education could help manage teacher workload more effectively. Limitations included the relatively small sample size of special education teachers ( $n < 100$ ) compared to general education teachers ( $n = 164$ ), which may affect the generalizability of the findings. Future research should consider larger sample sizes, as recommended by Klein (2011), who suggests at least 100 participants per group for multi-group models. Despite these limitations, the study highlights the connection between workload manageability, emotional exhaustion, and teacher attrition, particularly among special education teachers.

In 2017, Conley and You conducted a quantitative study using the Schools and Staffing Survey (SASS) dataset to examine the factors influencing special education teachers' intentions to leave the profession. The purpose of the study was to explore how administrative support, team efficacy, and other workplace factors affected special education teachers' turnover intentions. Research questions focused on the extent to which administrative support directly and indirectly influenced teachers' intentions to leave and how job satisfaction, work commitment, and career commitment mediated this relationship. The study analyzed a national sample of 2,060 full-time secondary-level special education teachers drawn from the 2007–2008 SASS database. Participants responded to a survey using a 4-point Likert-type scale, which included two key items related to turnover intentions: “If I could get a higher paying job, I’d leave teaching as soon as possible,” and “I think about transferring to another school” (Conley & You, 2017, p. 528). Using a comparative fit index and a non-normed fit index, the researchers found that administrative support had both significant direct and indirect effects on teachers' intentions to leave. Specifically, administrative support was shown to influence turnover intentions through its impact on job satisfaction and commitment. The study also found that administrative support and teacher team efficacy were critical factors in predicting whether

special education teachers intended to stay in or leave their positions. However, the study did not identify which specific administrative support or leadership behaviors were most helpful to teachers. While the findings did not explicitly link principals' knowledge of special education to teacher attrition, they suggested that principals play a key role in shaping the support structures that influence teacher retention. Limitations included the lack of qualitative data to explore what "support" meant to teachers, as well as a lack of detailed information about the types of administrative practices that might reduce attrition. The study did recommend future research to clarify how school leaders can effectively support special education teachers and reduce teacher turnover. In the subsequent study, attrition and retention for special education teachers will also be investigated.

Billingsley and Bettini (2019) conducted a meta-synthesis with data from a decade earlier to examine the relationship between special educator attrition and retention, focusing on four key areas: preparation and qualifications, school characteristics, working conditions, and demographic and nonwork factors. The purpose of this study was to synthesize existing research to gain a deeper understanding of the factors contributing to special education teacher turnover and to identify strategies for improving retention. The research questions centered on how teacher preparation, school environments, working conditions, and personal factors influenced special educators' decisions to stay in or leave the profession. The study employed both quantitative and qualitative research, drawing on national, state, and survey data, as well as qualitative findings from eight additional studies. Using a recursive four-phase process—holistic summarizing, table analysis, subtheme identification, and collaborative review—the authors identified four overarching themes. The results indicated that special educators frequently struggled with work demands, which increased their risk of attrition. Instructional conditions such as collaboration, workload, scheduling, and resource allocation were cited as major contributors to teacher dissatisfaction and turnover. Although not explicitly stated in this study, principals could have impacted instructional conditions, collaboration, workload, scheduling,

and resources, which might have affected the retention of special education teachers. The implications of this study suggest that improvements were unlikely without systematic and coordinated efforts across federal, state, and local institutions. This comprehensive analysis provided information on current research on retention and attrition among special education teachers. It offered insight into some reasons to help with retaining special education teachers. Although the study did not explicitly examine the role of principals, it suggested that their influence is key to instructional conditions that affect teacher retention. Therefore, by improving collaboration, managing workloads effectively, and ensuring adequate resources, principals can play a critical role in supporting special education teachers. Despite its broad scope, the study's limitation is the lack of direct analysis of administrative practices; still, it remains a valuable contribution to the literature on special educator retention. The following study addressed service providers' priorities through the lens of special education administrators.

Tudryn, Boscardin, and Wells (2016) employed a mixed-methods approach to investigate whether special education administrators prioritized distributed leadership attributes differently than special education teacher leaders, who are schoolteachers within the special education setting. The purpose of the study was to explore how perceptions of distributed leadership varied between these two professional groups. Research questions focused on whether professional roles influenced the valuation of distributed leadership attributes and whether these perceptions aligned with specific leadership distribution models. A non-random sample of 30 participants—15 special education administrators and 15 special education teacher leaders—was selected from 15 districts within a single state to ensure variability while maintaining consistency in role descriptions. Participants reviewed and rated 40 distributed leadership statements, which had been approved by the Institutional Review Board (IRB), in terms of their perceived importance. Data were analyzed using Q-methodology, which allowed the researchers to examine diverse viewpoints through a forced-choice ranking process. Results revealed that perceptions of distributed leadership were not strictly bound by professional roles

but instead followed a continuum of three distinct perspectives: planned, embedded, and natural distribution. Planned distribution emphasized strategic collaboration and intentional role assignments to achieve collective goals. Embedded distribution reflected a culture of collaboration and shared responsibility, supported by data-driven decision-making and mutual trust. Natural distribution was described as spontaneous collaboration based on individual capabilities and problem-solving. Tudryn et al. (2016) emphasized the multidimensional nature of special education leadership, stating:

Special education leadership is multifaceted. Special education leaders lead, supervise, and manage the provision of special education and related services, ensuring that students with disabilities receive a free and appropriate public education in the least restrictive environment. (p 3).

These findings support the notion that experience, expertise, and work environment had a greater influence on leadership perceptions than formal titles. Findings also suggest that more experienced leaders are likely to adopt leadership techniques that are responsive to situational demands. Although the study did not establish causation or generalizability regarding the influence of principals' support on teacher retention, it was replicable and offered the potential for broader application in future research.

**Summary.** This section examined the impact of what principals do not know related to special education on service providers. Although two of the studies employed different methodological approaches, they found similar results, indicating that emotional exhaustion and work demands often lead to a greater risk of attrition (Bettini et al., 2017; Billingsley & Bettini, 2019). Additionally, direct and indirect effects could be attributed to administrative support (Conley & You, 2017; Tudryn et al., 2016). Principals equipped with the knowledge and skills needed to support special education teachers can help teachers manage their workloads, facilitate collaboration, and help teachers access resources. Helping special education teachers with their workload involves ensuring compliance with IEPs and relevant laws and regulations.

Principals need to have knowledge of special education regulations to adequately support staff and students appropriately. In the following section, the impact of what principals do not know and its effects on IEPs and the law will be explored.

**2.3.2 IEP and the Law.** Implementing Individualized Education Programs (IEPs) with fidelity is crucial for upholding laws and adhering to best practices. An article highlighted in the *International Journal of Education Leadership Preparation* noted,

“The administration of special education programs requires complex responsibilities, including assurances that policies and practices comply with the [IDEA]. Administrators report that oversight of special education programs is among their most prioritized responsibilities yet was the area for which they were least prepared” (Gilson & Etscheidt, 2022, p.41).

The potential impact of principals’ knowledge is essential for schools since “special education students have accounted for more federal court decisions for the past four decades than their far more numerous general education peers” (Zirkel, 2023). The three studies below provide further insights into this topic.

Ponce (2023) conducted a mixed-methods doctoral dissertation to examine the importance of participation by school site administrators or their designees in IEP meetings, specifically exploring the relationship between administrator preparation and their effectiveness in facilitating these meetings. The study aimed to understand how administrative involvement influences the quality and outcomes of IEP meetings. Research questions focused on the extent of administrator preparation, perceived effectiveness, and the support provided to special education teachers. Using snowball and stratified sampling, the study included 56 special education teachers, 38 administrators, and six special education coordinators who participated in Google-based Likert scale surveys and recorded Zoom interviews. Surveys included demographic items, Likert-scale questions related to administrator-case manager relationships and FAPE-related responsibilities, as well as open-ended questions about experiences and

knowledge of special education. Interviews explored topics such as training, available resources, and relationships with teachers, case managers, and parents. Results revealed that only seven out of 38 administrators felt adequately prepared to facilitate IEP meetings and contribute meaningfully during discussions.

Additionally, 53% of case managers reported that their site administrators did not provide sufficient support to special education teachers. These findings echoed previous research, highlighting the need for targeted special education training for administrators. Ponce emphasized the administrator's multifaceted role in IEP meetings, stating: “they hold as a servant leader and one of the stakeholders of the IEP team. An administrator must have a clear knowledge of their role in the IEP meeting and be able to provide input, feedback, and suggestions when needed” (Ponce, 2023, p. 104-105). Ponce goes on to state that administrators are also responsible for implementing the IEP, facilitating communication between families and case managers, and addressing parental concerns; therefore, they must be knowledgeable in all aspects of special education. The strengths of this study included the use of four types of validation—triangulation, construct verification, face validation, and catalytic validation—to ensure the credibility of the findings. Although the study's small sample size limited its generalizability, it contributed valuable insights to the growing body of literature supporting enhanced special education training for school leaders.

A year earlier, Kurth et al. (2022) evaluated a national sample of 112 IEPs for elementary-age students with complex support needs to determine whether placement in specific learning environments predicted overall IEP quality and the quality of key IEP components, including Present Levels of Academic Achievement and Functional Performance (PLAAFPs), goals, and Supplementary Aids and Services (SAS). The purpose of the study was to assess how educational placement influenced the development and quality of IEPs for students with disabilities and complex support needs. The research questions focused on whether placement type (e.g., Emotional and Behavioral Disorders [EBD], Attention Deficit

Hyperactivity Disorder [ADHD], and Autism was associated with differences in IEP quality and whether IEPs met established quality indicators. IEP data was entered into an online application and rated using a set of quality indicators that were operationally defined, pilot-tested, and double-coded using a consensus-based agreement and disagreement formula. Although the results did not reveal statistically significant differences in IEP quality by placement, the study found that IEPs across all placement types consistently failed to meet quality standards. Specifically, IEPs for students with complex support needs lacked detailed, high-quality services and support. The authors attributed these shortcomings to the widespread use of online IEP forms and tools, which often led to cookie-cutter approaches, reduced individualization, and low expectations. The implications of this research emphasize the vital need to prepare teachers better to develop IEPs that meet both procedural and substantive standards. The authors also called for further research into the working conditions of special education teachers, including the burden of IEP paperwork and large caseloads, and how these factors affect IEP quality. Finally, researchers suggested examining the role of principals in shaping these working conditions and whether principals with a deeper understanding of special education contribute to more supportive environments for special educators. This is particularly relevant given principals' responsibility to support all students, including those with disabilities and complex support needs. The following study centers on the school principal's role in relation to legal compliance and responsibilities.

Zirkel and Karanxha (2024) examined trends in court decisions related to the Individuals with Disabilities Education Act (IDEA) over 25 years to gain a better understanding of the legal landscape surrounding special education disputes. The purpose of this study was to analyze the frequency and outcomes of federal court cases involving the IDEA, with a particular focus on FAPE, LRE, and discipline. Research questions centered on how court decisions were distributed across federal circuits, the proportion of rulings favoring school districts versus parents, and whether trends had shifted over time. Using the Perry Zirkel database of officially

published federal appendix court decisions, the researchers identified 1,322 relevant cases from 1998 to 2022. These cases were analyzed using frequency counts, and the outcomes were categorized by federal circuit court region. The results revealed that 55% of cases were conclusively in favor of school districts. Twenty-five percent favored parents, and the remaining 20% resulted in mixed outcomes such as settlements or attorney fee awards. Remarkably, the study found a decline in the number of court cases over the past decade despite the COVID-19 pandemic. The authors emphasized the importance of proactive policies and collaborative practices that cultivate trust with families and reduce the likelihood of litigation. A key limitation of the study was its reliance on a single database; future research should incorporate multiple databases to ensure that all reporting through state-level sources is captured and analyzed. Future research should also explore how principals, with a deeper understanding of special education influence trust and collaboration with teachers, students, and families.

**Summary.** This section examined the principal's role in ensuring legal compliance within special education, highlighting the connection between effective school leadership and adherence to federal mandates. It also examined how principals' legal knowledge influences the implementation of high-quality special education services. Overall, the studies concluded that IEPs often fail to meet the needs of students with disabilities, leading to litigation and a lack of proper support to service providers (Zirkel & Karanxha, 2024; Kurth et al., 2022; Ponce, 2023). There is a need for future research to examine the impact of principals with special education expertise on meeting the needs of students with disabilities, as well as whether this knowledge leads to more effective IEPs and fewer instances of litigation. Therefore, regarding the impact of principals, the next section will examine the influence that principals exert on student outcomes.

**2.3.3 Student Outcomes.** Key legislation, such as the Carl Perkins Vocational and Technical Education Act of 1998 and the IDEA of 1997, has mandated transition planning, services, and coordination for individuals with disabilities (Oertle, 2007). Despite these regulations, research suggests that "young adults with disabilities become less integrated into

employment, independent living, and community activities as they age" (Chadsey-Rusch, 1991). Employment is considered one of the most significant challenges for individuals with disabilities; The Bureau of Labor Statistics (2025) notes that "the unemployment rate for people with a disability was about twice that of those with no disability in 2024," making it much higher for people with disabilities across all educational attainment groups (p. 3). Although schools, organizations, and government agencies have offered services to assist individuals in areas of need, the overall development of transition services has resulted in a segregated and unsuccessful approach. The following two studies examine the principal's impact on student achievement to determine the long-lasting effects.

Grissom, Egalite, and Lindsay (2021) conducted a systematic synthesis of over 20 years of data to examine the relationship between school leadership and student achievement in the United States. The purpose of this study was to determine whether principals have an influence on student outcomes and how the characteristics of school leaders have evolved. The study addressed two primary research questions: (1) how the demographics and experience levels of public-school principals have changed over the past two decades, and (2) to what extent do principals contribute to student achievement and other school outcomes? To answer the first question, the authors analyzed data from the National Center for Education Statistics (NCES) and cross-referenced it with the Common Core of Data (CCD). They found a notable increase in female principals, a decline in principal experience—particularly in high-need schools—and a widening racial and ethnic gap between principals and the students they serve. The authors emphasized the need for instructional leadership to reflect the needs of diverse student populations, stating, "Attention to the needs of growing populations of English learners and students with disabilities, for example, must be incorporated into current understandings of instructional leadership" (Grissom et al., 2021, p. 28). They also noted that principal turnover was more frequent in schools serving students of color, low-income populations, and those with declining academic performance, highlighting that "high principal churn in schools with larger

populations of historically marginalized students and greater performance challenges is an important, largely unrecognized issue for educational equity” (p. 53).

To address the second research question, Grissom, Egalite, and Lindsay systematically reviewed 219 studies, incorporating data from four states and two urban school districts, which represent over 22,000 principals. The analysis examined the relationships between principal characteristics, behaviors, and student and school outcomes. The findings indicated that the impact of an effective principal on student achievement is comparable to that of a highly effective teacher, with the added influence of affecting the entire school rather than a single classroom. Although the study did not disaggregate data for students with disabilities, it underscored the importance of high-quality school leadership. The authors identified three core skill areas for effective principals: instructional leadership (engagement with teachers), people skills (fostering a collaborative school climate), and organizational management (strategic planning and resource allocation). They recommended further research into cultivating, selecting, and supporting a strong principal workforce. A key limitation of the study was the lack of disaggregated data for students with disabilities, which limited the ability to draw specific conclusions about this subgroup. Nonetheless, the study made a significant contribution to understanding principal effectiveness and its implications for students' success.

In the following quantitative study, Brown, Plotner, and Marshall (2023) examined school leaders' perspectives on transition planning for students with disabilities. The purpose was to explore the extent of principals' involvement in transition services and to identify perceived barriers to supporting these efforts. The research questions focused on how familiar school administrators were with IDEA requirements and transition programming, their level of involvement in the transition process, and the obstacles that hindered their participation. The authors distributed a survey titled "Secondary Administrators' Perspectives on Their Involvement in and Barriers to Supporting Transition Efforts" to 460 public middle and high school principals in one southeastern U.S. state via SurveyMonkey in 2020. A total of 147

principals responded. The findings revealed a disconnect between principals' beliefs and their actual practices. While many administrators expressed strong beliefs about the importance of understanding IDEA and federal IEP transition requirements, they reported limited familiarity with these mandates. Furthermore, principals were rarely or never involved in developing, collaborating on, or communicating about transition programming. Reported barriers included a lack of family involvement and insufficient resources to provide students with real-life occupational experiences. The authors emphasized the importance of district- and state-level support, noting that "principal participation in transition efforts directly and indirectly affects student achievement and student outcomes" (Brown et al., 2023, p. 329). Unfortunately, the study did not provide sufficient evidence to determine whether the principal's influence on student outcomes was statistically significant. A key limitation of the study was also its small and geographically limited sample, with most participants representing rural communities in a single state. Despite these limitations, the findings suggest that targeted guidance, support, and resources from district or state transition personnel may enhance principals' involvement in transition initiatives to help with students' post-secondary outcomes.

**Summary.** These studies highlight the impacts of principals on students. Although many principals recognize the importance of transition services, they rarely participate in the planning, which can indirectly affect students (Brown et al., 2023; Grissom et al., 2021). The results underscore the importance of future research investigating whether principals with special education expertise can positively impact student achievement, including post-secondary employment rates. The final subsection, in answering RQ3, examines the impact of principals on school culture.

**2.3.4 School Culture.** In addition to affecting individual students, principals can also influence school culture. This section examines the impact principals have on school culture. School culture is crucial in fostering inclusive environments that enable all students to learn and excel. Special education leadership is at the forefront of creating a school culture that is inclusive

of all students. "However, little evidence indicates that schools have successfully done both, that is, achieving excellent outcomes for students in highly inclusive settings" (McLeskey et al., 2014, p. 1). The following three studies examined the impact of principals on school culture.

In the same qualitative study reported earlier (p. 23-24), answering RQ2 of what training, certification, or programs are available for principals related to special education, (subsection: college courses and certification), Robertson et al. (2017) conducted focus groups with master's and doctoral students enrolled in administrative leadership programs. The results of the focus groups indicated that participants considered administration essential for creating the culture, providing classroom resources and support, and evaluating the quality of programs and services. Master's and doctoral students noted numerous barriers to implementing effective inclusion, including administrators' fear of asking for clarification and support, lack of collaboration, rigid systems favoring form over function (systems more concerned with managing paperwork than providing services), and students placed in segregation and isolation (Robertson et al., 2017). While this study did not directly examine the principal's influence on school culture, the proposed solutions contribute to the existing literature supporting improvements to university preparation programs and professional development for school principals, with the aim of creating more inclusive schools. The following study investigates practices and conditions that promote inclusive education.

McLeskey, Waldron, and Redd (2014) conducted a case study investigation to examine the factors contributing to the successful inclusion of students with disabilities in the general education classroom for most of the school day while also improving educational outcomes. The purpose of the study was to identify the practices and conditions that supported effective inclusive education in a high-performing elementary school. The research questions focused on how inclusive practices were implemented and sustained, as well as the role school leadership played in supporting these efforts. The school was purposefully selected based on its above-average inclusion rates and higher academic achievement for students with disabilities

compared to district and state averages. For six months, the researchers collected data through interviews (in the form of transcripts), observations (recorded in field notes), and document reviews. To ensure trustworthiness and credibility, they employed triangulation, prolonged engagement, and collaborative data analysis. The results revealed two overarching themes: (1) student support and instructional quality, and (2) administrative and organizational features. The study found that effective inclusion was achieved through high-quality instruction in general education settings, flexible and efficient use of resources, and continuous monitoring of student progress. The authors described inclusive schools as “places where students with disabilities are valued and active participants and where they are provided with the supports needed to succeed in the academic, social, and extracurricular activities of the school” (McLeskey et al., 2014, p. 4). Principals were found to play a crucial role in fostering and sustaining inclusive practices, which led to improved outcomes for students with disabilities. Although the findings were specific to one school, the strategies identified in the study offer valuable insights that can be applied to other educational settings aiming to enhance inclusion.

Around the same time, in 2013, the University of Florida established the Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR) Center with the mission of ensuring that all students, including those with disabilities, graduate career- or college-ready. The purpose of the CEEDAR Center was to support states in improving professional learning systems for both teachers and school leaders. In 2017, CEEDAR, in collaboration with the Council of Chief State School Officers (CCSSO), conducted a research synthesis to explore what was known about principal leadership in improving educational outcomes for students with disabilities in inclusive schools (Billingsley et al., 2017). The guiding question focused on how principal leadership could be defined and supported to enhance inclusive education. To address this, CEEDAR developed an Innovation Configuration (IC) matrix aligned with the 2015 Professional Standards for Educational Leaders (PSEL). This matrix defines effective leadership in terms of promoting the academic success and well-being of

each student, with particular attention to those requiring more intentional support (CCSSO & CEEDAR, 2017). The IC guide has since been used to assist states in strengthening principals' capacities to lead inclusive schools by identifying essential knowledge, promoting instructional leadership, fostering inclusive environments, and supporting family engagement. The synthesis highlighted a significant gap in principals' understanding of inclusion and instruction for students with disabilities and called for enhanced district and state support to improve principal preparation programs through both pre-service and ongoing professional development. While the synthesis did not involve original empirical research, it provided a valuable, research-based framework for guiding leadership development and policy implementation in inclusive education.

**Summary.** The section examined the principal's impact on school culture, answering RQ3: What are the impacts for students, teachers, and school culture when principals have limited knowledge or experience in special education? This qualitative case study investigation and guide highlights the need for an inclusive culture, noting numerous barriers principals face when implementing and leading inclusive schools. Principals require knowledge and guidance to strengthen their capacities for effective leadership and delivering high-quality instruction with equitable opportunities (Billingsley et al., 2017; McLeskey et al., 2014). Principals must also ensure collaboration and open communication to ensure inclusivity (Robertson et al., 2017).

### **Conclusion**

This comprehensive literature review examined 27 studies grouped according to the three research questions. The following is a summary of the findings for each question.

**RQ1: What knowledge and skills are required for principal certification or licensure? Do any of these qualifications relate to experience or knowledge in special education?**

Eight studies were reviewed to address the question of what specific knowledge and skills are necessary for principal preparation programs, certification, or licensure to become a

qualified principal, and do any of these qualifications relate to experience or knowledge in special education? The eight studies were divided into two categories: principal licensure and training with or without special education. The following summarizes three studies related to principal licensure without special education training.

One report and two qualitative studies concluded that all 50 states require completion of a state-approved program with adapted standards to guide school leadership policies. The ISLLC/ELCC standards focus on linking educational leadership with student learning. States varied with respect to required degree level and education licensure. Vogel & Weiler (2014) found that 34 states required a minimum of a Master of Arts Degree (MA), whereas Anderson & Reynolds (2015) found that 30 states required an MA in educational leadership (or a closely related field). By 2018, Scott identified 37 states that required a minimum of an MA. Studies have also highlighted the importance of internships or field experience. Vogel & Weiler (2014) and Anderson & Reynolds (2015) found that 16 states required program internships, whereas Scott (2018) identified 38 states that required field experience. Anderson & Reynolds (2015) also noted that 25 states required supervision by expert veterans, and 17 states required the experience to occur on multiple sites with diverse populations. Vogel & Weiler (2014) found that 32 states required teaching experience, and 20 states required a valid education license. Anderson & Reynolds (2015) found that 38 states required three or more years of teaching experience, a finding similar to Scott's (2018), who reported that 37 states required at least three years of teaching experience. Vogel and Weiler (2014) and Anderson and Reynolds (2015) noted that 30 states required state tests.

Taken together, these studies require candidates to qualify under state-approved programs that include ISLLC/ELCC standards to become a principal. Some states require these programs to include various field experience participation. The majority require a minimum of a master's degree, along with previous teaching licensure and experience. Some states require candidates to qualify by taking a state-approved standardized test; however, not all states do. In

all, it is evident that although states required a state-approved program with adapted standards, the degree to which these professionals have experience in the field and additional educational training varied considerably. Furthermore, most states do not mandate adequate training or licensure requirements specific to special education for school leaders.

Five studies reviewed principal licensure and training related to special education. Every state offered an administrative endorsement, and 46 states had established standards for the certification or licensure of school administrators and superintendents (Goldrick et al., 2014). As early as 1992, 33% of all regular administrative endorsements required knowledge of special education law, and only three states required a special education law course (Valesky et al., 1992). Two decades later, in 2014, only 16 states explicitly required principal preparation programs to offer coursework on the learning needs of students with disabilities (Goldrick et al., 2014). Thus, there are still very low rates of state requirements for special education coursework within principal preparation programs. Sun and Xin (2020) also noted that 23.8% of the participants learned skills about special education from university leadership programs they attended for principal preparation, whereas 66.9% of participants obtained their knowledge from mandatory school and district in-services. Similar results are reflected in Gordon and Niemiec's (2020), highlighting that none of the states could demonstrate transformative leadership skills across all eight domains. Instead, the need for the "State Agency-University-School-School District Partnership" initiative, which includes teaching certificates, experiences, master's degrees, and field experience embedded in principal preparation coursework and year-long internships, is needed in every state. Although principals reported an understanding of inclusive practices and IEP requirements, contrary data implies the need for additional training (Pregot, 2021). Several studies noted a lack of up-to-date information from each state, which also affects the accuracy of these results (Goldrick et al., 2014; Pregot, 2021). In summary, it was evident that principals receive most of their knowledge related to special education through school professional development, and very few states require coursework in special education as

part of principal preparation programs. Additionally, principals' training or coursework often does not include resources and instruction on effectively supporting inclusive practices and IEP requirements.

Thus, in addressing the question RQ1: What knowledge and skills are required for principal certification or licensure, from the lens of standard qualifications compared to special education, although there are some standards (ISLLC/ ELCC) required of the states, it is evident that limited opportunities are available for principals to enhance their knowledge in special education.

**RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education?**

Seven studies addressed the question of which evidence-based training, certification, or programs for principals yield positive outcomes for students in special education. Three themes emerged: focusing on college and career readiness, professional development, and inclusive schools.

Three studies related to college and career readiness were identified and revealed a lack of content in preparation programs for education leadership regarding special education (Melloy et al., 2022). Robertson, McCaleb, and Smith (2017) concluded that current graduate students enrolled in education leadership administration programs were mainly unprepared to serve students with pervasive needs. They noted that inclusive culture, equitable access, and a basic understanding of what "low incidence" or "severe disabilities" were all missing from principals' knowledge base. Some studies proposed solutions that included improving university-based preparation and professional development. Similar to Robertson et al. (2017), Melloy, Creminski, and Sundeen (2022) highlighted the need for more specific content in educational leadership related to special education, such as understanding the IEP components, leadership roles in IEP development and implementation, and multi-tiered systems of supports. In a report from the National Policy Board for Educational Administration (2018), standards were

developed specifically for advanced programs tailored to principals and other administrative staff. These standards revealed significant differences between the ELCC 2011 standards and the 2015 PSEL standards, including the need to focus on each student and adult, as well as the importance of building an inclusive school culture with equitable access to educational resources and opportunities. The report also suggested that programs include components such as assessments, reflective evaluations, recruitment, selection, and hiring engagement. This research underscores the need for principals to have more training opportunities regarding disabilities, including specific information about IEP components, types, and degrees of disabilities, as well as the role of principals in supporting students with disabilities through MTSS or inclusive education.

In addition to enhancing leadership preparation programs, studies also examined the need for professional development related to special education. Thompson (2017) found that the most essential competencies were communication and a high standard of ethical practices, specifically in the areas of special education law and procedures. Bai & Martin (2015) noted that educational degrees, special learning needs of principals, and time spent employed impacted participants' training needs for knowledge and skills in special education. Both studies highlighted the need for professional development programs that incorporate CEC standards and knowledge of how to interpret case law and federal, state, and local policies (Thompson, 2017; Bai & Martin, 2015)—adding that professional development should be designed with different foci for different groups related to principals' background, education, and years of employment (Bai & Martin, 2015).

Finally, principals were regarded as key figures in leading inclusive schools. Two qualitative studies identified principals as essential parts of inclusive schools. Resch (2024) found that principals play a key role in creating environments that foster shared responsibility, a set of beliefs, and equitable learning opportunities. Similarly, DeMatthews, Kotok, and Serafini (2020) noted that principals ultimately lacked preparation in special education, yet principals

with prior special education experience yielded better outcomes for inclusion within their schools. Both studies highlight the importance of inclusive education that is rooted in principal leadership to be effective.

Thus, when examining what principals do not know, these studies provided evidence that special education content in principal leadership preparation programs is necessary. Furthermore, professional development programs should include CEC standards or knowledge to interpret case law and federal, state, and local laws and policies. Finally, inclusive education must be driven by strong principal leadership.

**RQ3: What are the impacts for students, teachers, and school culture when principals have limited special education knowledge or experience?**

Twelve studies examined the impacts on students, teachers, and school culture when comparing principals with special education experience to those without. Four areas of concern emerged: service providers, IEP and the law, student outcomes, and school culture. The following summary reviews the principal's impact on service providers.

Four studies, which collectively used secondary analysis, along with qualitative and quantitative research methods and a literature review, were reviewed regarding principals' knowledge of special education and their impact on service providers. Bettini et al.'s (2017) research revealed that workload manageability predicted emotional exhaustion, contributing to adverse outcomes. Researchers suggested that school leaders can help novice special education teachers manage their workload by fostering a supportive school culture that promotes a collective responsibility for students with disabilities. Conley & You (2017) also indicated that significant direct and indirect effects on teachers' intention to leave could be attributed to administrative support, noting that administrative support and teacher team efficacy directly affected turnover rates. Billingsley and Bettini (2019) concluded that special education providers struggle with work demands, often leading to a higher risk of attrition, which is attributed to instructional conditions, including collaboration, workload, scheduling, and resource allocation.

They also argued that improvements are unlikely without systematic and coordinated efforts across federal, state, and local institutions. Tudryn, Boscardin, and Wells (2016) found that experience, expertise, and work environment are more significant factors in shaping perceptions than formal leadership roles, such as administrator versus teacher leader. Throughout these studies, there is consistent evidence that high work demands often increase the risk of attrition among special educators, highlighting the crucial role principals play in supporting teachers with their workload.

Three studies highlighted the principal's impact on IEPs and related laws. Ponce (2023) found that only seven out of 38 administrators felt prepared to facilitate IEP meetings, while 53% of the case managers indicated that their site administrators do not support the special education teachers. These findings suggest that principals require additional knowledge, including specialized training and professional development, to participate effectively in IEP meetings. Kurth et al. (2022) revealed that students with disabilities and complex support needs often have IEPs that fail to detail high-quality services and support, raising concerns about potential legal implications. Zirkel and Karanxha (2024) found that proactive policies and practices remain the primary focus for reducing litigation. Such policies aim to combat litigation through collaboration and trust with parents, prioritizing education over legal disputes. Although none of these studies explicitly identify principals as the key to combating litigation, they note that principals can significantly impact stakeholders' ability to collaborate with parents to build trusting relationships. Furthermore, these studies share a common theme that IEPs are not meeting the needs of students with disabilities, leading to litigation and administrators failing to provide adequate support.

Two studies were identified that examine the influence of principals on student outcomes. Grissom, Egalite, & Lindsay (2021) found that the impact of an effective principal on student achievement can be even more significant than that of teachers, as a principal can affect the entire student body of a school, not just one classroom. Although this research did not

explicitly focus on students with disabilities, it did highlight the impact that principals have on students. In a separate study by Brown, Plotner, and Marshall (2023), survey results revealed that while administrators strongly believed in the importance of understanding the IDEA, IEP requirements, and secondary transition service delivery practices, they lacked the familiarity and involvement necessary to directly and indirectly influence student achievement. Both studies highlight principals' direct and indirect impacts on students' achievement and the need for more research in this area, specifically for students with disabilities.

Finally, three studies examined the impact of principals on school culture. Robertson, McCaleb, and Smith (2017) found that special education leadership is at the forefront of creating a school culture that is inclusive of all students, and that improving university-based preparation and professional development could improve principals' ability to support inclusive learning communities. Similarly, McLeskey, Waldron, and Redd (2014) noted that effective inclusive schools meet the needs of all students by providing high-quality instruction in the general education setting, using resources efficiently and flexibly, and continually monitoring student progress. Principals were cited as having critical roles in developing and supporting inclusive schools that improve outcomes for students with disabilities. The last report from CEEDAR provided a guide for strengthening principals' capacity to lead inclusive schools. The authors noted that principals need to provide students with equitable opportunities to succeed by identifying critical knowledge, promoting instructional leadership, fostering an inclusive school environment, and supporting parent and family engagement. In all three of these studies, principals were viewed as critical in developing and shaping school culture through inclusive education.

When addressing the question about the effects of principals' knowledge gaps, it is clear that their influence extends to service providers, IEPs, student outcomes, and school culture. Principals can positively impact special education teachers (service providers) by supporting their work demands, ultimately influencing their decision to remain or leave the profession.

Principles can also improve the effectiveness of IEPs, which currently meet the needs of students with disabilities, thereby lowering the risk of litigation by providing appropriate support and involvement. Understanding that principals have both direct and indirect effects on students' achievement, principals can play a pivotal role in developing and implementing inclusive education.

### **Significance**

Numerous studies highlighted the importance of training and principal preparation programs for school principals (Bai & Martin, 2015; Melloy et al., 2022; National Policy Board for Educational Administration, 2018; Robertson et al., 2017; Thompson, 2017). Special education requires a multifaceted approach to support all stakeholders fully (Tudryn et al., 2016). One conclusion from RQ1 is that principal preparation programs should incorporate more state-required standards that align with ELCC and PSEL standards, focusing on additional coursework or experience for principals to gain or enhance their knowledge in special education (Melloy et al., 2022; National Policy Board for Educational Administration, 2018). The second question reviewed focused on what principals need to know, revealing that principal leadership preparation programs and professional development training need more in-depth content related to implementation and practices that support principals in inclusive schools (Robertson et al., 2017). Several studies noted principals' lack of knowledge regarding the interpretation of the law, which can ultimately impact service providers and student achievement (Ponce, 2023; Brown et al., 2023). To address this issue, professional development content should include information about CEC standards and knowledge for interpreting case law, as well as federal, state, and local policies, and the inclusion of diverse perspectives (Bai & Martin, 2015). RQ3 addressed the impact of principals, finding that principals have both indirect and direct effects on service providers, IEPs, student achievement, and school culture (Billingsley & Bettini, 2019; Grissom et al., 2021; McLeskey et al., 2014; Ponce, 2023). By supporting the work demands, knowledge, and participation of special education teachers in implementing effective IEPs,

principals can influence both service providers and students by empowering them with knowledge of special education policies, thereby helping to uphold the law. (Brown et al., 2023; Conley & You, 2017; Kurth et al., 2022; Zirkel & Karanxha, 2024). Principals have both direct and indirect impacts on students' achievement, which can often be enhanced by developing a culture of inclusive education (Grissom et al., 2021). While the causal relationship between principal training in special education and outcomes for students, IEPs, service providers, and schools has not been fully established, it is clear that principals need training, given the legal ramifications. According to Melloy, Cieminski, and Sundeen (2022), inclusive schools require inclusive leadership to increase outcomes for all students; however, "effective leadership of inclusive schools requires specific skills and dispositions" (p. 358). Therefore, properly preparing principals through enhanced principal preparation programs that align with state standards and requirements is essential. Additionally, providing existing principals with professional development, resources, and support to supplement their knowledge of special education can better equip them to positively impact service providers, students, and schools (Gordon & Niemiec, 2020).

Throughout this paper, evidence supporting a causal connection between principals and their direct impact on student, IEP, and teacher outcomes is limited (Brown et al., 2023; Grissom et al., 2021). However, Sun & Xin (2020) noted that, "the connection of the academic achievement of students with disabilities to the principal involvement in special education warrants the attention of future research" (p.114). Therefore, it is essential to address the current research gap by linking principals' knowledge of special education to their impact on various populations.

However, there are counterarguments related to this topic. For one, some may argue that principal priorities should focus on the majority of the population rather than the minority populations. Although special education makes up 15% of the population, the National Teacher and Principal Survey (2021) found that average principals spend 29.9% of their time on internal

administrative tasks, 28.8% on curriculum and teaching-related tasks, 23.9% on student interactions, and 15.1% on parent interactions (NCES, 2023). Although the exact percentage of time allocated to special education is not always specified, principals consider special education as part of their administrative tasks, and a substantial amount of time is devoted to student support and compliance, as well as hiring for hard-to-fill vacancies within the special education department (Zuckerberg, 2023). Reallocation of principals' time may be possible if there were fewer administrative tasks related to hiring and compliance, allowing principals to refocus their time more effectively.

Others may argue that the special education demands are not feasible given all of the other demands on principals. Over the past century, the roles and responsibilities of principals have undergone significant changes. From their inception as teacher principals providing clerical and administrative duties to becoming supervisors giving instructional leader guidance, to the addition of managing budgets, the job of being a school principal has changed considerably. Landmark cases and the passing of laws have forced principals to adapt to the times, providing FAPE in the LRE and ensuring progress is made in more inclusive settings (Endrew v. Douglas County School District Re-1, 137 S. Ct. 988). To keep up with the demands of 21st-century education, principals need more than a basic understanding of special education. They need to know how to lead and support all students, which requires in-depth knowledge of how to be an effective instructional leader for all types of learners (Gordon & Niemiec, 2020; Grissom et al., 2021; CCSSO & CEEDAR, 2017).

It cannot be left up to individual principals to seek this information; states must require and provide access to adequate professional development and principal preparation programs for change to occur (Gordon & Niemiec, 2020; Melloy et al., 2022; Bai & Martin, 2015; Thompson, 2017). Research is needed to determine what type of professional development and principal preparation programs provide the most effective outcomes (Bai & Martin, 2015). Therefore, the following section presents a proposal for a Self-Assessment Toolkit for states

designed to evaluate areas where additional training, support, and licensure are needed.

Ultimately, the aim is to enhance principals' understanding and knowledge of special education beyond a basic level, enabling them to support inclusive practices more effectively within their schools.

## Section 3: The Plan

### **Introduction**

From the literature reviewed in Section 2, it is clear that many principals lack sufficient knowledge of special education to support their special education staff and students effectively. It is also apparent that changes are needed at multiple levels of the system to address this issue proficiently. Melloy, Creminski, and Sundeen (2022) noted that “equitable learning experiences for all students can be achieved through inclusive schools [led] by administrators who are certified experts in special education,” however, changes are needed concerning preparation, policy, and practice (Melloy et al., 2022, p. 376). Robertson, McCaleb, and Smith (2017) proposed solutions that include improving university-based preparation, professional development, hands-on learning opportunities, and a support system for educators, students, and their families.

The literature consistently emphasizes the critical role principals play as key stakeholders in shaping school culture and in fostering inclusive cultures. Several studies have noted many challenges principals face when implementing and maintaining inclusive practices. These findings underscore the importance of equipping school principals with the knowledge and resources necessary to effectively lead inclusive schools, thereby ensuring all students have access to high-quality, equitable instruction (Billingsley et al., 2017; McLeskey et al., 2014). The following plan begins with a description of key recommendations that emerge from the research reviewed in Section 2. It then describes a product that can be used to facilitate changes.

### **Recommendation 1: Need for Research**

Although the studies reviewed in Section 2 establish the importance of principals to the overall functioning of the school, there is still a need for additional research that establishes a direct causal link between principals’ knowledge of special education and its impact on student achievement, IEP implementation, and teacher effectiveness (Brown et al., 2023). Despite this gap, there is evidence that principals have a powerful effect on schools as a whole and that they

frequently lack knowledge with respect to special education. Therefore, further research is needed to examine how principals' knowledge of special education affects students with disabilities, related service providers, and the services they receive. Additionally, research could also identify which types of professional development and principal preparation programs yield the most effective results in addressing these issues (Bai & Martin, 2015). This will help state education authorities identify specific areas where principals lack essential knowledge and determine the necessary supports to foster meaningful change at the school level. As Robertson, McCaleb, and Smith (2017) note, "given the limitations identified in terms of traditional educator preparation, further research is needed to examine the most effective program models for providing preservice and in-service experiences and to identify specific program components that effectively prepare educators for success in inclusive environments" (p. 10).

### **Recommendation 2: Need for Policy Changes at the Federal Level**

At the federal level, studies reviewed in Section 2 suggest the need for national policy reform (Thompson, 2017). Billingsley and Bettini (2019) emphasize that meaningful improvements in special education require coordinated efforts across federal, state, and local levels. Since many legal disputes escalate to the federal courts, federal policy must offer explicit guidance for principals navigating special education issues, such as those raised in *Andrew F. v. Douglas County School District Re-1*, 137 S. Ct. 988.

In terms of leadership standards, while some states have licensure requirements that produce highly qualified administrators for general education, these standards often fall short in preparing leaders to meet the needs of students with disabilities (Gordon & Niemiec, 2020; Sun & Xin, 2020). To be effective leaders for all students, principal qualifications must explicitly incorporate competencies in special education leadership. Responding to this need, the CEC established the Council of Administrators of Special Education (CASE), which developed the Administrator of Special Education Professional Leadership Standards. These standards all

align with leadership standards incorporating special education practices and should be implemented nationwide:

Standard 1: Vision, Mission, & Direction Setting. Standard 2: Implementation of Policy, Legal, & Ethical Practices for Special Education Programs & Services. Standard 3: Organizational Leadership & Management for Special Education. Standard 4: Program Oversight, Improvement, & Instructional Leadership for Special Education. Standard 5: Human & Fiscal Resource Management of Special Education Programs & Services. Standard 6: Collaboration & Communication with Special Education Stakeholders. Standard 7: Equity & Cultural Responsiveness. Standard 8: Field & Clinical Experience. (CEC, 2022)

Additionally, there is a need to strengthen the enforcement of IDEA and FAPE by mandating the nationwide implementation of Multi-Tiered Systems of Support (MTSS). MTSS provides a flexible framework for delivering instruction across academic, behavioral, and social-emotional domains, allowing students with disabilities to learn alongside their peers in inclusive settings (Billingsley et al., 2019). Establishing clear, thoughtful, and achievable implementation expectations can help transform school culture into one that fosters greater inclusivity and equity for all learners. However, successful MTSS implementation depends on planned support and intentional execution from federal and state policymakers, who must ensure schools are equipped with the necessary resources, training, and guidance.

In summary, the adoption of new state licensing standards and funding, along with support for special education programs and training (including professional development and MTSS), requires federal-level policy support.

### **Recommendation 3: Need for Changes at the State Level**

At the state level, research highlighted the need to revise standards for principal licensure to include comprehensive preparation programs and professional development. One notable recommendation was the expansion of the “State-Agency-University-School-School

District Partnership,” which integrates teaching credentials, practical experiences, master’s degrees, and fieldwork into principal preparation (Gordon & Niemiec, 2020).

### ***3.1 Principal Evaluation***

The research reviewed in Section 2 emphasized the need to embed special education practices in principal licensure requirements. Such changes require updates in performance evaluations. The literature suggests that performance-based assessments aligned with the PSEL and NELP standards are crucial. These standards emphasize equity in educational opportunities and the development of supportive, inclusive school environments. Licensure assessments should encompass a variety of formats, including constructed responses, assessor discussions, and performance evaluations, to effectively measure principals’ knowledge, skills, and dispositions. Key competencies include instructional supervision, team building, adherence to legal and ethical practices, and creating inclusive and collaborative school environments. Strategic planning, staff development, and resource management are also critical for sustained school improvement (Gordon & Niemiec, 2020).

States can also use the NELP building-level standards for advanced programs that prepare graduate students at the master’s, specialist, or doctoral levels. This guide can help assistant principals, principals, curriculum directors, supervisors, and other school leaders promote student success (National Policy Board for Educational Administration, 2018). The CEEDAR Center was also identified as a valuable, research-based resource to support schools and states in implementing effective practices.

### ***3.2 Principal Preparation***

One area at the state level that needs attention is college preparation coursework. Principal preparation programs should align with ELCC and PSEL standards and offer additional coursework or practical experiences focused on special education (Melloy et al., 2022; National Policy Board for Educational Administration, 2018). As Billingsley, McLeskey, and Crockett (2019) note, coursework often emphasizes legal aspects rather than inclusive

leadership or instructional strategies. Programs should incorporate field-based learning and ongoing training to address equity, achievement, and opportunity gaps (Melloy et al., 2022). These programs should also include content on inclusive practices, CEC standards, and relevant legal frameworks (Robertson et al., 2017; Bai & Martin, 2015). An added recommendation is that school systems assign a dedicated special education mentor to each principal to help with legal compliance and the implementation of evidence-based practices.

### ***3.3 Professional Development***

Another state-level focus involves professional development that must extend beyond legal compliance to include training on inclusive leadership, evidence-based practices, and strategies to improve outcomes for students with disabilities. Training should also emphasize family engagement, effective stakeholder communication, time management, and school climate. Targeted learning is essential to help principals interpret case law and policy (Thompson, 2017). Crockett (2002) outlines four dimensions of comprehensive leadership training: moral, instructional, organizational, and collaborative leadership. University partnerships can strengthen professional development and support recruitment efforts (Crockett, 2019). In addition, principal training should focus on transition planning and include MTSS frameworks tailored to each school's specific needs to improve post-secondary outcomes for students with disabilities. These can be provided through partnerships among universities, districts, and agencies to ensure relevance and sustainability (Bellamy et al., 2014).

In summary, state-level efforts to ensure highly qualified leadership should include enhanced coursework, professional development, and licensing evaluations. States must revise expectations for both principal preparation and licensure by using the existing network of evidence-based programs. Collaborations with colleges can prepare new principals to lead inclusive schools, while ongoing professional development can help current leaders develop expertise in special education. This dual approach equips principals with essential legal

knowledge and practical skills to create inclusive environments and improve outcomes for all students.

#### **Recommendation 4: Need for School-Level Changes**

At the school level, effective inclusive schools are defined by their ability to meet the needs of all students through high-quality instruction in general education settings, efficient and flexible use of resources, and consistent monitoring of student progress (McLeskey et al., 2014). Researchers emphasize that principals must possess instructional expertise and a deep understanding of organizational dynamics, including legal knowledge and familiarity with IEPs. These competencies can be strengthened through professional development aligned with CEC standards, tailored to individual backgrounds, education levels, disability status, and years of experience (Bai & Martin, 2015).

Studies reviewed in Section 2 confirm that principals play a central role in creating equitable learning environments where inclusion is a shared responsibility (Resch, 2024). Principals with prior experience in special education tend to foster more effective inclusive practices (DeMatthews et al., 2020). Four key themes—Service Providers, IEP and the Law, Student Outcomes, and School Culture—emerged as focal points for targeted principal improvement.

##### ***4.1 Service Providers***

Research consistently links teacher attrition to workload and instructional conditions. Billingsley and Bettini (2019) identified collaboration, scheduling, and resource allocation as major factors. Conley and You (2017) found that administrative support has a significant influence on job satisfaction, work commitment, and career longevity. Principals play a vital role in supporting special education teachers by fostering collaborative environments and ensuring manageable workloads. Their understanding of special education policies enables them to uphold legal standards and improve instructional conditions (Brown et al., 2023; Kurth et al., 2022; Zirkel & Karanxha, 2024).

#### ***4.2 IEP and the Law***

Compliance with IDEA is a critical responsibility for school leaders. Gilson and Etscheidt (2022) noted that while oversight of special education is a top priority, it is also the area where principals feel least prepared. Ponce (2023) found that only 7 of 38 administrators felt confident facilitating IEP meetings, and over half of case managers reported inadequate support from site administrators. These findings underscore the need for specialized professional development to enable principals to effectively lead IEP processes and ensure compliance with legal requirements.

#### ***4.3 Student Outcomes***

Principals have a significant influence on student achievement, both directly and indirectly. Grissom, Egalite, and Lindsay (2021) emphasized the importance of strategic planning, resource management, and fostering professional learning communities. Principals also help reduce litigation risks by building trust with families and focusing on collaboration over conflict (Zirkel & Karanxha, 2024). Inclusive leadership strengthens student achievement by promoting a child-centered environment grounded in shared responsibility and strategic alignment.

#### ***4.4 School Culture***

Principals are instrumental in shaping inclusive school cultures. Implementing MTSS allows students with disabilities to learn alongside peers through flexible, differentiated instruction (Billingsley et al., 2019). A truly inclusive culture begins with leadership that believes in the potential of all students and promotes collective responsibility. Schoolwide strategies, such as multidisciplinary teams and MTSS frameworks, provide collaborative solutions that support diverse learners.

In summary, school-level leadership (principals) must tailor policies to meet the unique needs of each school, fostering inclusive environments through improved instructional conditions, strategic resource allocation, and clear role definitions in special education. Building

trust with stakeholders and implementing systems like MTSS reinforces a culture of shared responsibility and collaboration. These efforts equip principals to lead inclusive schools that support both educators and students effectively.

### **Recommendation 5: Targeted Professional Development**

It is clear from the literature review that there is considerable variation in principals' knowledge and experience related to special education (Goldrick et al., 2014; Sun & Xin, 2020; Pregot, 2021). This inconsistency highlights the need for customized professional development to address specific knowledge gaps (Bai & Martin, 2015). Rather than applying a one-size-fits-all professional development program for all principals, there is a need to pinpoint individual needs to foster change at the school level.

One way to address these needs is to provide states and districts with access to a self-assessment toolkit, which would help states identify gaps and guide them toward appropriate action to address these deficits. Therefore, the product for this capstone is a self-assessment toolkit, which is described below and in Section 5.

#### ***Purpose of the Self-Assessment Toolkit***

The self-assessment toolkit in Section 5 is designed to help states identify knowledge gaps among principals related to special education. The purpose is to provide states a set of tools that they can use to assess principals' understanding of special education and to help identify targeted professional development initiatives. Moreover, states can use information gleaned from the self-assessment to support the implementation of principal licensure requirements aligned with PSEL, NELP, and CEC standards. By identifying areas for growth, principals can seek opportunities to strengthen their expertise in special education.

The central question guiding the toolkit is: "What knowledge gaps do principals have related to special education?" In exploring this, users may also consider additional questions such as: "What changes are needed in training and principal licensure requirements?" and "What types of in-service or principal preparation programs can effectively address these gaps?" In

examining these questions, states can make informed decisions to address principals' limited knowledge of special education proactively, ultimately improving leadership capacity to create more inclusive educational environments.

### ***Toolkit Relevant Stakeholders***

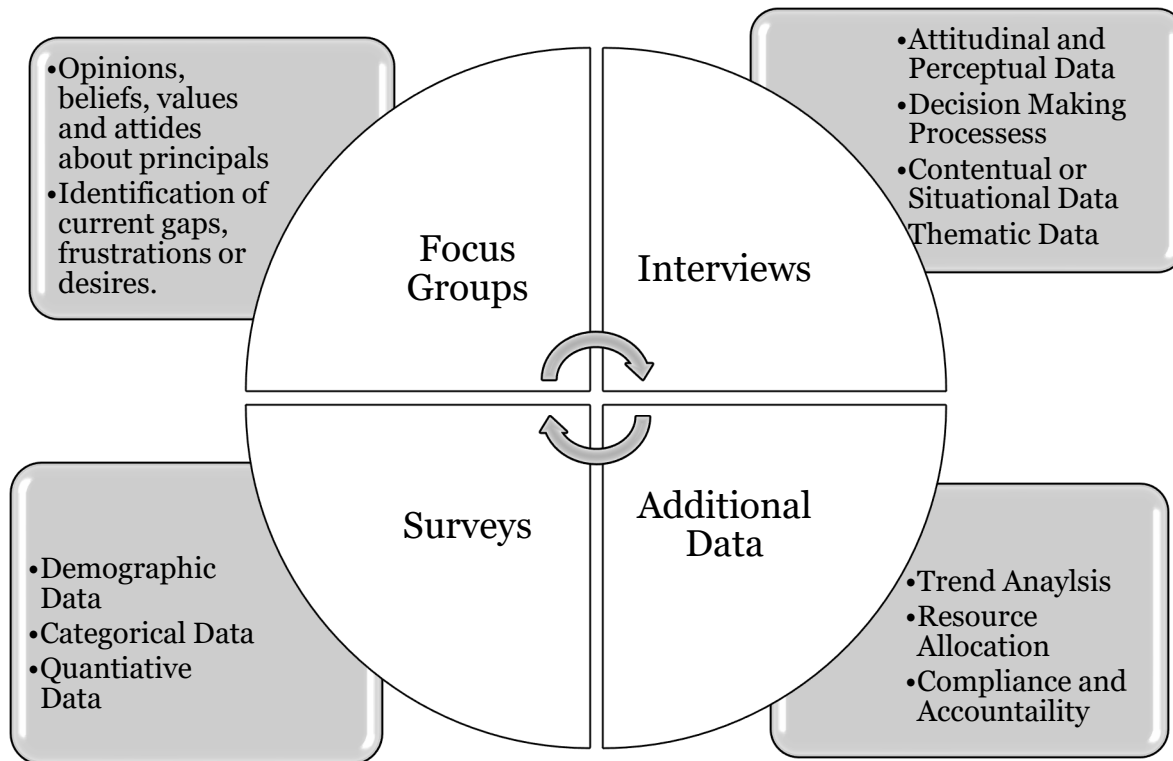
Given the multiple domains, this self-assessment may be used by a range of stakeholders. Relevant stakeholders include state and district-level boards of education, other professional education leaders, the Educational Commission of the States (particularly state licensure committees), and federal agencies and policymakers.

### ***Self-Assessment Toolkit Components***

The self-assessment toolkit can be used by state officials to assess the knowledge gap for principals. It offers a compilation of resources from the literature, including Leadership Surveys, Principal Surveys, Interviews, Focus Groups, Additional Data Sources, and guides. It is designed to be used by states and can be shared with regional or district leadership at their discretion; however, the resources developed from the research are accessible to everyone.

### ***Toolkit Measurements***

This toolkit includes a range of resources that enable state-level officials to identify the specific training needs of principals in their state. Users may select resources most relevant to the needs of school principals, recognizing that the applicability of each tool may vary depending on the size and context of the state or region in which they operate, as well as on how it is disseminated. It is important to note that resources involving participant input, such as focus groups, should be implemented with appropriate privacy safeguards to ensure confidentiality. It is also worth noting that many of these assessment tools require additional assistance to evaluate and interpret the results effectively. Users may consider using external agencies when implementing specific tools to support these efforts. The measures listed below will assess the results achievable through each tool.

**Figure 1***Toolkit Outcomes****Toolkit Benchmark***

As previously stated, the variation in completion timelines depends on the scope of implementation; however, the aim is to finish the self-assessment and implement professional development within the same school year, ensuring that principals receive the specific support tailored to their needs. The state's data collection phase of the self-assessment is expected to take two to six months to complete, followed by an additional four weeks for analysis. To provide clarity on estimated completion times, a breakdown of each assessment component is provided, detailing individual segments.

Starting with the surveys, the anticipated completion window is two to six weeks from the state personnel's dissemination of the study until its completion. At the same time, qualitative data collection methods, such as interviews and focus groups, can be conducted over

a period of approximately six to eight weeks. The examination of additional data is expected to vary between two and eight weeks, depending on the volume of data and each state's capacity to allocate time for review and decision-making. Four to eight additional weeks will be needed to review the data and make informed decisions about how to enhance principals' skills in the area of special education and inclusive services. The implementation of subsequent actions, such as professional development, training, or other targeted initiatives, could begin as early as three months after the initial assessment activities. If necessary, states have the option to contract with consultants to assist with implementation and data analysis.

### ***Toolkit Dissemination and Use***

This toolkit is intended for use by states and is designed to assess school-level principals' knowledge of special education. Using the contact information provided by the Education Commission of the States (Scott, 2018), states can be offered access to the toolkit, and State officials can distribute it to regions, districts, or individual schools as they deem most appropriate. The administration of these tools may differ from state to state; however, surveys are typically designed for principals and state-level leaders. In contrast, interviews and focus groups can be conducted by either state leaders or external agencies, and may include a variety of participants such as principals, parents, and teachers. The information collected by each state will provide a basis for determining future professional development opportunities for principals, with the potential to inform modifications to licensure requirements. Additional information is available in the toolkit to help states identify consultants or outside agencies for extra help with implementing and analyzing interviews, focus group data, or any of the toolkit assessments.

### ***Toolkit Anticipated Outcomes***

This toolkit is designed to help states gather comprehensive evidence that can inform policy decisions and initiate a discussion about the knowledge gap for principals in their state.

In the final phase of the toolkit, a group of stakeholders will come together to analyze the data. After reviewing and synthesizing the information, the group will reach a consensus on the findings, recommendations, and next steps. Using the toolkit completion checklist, the committee will create a summary of its findings.

The immediate outcomes include identifying areas of deficit and training needs. This can help states develop tailored professional development opportunities for school principals. In the long term, the initiative aims to influence systemic improvements, including revisions to principal preparation programs, the development of targeted professional development opportunities, and potential modifications to licensure requirements.

Any training initiatives that emerge from this process should prioritize areas of critical need. Information gleaned from the use of this toolkit can also inform the development of professional development timelines and targeted supports designed to enhance principals' knowledge of special education. To assess the impact of these efforts, principals can be evaluated using the CEEDAR Center's Innovation Configuration Rubric: Inclusive Principal Leadership Aligned with PSEL. This self-assessment tool uses a 0–3 scale to measure principals' implementation of inclusive leadership practices aligned with the PSEL. The results will offer valuable insights into current leadership capacities and guide the design of future training and resource allocation to support inclusive school leadership.

## **Conclusion**

Key stakeholders, including principals, district and state education leaders, and federal policymakers, all play a vital role in driving change. Empowering these individuals is essential to enhancing principals' knowledge of special education so that they can better support service providers, foster inclusive school cultures, and lead effective special education initiatives. Well-prepared principals are central to improving outcomes for students with disabilities and strengthening school communities.

Addressing the knowledge gap at all levels creates meaningful opportunities for systemic improvement. With targeted support from state agencies and reinforcement from federal policy, principals can acquire the skills necessary to lead inclusive schools. This collaborative effort ultimately benefits students, educators, and families by promoting equitable access to quality education and cultivating environments where all learners can thrive.

## Section 4: Summary of Results

Over the past century, the roles and responsibilities of principals have undergone significant changes. Initially, principals served primarily as teacher-administrators, responsible for clerical and administrative duties. Over time, they have evolved into instructional leaders who provide guidance and supervision, while also managing budgets and other responsibilities. Landmark legal cases and legislation have forced principals to adapt, ensuring that students receive a FAPE in the LRE and make progress in more inclusive settings (*Endrew v. Douglas County School District Re-1*, 137 S. Ct. 988). Therefore, to meet the demands of 21st-century education, principals need more than just a basic understanding of special education. They need in-depth knowledge to effectively lead and support all students, thus becoming effective instructional leaders for diverse learners (Gordon & Niemiec, 2020; Grissom et al., 2021; CCSSO & CEEDAR, 2017).

Since the 2012-13 school year, the number of students receiving special education services has increased from 6.4 million to 7.5 million (*The Condition of Education*, 2024). Despite the rise in students requiring special education and related services, the number of principals prepared to support students with disabilities has remained relatively unchanged over the decades. As of 2023, the Office of Special Education Programs (OSEP) reported that only 23 states and territories met the requirements of IDEA Part B (2024 Determination Letters on State Implementation of IDEA, 2024). This has left 31 states in need of additional assistance for one or two or more consecutive years. Although these reports do not directly place blame on principals, a survey conducted by the RAND American Educator Panels, involving 3,500 principals, highlights that only 12% felt "completely prepared" to support the needs of students with disabilities (Stelitano et al., 2020, p. 1). This survey indicates that "principals are not receiving the training necessary to fulfill their responsibilities as the instructional leaders of students with disabilities," resulting in a lack of foundational knowledge regarding special

education policies and laws (Lynch, 2012, pp. 42-43). As a result, this knowledge gap is a contributing factor to the mismanagement of special education programs within schools.

To better understand and address the knowledge gap, the purpose of this capstone was to examine the skills principals possess related to special education, the necessary preparation for principals, and the consequences of insufficient knowledge. In Section 2, the review of literature specifically addressed three questions:

RQ1: What knowledge and skills are required for principal certification or licensure? Do any of these qualifications relate to experience or knowledge in special education?

RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education?

RQ3: What are the impacts for students, teachers, and school culture when principals have limited special education knowledge or experience?

To address these research questions, a comprehensive literature review of 27 studies was conducted to analyze information relevant to the research questions. The research reviewed in Section 2 revealed that although principals are responsible for leading all students, including those with disabilities, they frequently lack knowledge in special education.

These studies also revealed a need for more comprehensive content related to special education within principal leadership preparation programs and professional development initiatives. These programs should emphasize the CEC standards and equip principals with the knowledge to interpret case law and understand federal, state, and local policies and regulations (Bai & Martin, 2015). The research highlighted the importance of inclusive education led by effective principal leadership. Findings from multiple studies indicate that principals have an impact on service providers, the development and implementation of IEPs, student performance, and school culture (Billingsley & Bettini, 2019; Grissom et al., 2021; McLeskey et al., 2014; Ponce, 2023). By supporting the workload of special education teachers, principals may improve teacher retention and reduce attrition rates. Additionally, by providing proactive

support and preventive measures, principals can enhance the effectiveness of IEPs. Lastly, principals have both direct and indirect impacts on student achievement and play a pivotal role in fostering inclusive education, thereby shaping the overall culture of their schools.

Although a direct causal connection between principal training in special education and outcomes for students, service providers, and schools has not been definitively established, it is evident that principals need a better understanding of special education. To accomplish this, additional training is needed for principals who lack specific preparation and experience in special education, simply from a legal standpoint. Melloy, Cieminski, and Sundeen (2022) emphasize that inclusive schools require inclusive leadership to improve outcomes for all students; however, “effective leadership of inclusive schools requires specific skills and dispositions” (p. 358). Therefore, enhanced training opportunities aligned with state standards and requirements are essential. Current principals need access to ongoing professional development, resources, and support in the area of special education, which is targeted to their needs. This can better equip them to positively impact service providers, students, and school communities (Gordon & Niemiec, 2020). Building on the need for systemic support, Robertson, McCaleb, and Smith (2017) emphasized that solutions need to include improving university-based preparation, professional development, hands-on learning opportunities, and establishing a supportive system for educators, students, and their families. By enabling principals to support service providers and teachers better, a positive and inclusive school culture can be fostered.

For meaningful change to occur, principals need access to high-quality professional development and principal preparation programs (Gordon & Niemiec, 2020; Melloy et al., 2022; Bai & Martin, 2015; Thompson, 2017). Lack of such knowledge may lead to continued teacher attrition (Conley & You, 2017; Tudryn et al., 2016), continued litigation over IEP implementation and adhering to IDEA (Zirkel & Karanxha, 2024), and the lack of inclusivity for all students within schools (Billingsley et al., 2017; McLeskey et al., 2014). Furthermore,

additional research is necessary to determine the most effective types of training (Bai & Martin, 2015). By deepening principals' understanding of special education beyond foundational knowledge, principals will be better equipped to support inclusive practices in schools.

To support this process, the Product for Practitioners for this Capstone is a Self-Assessment Toolkit. It has been developed as a resource for states to identify specific training needs in their respective areas. The toolkit offers access to Leadership Surveys, Principal Surveys, Interviews, Focus Groups, Additional Data Sources, and guides based on resources from the literature. It is hoped that states can use these tools to provide valuable insights into areas of deficit and proactively inform data-driven strategies for continuous improvement. Using these findings, states can then develop customized training solutions, including targeted professional development programs tailored to the specific needs that have been identified.

Such data can also be helpful as states develop and/or modify principal licensure requirements aligned with the PSEL, NELP standards, and CEC standards. Eventually, the toolkit can empower principals to explore their knowledge in special education, with the goal of fostering an inclusive school culture that benefits students, teachers, and families alike.

In conclusion, the recommended next steps, in addition to disseminating this toolkit, involve conducting further research to establish a causal relationship between principal training in special education and outcomes for students, IEPs, service providers, and schools. It also requires investigating which types of training and preparation lead to the most effective results, along with strategies for sharing these findings with states for implementation. Ultimately, strengthening principals' capacity to lead inclusive schools can enable students, teachers, and families to build a thriving educational community.

“A thriving school is one where every child is seen, every teacher is heard,  
and every family is valued” -Unknown.

## Section 5: Product for Practitioners

The culminating product for this capstone project, which will be disseminated to practitioners, is a Self-Assessment Toolkit Website. The purpose of this website is to support principals, school districts, and state-level education leaders in identifying and addressing knowledge gaps related to special education among principals. Grounded in research-based practices, the website features a self-assessment toolkit that enables users to pinpoint areas of deficit in leadership competencies. This approach is intended to inform the development of specially designed professional development programs that directly target identified areas of deficit. Using a multifaceted methodology, the toolkit incorporates surveys, interviews, focus groups, and additional data sources that states can use to collectively assess areas for improvement (as referenced in Appendix C).

Beyond the self-assessment component, the website offers practitioners a concise overview of the problem of practice, along with research-based recommendations and solutions. Additional resources include links to established professional development programs, state standards, and evaluations that already incorporate techniques and frameworks aligned with special education leadership.

This website is designed to serve as a strategic resource for bridging the current gap in research regarding principals' understanding of special education and its implications. By revealing existing knowledge deficits, the toolkit enables stakeholders to allocate resources effectively and implement targeted interventions. Ultimately, by utilizing the website, school principals can identify their unique area of need and work to improve it, hopefully leading to more inclusive schools that effectively support students with disabilities.

## Appendices

### Appendix A: Methodological Critique Matrix

**Table 1**

*RQ1: What knowledge and skills are required for principal certification or licensure? Do any of these qualifications relate to experience or knowledge in special education?*

	Purpose/ Rationale/ Research Questions	Design/ Methods/ Procedures/ Analyses	Sample/ Participants	ISLLC/ ELCC Standards	Preparation	Education & Experience	Trainings	Proposed Solutions
Valesky, Thomas C., and Marilyn A. Hirth. (1992)	Examine state requirements for administrators' certification endorsements regarding special education law.	Qualitative survey with follow-up interviews (SPSSX).	57 special education directors.	Every state offers at least one administrative endorsement.	3 states require a special education law course for principals.	33% of states require knowledge of special education law for admin endorsements.	75% offer special education in-service training annually.	Revise State endorsement requirements to include special education law knowledge.
Vogel, L., & Weiler, S. C. (2014).	Examine alignment of state preparation programs with ELCC standards.	Quantitative document analysis (NVivo).	50 states' principal standards and licensure requirements.	19 adopted 2008 ELCC standards verbatim. 31 include basic ELCC tenets. 30 require passage of a test; 19 require both initial and advanced licensure.	16 states require credit hours (18-60); 4 require internships (200-450 hours). ELCC accreditation from CAEP.	Experience requirements vary: 2-5 years.	2 states require 2 years; 25 states require 3 years; 1 state required 5 years; 34 states require MA and 2 require EdS/EdD	Align school leader development among university programs, state departments, and school districts.

	Purpose/ Rationale/ Research Questions	Design/ Methods/ Procedures/ Analyses	Sample/ Participants	ISLLC/ ELCC Standards	Preparation	Education & Experience	Trainings	Proposed Solutions
Goldrick, L., Sindelar, P., Zabala, D., & Hirsch, E. (2014).	Develop tools for policy development supporting effective teaching and leadership.	Policy analysis through CEEDAR.	Policy summaries of all 50 states.	46 leadership standards; 40 adopted ISLLC standards.	16 states require specific coursework in special education.	3 states require a 2-year support program for new administrators	13 states have ongoing PD standards for veteran administrators	Strengthen expectations for administrators, including criteria related to students with disabilities.
Anderson, E., & Reynolds, A. (2015)	Develop researched based rubrics exploring state policies on principal preparation and licensure.	Multi-phased qualitative analysis with pilot studies.	Documents from all 50 states between August of 2013- April 2014.	100% adopted/adapted national leadership standards.	16 states require fieldwork integrated with curriculum. 25 states provide supervision by expert veterans, 17 multiple sites with diverse populations.	38 states require 3+ years of teaching experience. 30 states require an MA in educational leadership. 35 states require passing assessments aligned with state standards.	45 states require continuing education.	Develop comprehensive reports through UCEA for policy makers to assist with high quality university preparation programs.

	Purpose/ Rationale/ Research Questions	Design/ Methods/ Procedures/ Analyses	Sample/ Participants	ISLLC/ ELCC Standards	Preparation	Education & Experience	Trainings	Proposed Solutions
Scott, 2018	Compare school leader certification and preparation policies.	Policy analysis from the Education Commission of the states.	All 50 states.	All 50 states	38 states require field experience in preparation programs.	37 states require a master's degree and 3 years of teaching experience for initial certification.		
Gordon, S. P., & Niemic, J. (2020)	Examine initial licensure assessment process to classify as traditional, transitional or transformative	Qualitative policy analysis with expert panel recommendation s.	50 states Panel 2 AP, 2 Principals, 2 Administrators, 2 Professors, all with doctoral degrees in educational leadership.	35 states and DC have high-stakes principal licensure assessments (23 with high relations to PSEL; while 10 with moderate).	Recommendations include specific content related to PSEL, higher-level capacities in internships, equity efforts, multiple tools, and performance- based assessments.			Increase partnerships, include general requirements, incorporate specific content areas, emphasize higher-level capacities, focus on performance- based assessments, use multiple instruments, ensure equity, provide feedback.

	Purpose/ Rationale/ Research Questions	Design/ Methods/ Procedures/ Analyses	Sample/ Participants	ISLLC/ ELCC Standards	Preparation	Education & Experience	Trainings	Proposed Solutions
Sun, A. Q., & Xin, J. F. (2020).	Investigate principals' opinions on their knowledge, skills, and leadership roles related to special needs students.	Quantitative survey using descriptive statistics.	134 principals	23.8% did not obtain knowledge/skills related to special education in principal preparation programs. 51.7% took courses on special education issues.			66.9% gained knowledge from mandatory in-services.	Update knowledge and skills via professional development.
Pregot, M. V. (2021).	Measure principals' perceived knowledge in special education compared to generic leadership practices.	Qualitative study using T-test to analyze electronic survey responses.	485 surveys from principals in 5 states (NY, GA, VT, OR, MI)					Review leadership preparation programs to emphasize content differences between general and special education services.

**Table 2**

*RQ2: What are the leading evidence-based training, certification, or programs for principals that yield positive outcomes for students in special education?*

	Purpose Rationale Research Question	Design/ Methods	Sample/ Participants	School Setting/ Target Population	Procedure Analysis	DOK Education & Experience	Results	Implications/ Proposed Solutions
NPBEA, 2018	Background on NELP standard development.	Qualitative design with focus groups.	Practitioners, faculty, and state personnel.	The National Educational Leadership Preparation (NELP)	Development, review, external vetting, and editing before publication	CAEP and NPBEA member organizations (CCSSO, UCEA, (NASSP), (NAESP), (AASA), (AACTE), (ICPEL)	9 significant differences in standards (inclusive culture, with equitable access for every student and adult).	Comprehensive crosswalk comparing NELP to ELCC and PSEL.
Robertson et al., 2017	Perceived knowledge to support individuals with severe disabilities.	Qualitative design with three focus groups.	Graduate students in education leadership.	Hispanic-serving institution.	A survey was emailed to participants, and focus groups were formed to include peer debriefing.	MA & Doctoral students in education leadership, with 2 years of professional experience in public schools.	Participants are unprepared for pervasive needs.	Improve university-based preparation and professional development.
Melloy et al., 2022	Knowledge and skills in supporting students with disabilities.	Mixed-method survey.	83 respondents (teachers, administrators).	K-12 inclusive schools.	The IRB survey included structured & unstructured questions.	Principal or special education administrator license	Positive knowledge of IEP; leadership roles in IEP development and MTSS.	Include field-based learning and ongoing PD for inclusive leadership.

	Purpose Rationale Research Question	Design/ Methods	Sample/ Participants	School Setting/ Target Population	Procedure Analysis	DOK Education & Experience	Results	Implications/ Proposed Solutions
Thompson, 2017	Essential skills for special education leadership.	Mixed-method self-rated survey.	Special education administrators and directors.	Virginia.	2 groups answered open-ended questions and rated 25 competencies		Communication and ethical practices are rated essential.	PD on interpreting case law and policies.
Bai & Martin, 2015	Training needs for school principals.	Quantitative analysis with Needs Assessment.	289 participants.	Public school district in Southeast US.	Likert scale survey data was checked using MANOVA and Cronbach's alpha.	11+ yr=43.5%; 6-10yr= 22.4%; 3-5yr= 15.1%; 1-2yr= 11.7%; less than 12 months=7.4%. 13.7% expression special learning needs.	Strong association between education degrees, special learning needs, and training needs.	PD programs based on CEC standards, tailored to background and experience.
Resch, 2024	Equitable access for students with disabilities.	Qualitative study with observation and semi-structured interviews.	2 high schools in Wisconsin.		Snowball sampling, follow-up interviews, observation and debriefing	Selected based on WDPI state report card.	Belief in students' ability to learn; equitable learning starts with admin team.	Examine processes for assimilating new faculty.
DeMatthews et al., 2020	Principal preparation in special education and inclusion.	Qualitative study with interviews.	43 principals.	West Texas.	Interviews (initial, follow-up) open-ended questions and transcribed, along with observations.	District directors and superintendents' recommendations, principals having 1-8yrs of experience.	Principals lack preparation in special education.	Investigate successful principals with different backgrounds.

**Table 3**

*RQ3: What are the impacts for students, teachers, and school culture when principals have limited special education knowledge or experience?*

Purpose Rationale Research Question	Design/ Methods	Sample/ Participant(s)	Population Impacted	Procedure Analysis	Results	Proposed Solutions/Recommendations / Implications	Target Population	
Bettini et al., 2017	Workload manageability was predicted emotional exhaustion and career intentions.	Secondary analysis of Michigan Indiana Early Career Teacher (MIECT) surveys.	61 novice special education teachers, 184 general education teachers.	Novice teachers.	Dillman’s (2007) five-contact approach, emailed to participants, utilized measurement models, two-way ANOVA	Workload manageability predicted emotional exhaustion for both groups.	Cultivate a supportive school culture with shared responsibilities and investigate its impact on novice SETs' workload perceptions.	Administrators
Conley & You, 2017	Investigate influences on special education teachers' intention to leave.	Schools and Staffing Survey (SASS).	National sample of 2060 special education teachers.	Teachers.	Tested two mediational models.	Administrative support significantly affects intention to leave directly and indirectly.	Clarify what constitutes support and practical applications.	Administrators
Billingsley & Bettini, 2019	Relationship between special educator attrition and retention.	Literature review.	30 studies from 2002-2017.	Special educators.	Quantitative and qualitative methods to analyze.	Work demands lead to higher attrition risk.	Coordinated efforts across federal, state, and local institutions.	Federal, state, and local institutions.

Purpose Rationale Research Question	Design/ Methods	Sample/ Participant(s)	Population Impacted	Procedure Analysis	Results	Proposed Solutions/Recommendations / Implications	Target Population
Tudryn et al., 2016 Prioritize distributed leadership attributes differences from administrators to special education teacher leaders.	Mixed method analysis.	30 nonrandom participants (15 administrators and 15 teacher leaders).	15 districts in one state.	Q methodology analyzed 40 distributed leadership statements prioritized by participants.	Min. BS to teach, subject matter competency in core academic certification area.	Perceptions follow developmental continuum of three different areas: planned distribution, embedded distribution, and natural distribution.	Experience and work environment influence perceptions.
Ponce, 2023 The Importance of Administrators' Participation in IEP Meetings: determining the relationship between preparation and effectiveness.	Mixed-methods doctoral dissertation.	56 special education teachers, 38 administrators, six special education coordinators.	IEP teams.	Snowball and stratified sampling.	Administrators are often unprepared; there is a lack of support for special education teachers.	Provide special education training and professional development for administrators.	Administrators

Purpose Rationale Research Question	Design/ Methods	Sample/ Participant(s)	Population Impacted	Procedure Analysis	Results	Proposed Solutions/Recommendations / Implications	Target Population	
Kurth et al., 2022	Measure IEP quality based on placement.	Quantitative study.	National sample of 112 IEPs of elementary students with complex support needs.	Special education teachers and students.	Data was rated based on quality indicators, and double-coded using an agreement-plus-disagreement formula.	IEPs lack high-quality services and support.	Prepare teachers to develop compliant IEPs; research working conditions affecting IEP quality.	Special Education Teachers
Zirkel & Karanxha, 2024	Examine court cases related to IDEA over 25 years.	Quantitative study.	1,322 published court cases (1998-2022).	Federal circuit court regions and students.	Frequency count to determine the longitudinal trends	Decline in cases; 2:1 ratio favoring school districts.	Proactive policies to combat litigation through collaboration and trust with parents.	Administrators
Brown et al., 2023	School leaders' perspectives on transition for students with disabilities.	Quantitative study.	147 public middle and high schools.	Administrators.	Approved surveys through IRB were emailed out through SurveyMonkey 2020.	Inconsistencies in principals' beliefs and practices; lack of involvement in transition programming.	Guidance and support from district/state transition personnel.	District or state personnel.
Grisso et al., 2021	Evaluate the causal connection between leadership and student outcomes.	20-year longitudinal synthesis.	219 studies; data from four states and two urban districts.	Students.	Utilizing an empirical systematic review. NCES cross-references with CCD	Effective principals' impact on student achievement is similar to that of teachers.	Incorporate ELL and students with disabilities into instructional leadership; future research investigating support a high-quality principal workforce.	State and federal policies, universities, and administrators.

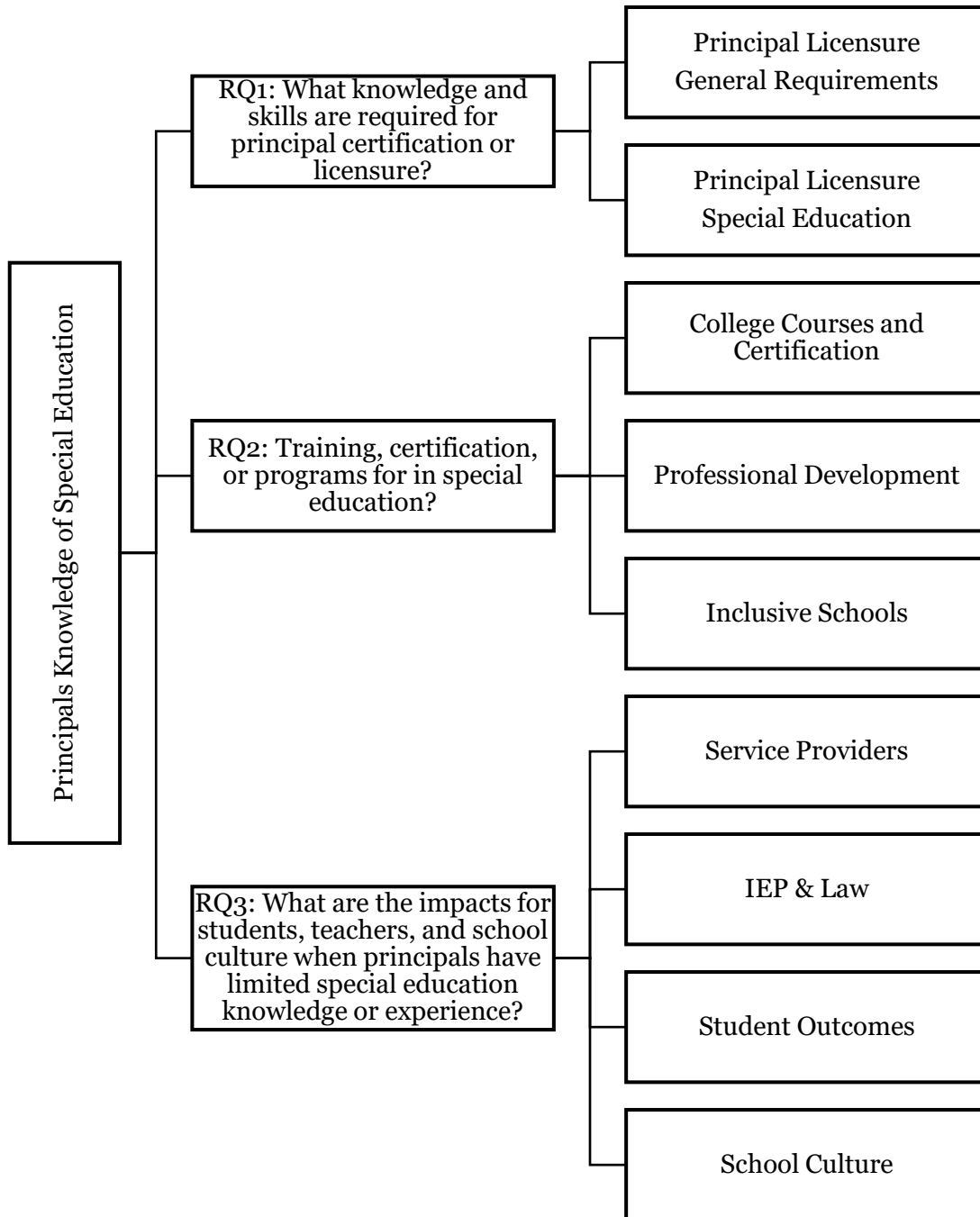
Purpose Rationale Research Question	Design/ Methods	Sample/ Participant(s)	Population Impacted	Procedure Analysis	Results	Proposed Solutions/Recommendations / Implications	Target Population
Billings Principal ley et. al., 2017 leadership's impact on educational outcomes for students with disabilities in inclusive schools.	Research synthesis.	PSEL standards.	Principals.	Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR)	Created an IC matrix based on PSEL standards to guide states in strengthening principals' capacities.	Identify critical knowledge, instructional leadership, inclusive school practices, and support for parent and family engagement.	States and administrators
McLeskey et al., 2014 Factors contributing to the success of including students with disabilities in general education classrooms.	Case study.	One elementary school.		Interviews, observations and document review over six months.	2 overarching themes: student support, instructional quality, and administrative & organizational features. Effective, inclusive schools provide high-quality instruction, utilize resources efficiently, and monitor student progress.	Principals play critical roles in developing and supporting inclusive schools.	Principals

Purpose Rationale Research Question	Design/ Methods	Sample/ Participant(s)	Population Impacted	Procedure Analysis	Results	Proposed Solutions/Recommendations / Implications	Target Population
Robert son et al., 2017 Candidates' perceived knowledge to support individuals with severe disabilities.	Qualitative study (focus groups)	Graduate students in education leadership programs.	School culture.	Participants were emailed a survey and participated in the focus group, which included peer-debriefing	Administration is essential in creating an inclusive school culture, providing resources, and evaluating programs.	Improve university-based preparation, professional development, hands-on learning, and supportive systems for educators, students, and families.	Administrators, universities, districts, and state personnel.

**Appendix B: Literature Search Map**

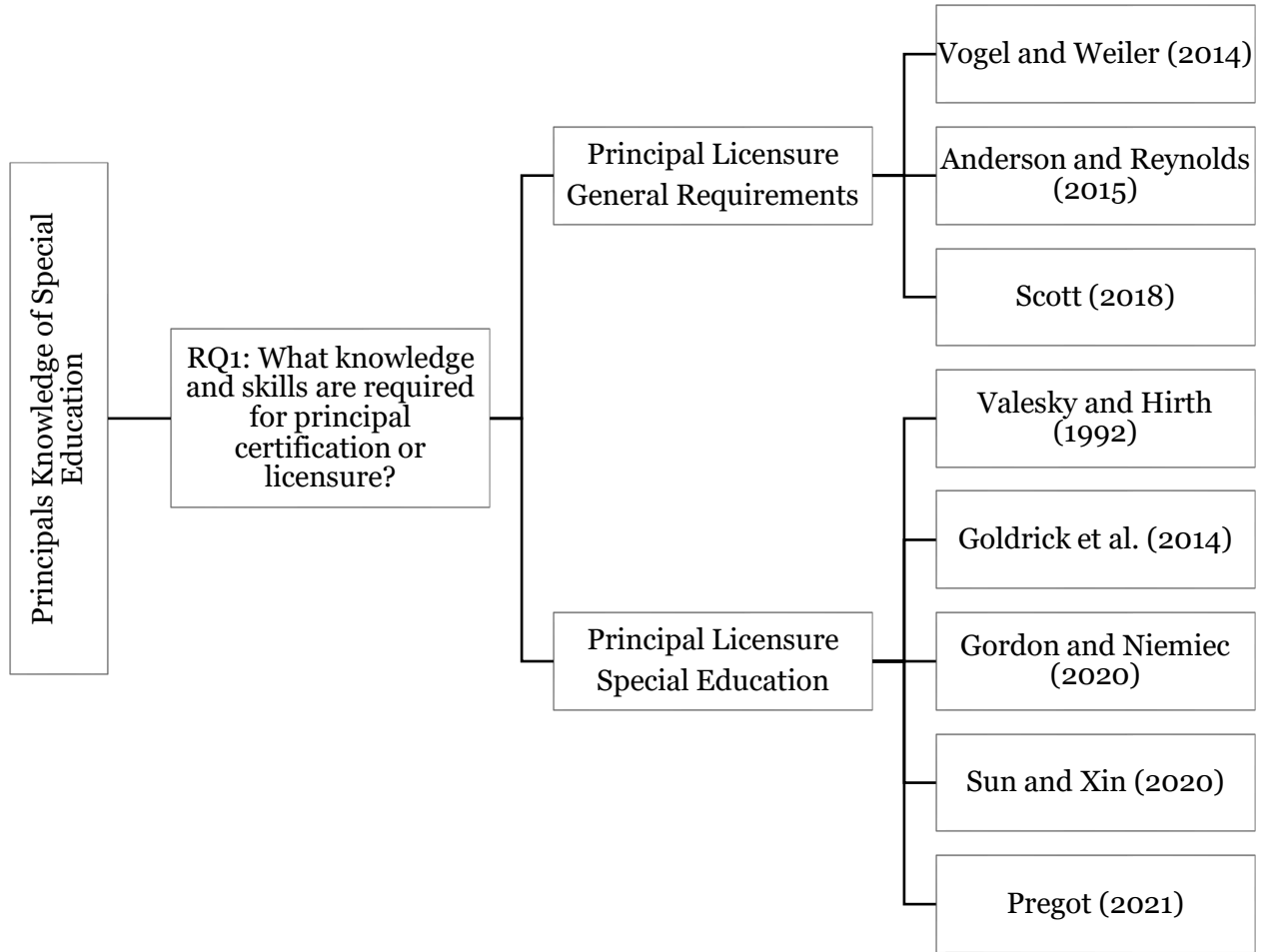
**Figure 2**

*Literature Search Map*



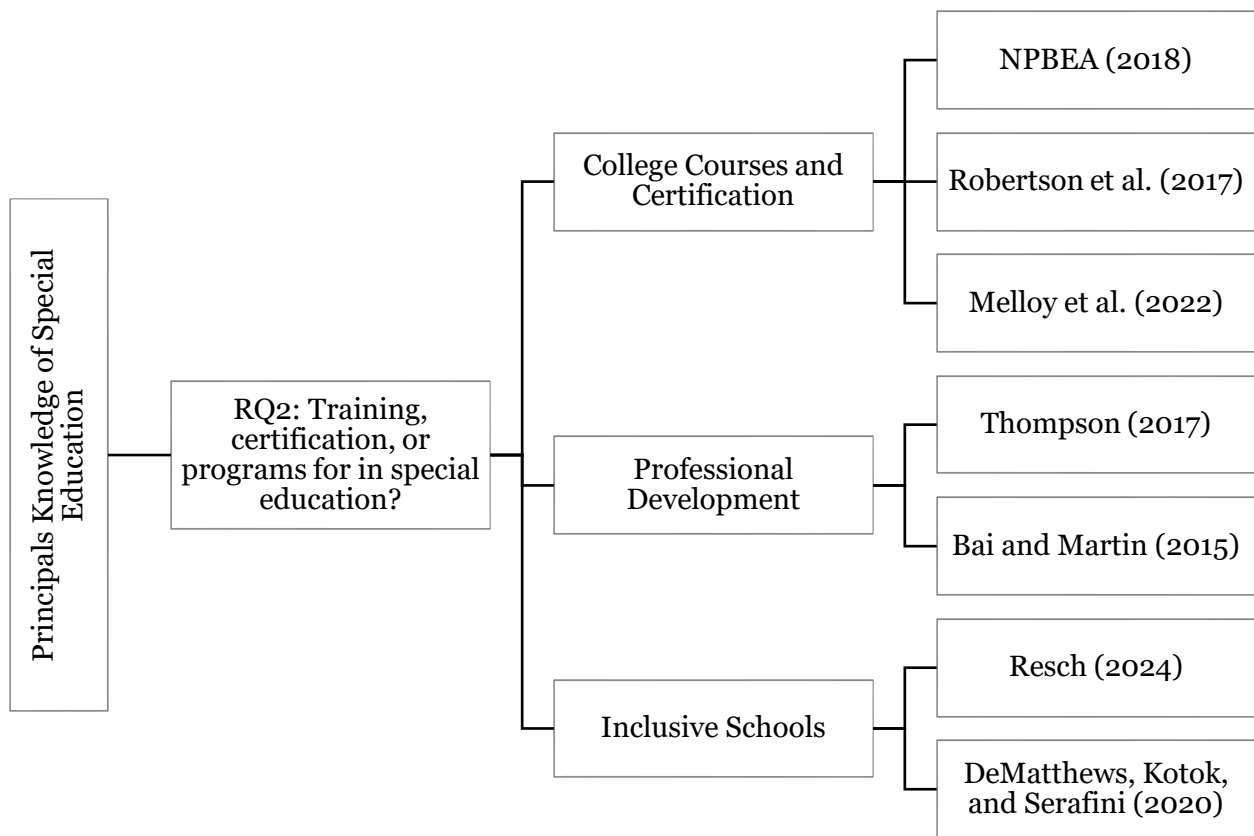
**Figure 3**

*Literature Map- RQ1*



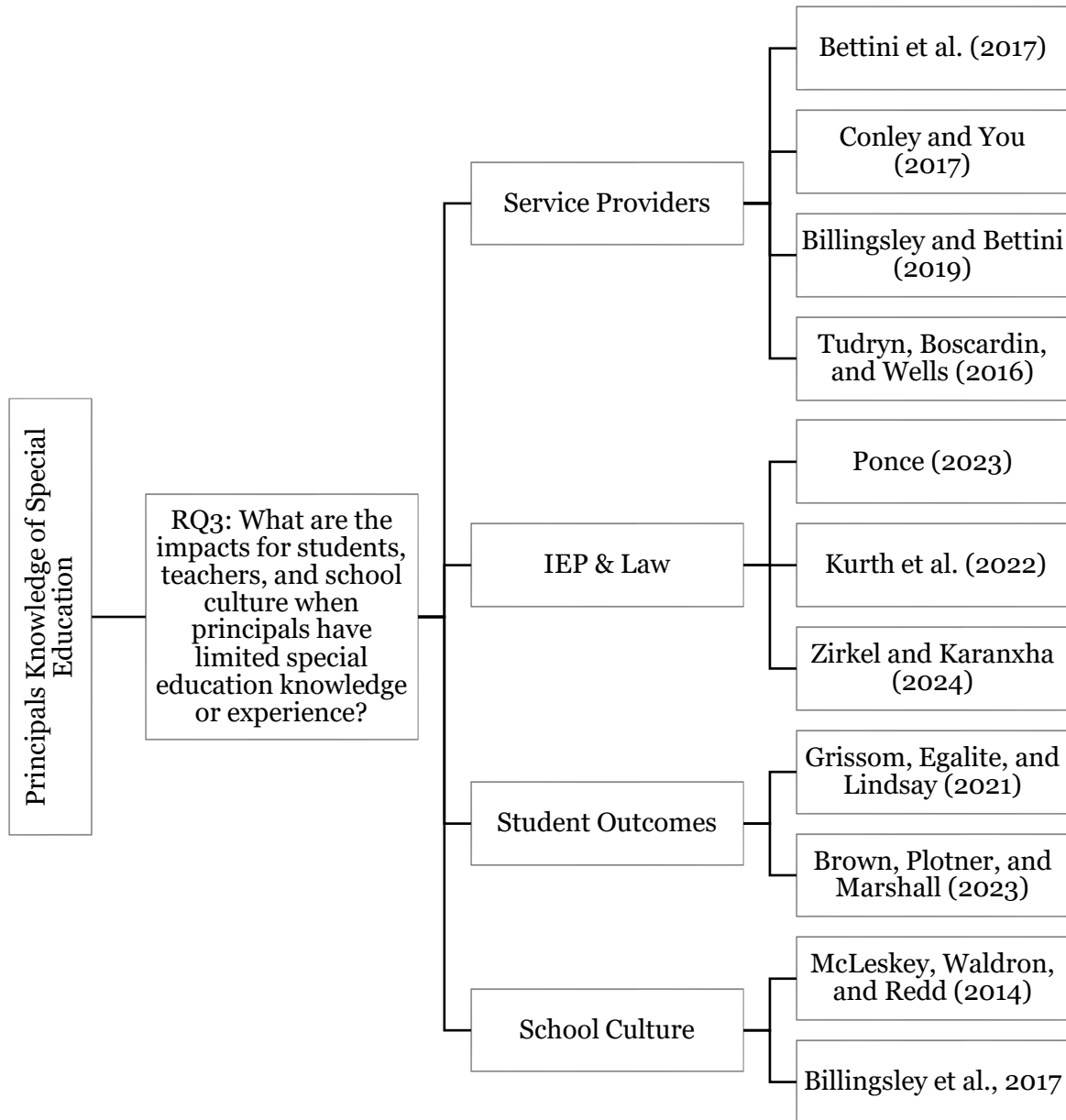
**Figure 4**

*Literature Map- RQ2*



**Figure 5**

*Literature Map- RQ3*



**Appendix C- Product**

**Self-Assessment Toolkit Index**

Appendix C.1- Informational Reference Guide

Appendix C.2- Leadership Survey

Appendix C.3- Principal Survey

Appendix C.4- Interviews

Appendix C.5- Focus Groups

Appendix C.6- Additional Data Source

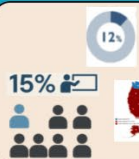
Appendix C.7- Toolbox Completion Checklist

**Appendix C.1- Informational Reference Guide.**

University of Maryland
Brianna Phillips

# PRINCIPAL KNOWLEDGE OF SPECIAL EDUCATION

The toolkit is designed to help districts and states identify knowledge gaps among school leaders.



- 7.5 million students (15% of all public school students) received special education services in 2022–23 (NCES, 2024)
- In 2023, only 23 states and territories met IDEA Part B requirements (OSEP, 2024)
- Just 12% of principals felt “completely prepared” to support students with disabilities (RAND, Johnston et al., 2019)

### SCHOOL LEVEL


- Tailor policies to each school’s needs
- Foster a supportive, inclusive environment by building trust with all stakeholders
- Monitor roles and responsibilities, especially in special education
- Improve instructional conditions:
  - Collaboration
  - Workload
  - Scheduling
  - Resources
- Promote an inclusive culture through MTSS, emphasizing:
  - Shared responsibility
  - Strategic planning
  - Resource alignment
  - Team collaboration

### STATE LEVEL

- Sustain highly qualified leadership through coursework and professional development
- Partner with college prep programs to equip new principals with inclusive leadership skills
- Offer differentiated professional development for current principals based on their needs
- Provide foundational training in legal requirements under IDEA
- Promote evidence-based practices to improve learning environments
- Support stakeholder engagement through inclusive leadership strategies
- Drive positive student outcomes by fostering inclusive school cultures

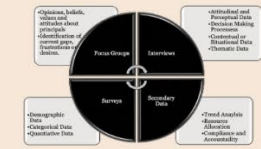
### FEDERAL LEVEL

- Adopt new licensing standards aligned with inclusive leadership and special education competencies
- Ensure principals are prepared to support all learners through updated certification requirements
- Appropriate dedicated funding for special education programming and training
- Invest in professional development and MTSS implementation to improve instruction and outcomes



### TOOL KIT

- District and State Survey
- Needs Assessment
- Interviews
- Focus Groups
- Secondary Data Source- Checklist
- Summative- data analysis checklist



### RECOMMENDATIONS

- Address the current research gap in leadership and special education
- Identify the most effective professional development and training programs
- Use findings to inform future principal preparation initiatives

Resources that enable district or state-level officials to identify the specific training needs within their districts.

**Appendix C.2- State Leader Survey**

State survey completed by state and or district leaders (directors, superintendents, coordinators, or other specialists). Developed by Fan et al. (2019), the survey is based on the Council for Exceptional Children (CEC) Advanced Specialty Set for Special Education Administration (CEC, 2015). The survey includes 25 specialty skill items organized into seven competency clusters: Assessment, Curricular Content Knowledge, Programs, Services, and Outcomes, Research and Inquiry, Leadership and Policy, Professional and Ethical Practice, and Collaboration. Respondents were asked to rate each skill using a five-point Likert scale ranging from “extremely important” to “not important at all.” In addition to the quantitative items, the survey included an open-ended question that asked participants to identify any additional knowledge and skills needed for the preparation of special education directors. Survey responses can be measured by averaging the mean score in each section and then comparing those results to the CEC Advanced Specialty Set for SEA Specialists (CEC, 2015). This framework outlines the essential skills and knowledge that special education administrators are expected to possess. By comparing the survey data to these standards, users can identify areas of strength and areas that require improvement. This comparison helps highlight where additional training, support, or resources may be necessary to meet professional standards and improve practice.

**Director’s Survey**

Directions: Reflecting on your observations and experiences, please rate the importance of the following skills for your current practice.

25 Quantitative Survey Items- Ratings:

1 = Not important at all

2 = Slightly important

3 = Moderately important

4 = Very important

5 = Extremely important

*Standard 1: Assessment*

1. Advocating for and implementing procedures for the participation of individuals with exceptionalities in accountability systems.
2. Developing and implementing ongoing evaluations of education programs and personnel serving individuals with exceptionalities.
3. Designing and implementing evaluation procedures that improve instructional content and practices.

*Standard 2: Curricular Content Knowledge*

4. Developing and implementing an administrative plan that supports the use of instructional and assistive technologies.
5. Providing ongoing supervision of personnel working with individuals with exceptionalities and their families.

*Standard 3: Programs, Services, and Outcomes*

6. Developing and implementing a flexible continuum of services based on effective practices for individuals with exceptionalities and their families.
7. Developing and implementing programs and services that contribute to the prevention of unnecessary referrals.
8. Developing data-based educational expectations and evidence-based programs that account for the impact of diversity on individuals with exceptionalities and their families.

*Standard 4: Research and Inquiry*

9. Engaging in data-based decision-making for the administration of educational programs and services that support individuals with exceptionalities and their families.
10. Joining and participating in professional organizations to guide administrative practices when working with individuals with exceptionalities and their families.

*Standard 5: Leadership and Policy*

11. Interpreting and applying current laws, regulations, and policies to the administration of services to individuals with exceptionalities and their families.
12. Applying leadership, organization, and systems change theory to the provision of services for individuals with exceptionalities and their families.
13. Developing a budget in accordance with local, state/provincial, and national laws in education, social, and health agencies for the provision of services for individuals with exceptionalities and their families.
14. Engaging in recruitment, hiring, and retention practices that comply with local, state/provincial, and national laws as they apply to personnel serving individuals with exceptionalities and their families.
15. Communicating a personal inclusive vision and mission for meeting the needs of individuals with exceptionalities and their families.

*Standard 6: Professional and Ethical Practice*

16. Communicating and demonstrating a high standard of ethical administrative practices when working with staff serving individuals with exceptionalities and their families.
17. Developing and implementing professional development activities and programs that improve instructional practices and lead to improved outcomes for individuals with exceptionalities and their families.

*Standard 7: Collaboration*

18. Utilizing collaborative approaches for involving all stakeholders in educational planning, implementation, and evaluation.
19. Strengthening the role of parents and advocacy agencies as they support individuals with exceptionalities and their families.
20. Developing and implementing intra- and interagency agreements that create programs with shared responsibility for individuals with exceptionalities and their families.

21. Develop seamless transitions of individuals with exceptionalities across the educational continuum and other programs from birth through adulthood.
22. Implementing collaborative administrative procedures and strategies to facilitate communication among all stakeholders.
23. Engaging in leadership practices that support shared decision-making.
24. Demonstrating the skills necessary to provide ongoing communication, education, and support for families of individuals with exceptionalities.
25. Consulting and collaborating in administrative and instructional decisions at the school and district level.

*Open-ended questions:*

26. How well do you feel the current SPED director preparation/training program prepared you, and why?
27. What would you change about the current SPED director's preparation/training program and why?
28. Please describe additional knowledge/skills that you feel should be discussed within the SPED director preparation/training program.

**-Additional assistance is required to evaluate and interpret the results of this instrument effectively.**

*\* Utilization of this instrument was sourced from and includes permission granted by Fan, Zhang, and Wu (2019). Using the CEC advanced preparation standards for special education administration to examine competencies for special education directors—Journal of Special Education Leadership, 32(1).*

**Appendix C.3- Principal Survey**

Sun and Xin (2020) developed the survey using a theoretical framework (e.g., Wakeman et al., 2006), which was guided by the study's research questions exploring where and to what extent school principals acquire knowledge and skills related to special education, and how well they understand relevant laws and regulations to support students with disabilities. Designed to gain principals' perspectives on their competencies and practices in special education, the survey underwent peer review and pilot-testing. Survey responses can be grouped into four main areas: leadership in special education, leadership knowledge, leadership support, and leadership decision-making. Participants' background information and how principals learned about special education (through training, experience, or other sources) can be identified. To evaluate principals' understanding of special education laws and their ability to effectively manage both special education responsibilities, survey responses can be analyzed across the four main categories previously identified. Areas with lower scores may indicate potential opportunities for targeted training or professional development. Responses to open-ended questions provided additional context and reinforced the findings from the multiple-choice items, offering a deeper insight into principals' perspectives and challenges.

**Principal Survey**

Your school Level:

- Elementary School
- Middle School
- High School

Your Age range:

- Under 30
- 30-40
- 40-50
- 50-60

- 60 above

Gender:

- Male
- Female

Years in the principal position: \_\_\_\_\_

Which year did you get your principal certificate \_\_\_\_\_

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. I understand the mandatory IDEA law to support students with disabilities in school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I know about the Individual Education Programs (IEP) and its process for students with disabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I know about the Response to Intervention (RTI) with three-tiers and have advocated its implementation in school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I know the importance of school-wide positive behavior support and have advocated its implementation in school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I understand the Least Restrictive Environment (LRE) for students with disabilities and have facilitated an inclusive learning environment for both general and special education students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. I learned the above information (questions 1-5) from the leadership program when attending college for principal certification

- Yes
- No

7. I learned the above information (questions 1-5) from the school/district in services

- Yes
- No

8. I took a course on special education in the leadership program when attending college for principal certification

- Yes
- No

9. I took other courses in which special education issues/practices/instructional and supervisory strategies were embedded in the leadership program when attending college for principal certification

- Yes
- No

10. I have generated options and possible solutions in resource management (e.g., instructional support, financial support, professional development opportunities) for special education in my school\*:

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

\*If your above answer is *Strongly Agree* or *Agree*, which of the following indicates your response:

- Planning time

- Paperwork demands
- Scheduling
- Conflict problem solving
- Other (please explain) \_\_\_\_\_

\*If your above answer is *Disagree* or *Strongly Disagree*, please skip to the next question

11. I have recommended the professional development of special education for school personnel in my school\*.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

\*If your above answer is *Strongly Agree* or *Agree*, which of the following indicates your response:

- Inclusive practice
- Teaching students with special needs
- RTI
- Positive behavior support

\*If your above answer is *Disagree* or *Strongly Disagree*, please skip to the next question

12. Who is taking the responsibility in your school to recommend personnel professional development on special education?

- District administration
  - A school-wide committee
  - The principal
  - Other (please explain)
-

	Strongly Agree	Agree	Disagree	Strongly Disagree
13. I have made decisions on financial resources that could support special education and inclusive practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I have developed a school-wide behavior management program in my school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I have implemented a school-wide behavior management program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1152. I have evaluated the school-wide behavior management programs implementation in my school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. I have facilitated implementing intervention programs for students with special needs\*.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

\*If your above answer is *Agree* or *Strongly Agree*, which of the following indicates your response:

- Evidence-based literacy and/or math interventions
- Progress monitoring
- Program evaluation
- Technology-based instruction
- Other (please explain) \_\_\_\_\_

\*If your above answer is *Disagree* or *Strongly Disagree*, please skip to the next question

\*What are the obstacles, if any, to make the above decisions (please explain)

	Strongly Agree	Agree	Disagree	Strongly Disagree
18. I have facilitated effective collaborations between special and general education teachers and personnel in an inclusive environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I have made recommendations regarding legal issues related to special education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I would like to take an initiative to create a learning environment that allows differentiated instructions for students with special needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I have taken an initiative to create a learning environment that allows differentiated instructions for students with special needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I have fostered collegial relationships between special and general education teachers and personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. What other resources have helped you to support special education programs and/or students with disabilities (please explain)?

Additional comments if you have on this survey:

**-Additional assistance is required to evaluate and interpret the results of this instrument effectively.**

*\* Utilization of this instrument was sourced from and includes permission granted by Sun and Xin (2020). School principals' opinions about special education services. Preventing School Failure: Alternative Education for Children and Youth, 64(2), 106-115.*

### **Appendix C.4- Interviews**

Interviews are meant to be conducted by state-level leaders, such as directors, superintendents, coordinators, or other specialists, or by individuals delegated this responsibility by district or state offices and should be conducted with school principals. The response from the interview can be analyzed to assess how well principals understand special education laws and their training and preparation related to special education. A list of key points can then be reviewed with the interviewee to ensure accuracy and completeness. The emerging themes derived from the key points can offer further insight into whether additional training, support, or resources are necessary to meet professional standards and enhance practice. The following checklist serves as a guide that interviewers can use before conducting the interviews.

#### **Interview Guide**

##### *1. Preparation*

- Define the purpose of the interview
- Research the interviewee's background
- Prepare open-ended questions
- Choose a quiet and comfortable setting

##### *2. Structuring the Interview*

- Start with introductions and build rapport
- Explain the interview format and duration
- Begin with general questions
- Move to core topics and allow follow-ups
- Wrap up and thank the interviewee

##### *3. Interview Techniques*

- Practice active listening

- Avoid interrupting the interviewee
- Use gentle probing questions
- Stay neutral and avoid bias

#### 4. *Recording and Note-Taking*

- Ask for permission to record
- Take notes during the interview
- Use transcription tools if needed

#### 5. *Post-Interview*

- Review notes and highlight key insights
- Send a thank-you note
- Follow up for clarifications if necessary

### **Open-Ended Interview Questions**

1. Can you describe your experience in your university-based principal preparation program?
2. Did you receive specific content about special education?
3. In what ways did your preparation program address inclusive education for students with disabilities?
4. How well do you feel your training prepared you to lead inclusive schools?
5. Were there specific courses, experiences, or mentors during your preparation that influenced your approach to special education leadership?
6. Looking back, what aspects of your preparation were most valuable in supporting students with disabilities? What was missing?
7. What leadership practices do you consider essential for supporting special education and inclusive reforms in your school?
8. Can you share specific skills that have helped you lead effectively in inclusive settings?

9. What personal beliefs or values guide your leadership in special education?
10. How did you develop these practices, skills, and beliefs—through formal training, mentorship, experience, or other means?
11. Can you describe a situation where you had to apply these leadership practices in a challenging context? What did you learn from it?

**-Additional assistance is required to evaluate and interpret the results of this instrument effectively.**

*\* The questions developed for the open-ended interviews were based on research conducted by Matthews, Kotok and Serafini (2020), which provided a foundational framework for their design.*

### **Appendix C.5- Focus Groups**

Three separate focus groups can be conducted at the individual school level, each consisting of five to ten participants, including teachers, students, and parents. To analyze focus group responses, a review of the transcripts is needed. Using codes to label key ideas or phrases enables grouping, which helps identify emerging themes. To analyze focus group responses, a review of the transcripts is needed. After completing an analysis to assess how well principals understand special education laws and their impact on stakeholders. After coding and identifying emerging themes, insight is gained into whether additional training, support, or resources may be necessary to meet professional standards and enhance practice.

#### **Focus Group Guidelines**

##### *Planning and Preparation*

- Define Objectives: Clarify the purpose of each focus group (e.g., understanding experiences with inclusive education).
- Segment Participants: Organize three separate groups: Teachers, Students, Parents.
- Recruit Participants: Ensure diversity within each group to capture a range of perspectives.
- Develop Discussion Guides: Tailor open-ended questions for each group, aligned with your research goals.
- Schedule Sessions: Choose times and locations (or virtual platforms) that are accessible and comfortable for each group.

##### *Conducting the Focus Groups*

- Facilitator Role: Remain neutral and encourage participation from all members. Use probing questions to deepen responses.
- Session Structure:
  - Welcome and explain the purpose.

- Establish ground rules (e.g., confidentiality, respect).
- Begin with icebreakers to build rapport.
- Proceed with open-ended questions and allow natural discussion.
- Close with a summary and thank participants.

#### *In-Depth Interviews Within Focus Groups*

- Allow Time for Individual Reflection:** Provide moments for participants to share personal stories or insights.
- Follow-Up Questions:** Use one-on-one style questions within the group to explore deeper experiences or clarify points.

#### *Member Checks*

- Clarify During the Session:** Summarize key points and ask participants to confirm or elaborate.
- Post-Session Validation:**
  - Share a summary or transcript with participants.
  - Invite feedback to verify accuracy and interpretation.
  - Incorporate corrections or clarifications into your analysis.

#### *Ethical Considerations*

- Informed Consent:** Clearly explain the purpose, process, and how data will be used.
- Confidentiality:** Assure participants that their identities and responses will be protected.
- Voluntary Participation:** Emphasize that participation is optional and they may withdraw at any time.

### **Sample Focus Group Questions**

#### *Principal Engagement and Visibility*

1. Does your principal regularly visit classrooms and engage with students and staff?

2. Does your principal attend IEP meetings for students receiving special education services?

*Knowledge of Students and Services*

1. Does your principal understand your students' qualifying disabilities and how special education services are provided?
2. Does your principal understand the difference between students receiving special education services and those in general education?

*Understanding of Special Education Processes*

3. Does your principal understand how services are determined and discussed during IEP meetings?
4. Does your principal understand the relationship between present levels of performance, IEP goals, and services?
5. Is your principal familiar with the continuum of special education services and the concept of the least restrictive environment (LRE)?

*Support for Special Education*

6. Does your principal provide adequate support to special education teachers, students, and families?

**-Additional assistance is required to evaluate and interpret the results of this instrument effectively. When conducting focus groups appropriate privacy safeguards should be in place to ensure confidentiality of all participants.**

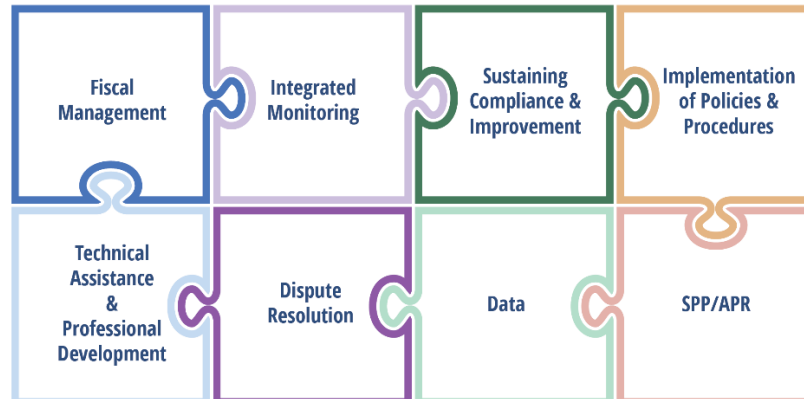
*\*The questions developed for this study were based on the research conducted by Ponce (2023) which provided a foundational framework for their design. More information about this study can be found at the following link:*

<https://www.proquest.com/openview/9f8f71e9bc9a295a6ae84c46f54d0080/1.pdf?pq-origsite=gscholar&cbl=18750&diss=y>

### Appendix C.6- Additional Data Source

This checklist is a comprehensive tool designed to help complete school system audits organized around eight components, which align with the National Center for Systemic Improvement (NCSI) and WestEd, and are based on the State General Supervision Responsibility under Parts B and C of the IDEA. It can serve as a guide if the data sources are available in conjunction with the other toolkit data. It also assesses all aspects of state compliance based on the State Performance Plan (SPP) and Annual Performance Report (APR). By comparing available data sources against the checklist criteria, schools can identify gaps in compliance and performance based on the SPP and APR. Examining these results can uncover areas where professional standards are not fully met, highlighting the need for targeted training, additional support, or enhanced resources to improve practice and ensure alignment with federal requirements and expectations.

#### State General Supervision System Audit Checklist



#### *Integrated Monitoring*

- System Design:
  - A multifaceted process or system to examine and evaluate the supervision of the state's system to improve educational outcomes.
- Focus Areas:
  - Emphasis on improved educational results for children with disabilities.

- Emphasis on functional outcomes that support meaningful progress.
- Emphasis on compliance with IDEA statutory and regulatory requirements.
- Evaluation Practices:
  - The system includes data collection and analysis to assess performance.
  - Findings are used to guide corrective actions and continuous improvement.
  - Stakeholders are engaged in the evaluation process.

### *Sustaining Compliance and Improvement*

- System Components:
  - A structured system to support the improvement of compliance results.
- Incentives:
  - Incentives are used to encourage strong performance and compliance.
- Sanctions:
  - Sanctions are applied when necessary to address noncompliance.
  - Corrective actions are clearly defined and enforced.
- Monitoring & Evaluation:
  - The system includes ongoing monitoring of compliance and results.
  - Data is used to evaluate effectiveness and guide adjustments.

### *Implementation of Policies and Procedures*

- Framing considerations:
  - Does the State Education Agency (SEA) have a written procedure related to this regulation or requirement?
  - What training has the SEA provided related to this regulation or requirement?
  - How does the SEA implement this regulation or requirement?
  - How does the SEA monitor the implementation of this regulation or requirement?

- How does the SEA evaluate and adjust policies and procedures based on data from implementation?

#### *Technical Assistance and Professional Development*

- Purpose & Goals:
  - Strengthen the capacity of local systems to effectively implement IDEA and improve student outcomes.
- System Features:
  - Provides targeted support to LEAs and schools.
  - Aligns with state performance goals and IDEA requirements.
  - Uses data and evidence to guide assistance efforts.

#### *Dispute Resolution*

- Procedural Safeguards:
  - The state provides multiple procedural options for resolving disputes between:
    - Parents/guardians
    - Schools/LEAs
  - Available Options:
    - Mediation is available as a voluntary and impartial process.
    - State complaint procedures are established and accessible.
    - Due process hearing requests can be filed to resolve legal disputes.
- Compliance & Accessibility:
  - All options comply with IDEA requirements.
  - Information about these options is clearly communicated to families and LEAs.
  - Processes are timely, fair, and designed to resolve issues effectively.

#### *Data*

- System Design:
  - The data system is designed to ensure:

- Validity and Reliability of collected and reported data.
- Data is reported and made available to the public in a timely manner.
- Reflects actual practice and performance.

### *SPP/APR*

- Development & Submission:
  - The state has developed a State Performance Plan (SPP).
  - The SPP:
    - Evaluates the state's efforts to implement IDEA requirements and purposes.
    - Describes how the state will improve its implementation of IDEA.
  - The SPP is submitted at least once every six years.
- Annual Reporting:
  - The state submits an Annual Performance Report (APR) each year.
- The APR includes:
  - Reporting against the targets set in the SPP.
  - Updates on progress toward improved implementation.
- Alignment with IDEA:
  - The SPP/APR process reflects compliance with IDEA statutory and regulatory requirements.
  - The reports support improved educational results and functional outcomes for children with disabilities.

### *Fiscal Management*

- Documentation Requirements: Procedures are actively implemented and documented.
  - Required budgetary information is documented.
  - Policies and procedures reflect:
    - IDEA requirements.

- EDGAR (Electronic Data Gathering, Analysis, and Retrieval System) requirements.
- Uniform Guidance requirements.
- Evidence supports that Federal funds are used to:
  - Improve results and outcomes for children with disabilities.

**-Additional assistance is required to evaluate and interpret the results of this instrument effectively.**

*\*Sourced from National Center for Systemic Improvement. (n.d.). General supervision toolkit. WestEd. <https://ncsi.wested.org/how-we-can-help/general-supervision/general-supervision-toolkit/>*

### **Appendix C.7- Toolkit Completion Checklist**

The following checklist is designed for state-level officials to help identify the completed components of the self-assessment toolkit, facilitating an evaluation of overall results. By analyzing all the data, users can gain a thorough understanding of current leadership practices, stakeholder experiences, and systemic challenges. This comprehensive review helps identify gaps in professional standards, instructional quality, and inclusive practices. The findings can inform targeted training, provide additional support, or improve resources to enhance practice and ensure compliance.

#### **Toolkit Completion Checklist**

##### *Surveys*

- Demographic Data
  - Collect participant background information (e.g., age, gender, role, years of experience, education level).
  - Understand the diversity and representation of stakeholders involved.
  
- Categorical Data
  - Inclusive Leadership: Assess perceptions of equity, diversity, and inclusion in school leadership.
  - Instructional Leadership: Evaluate how leaders support teaching practices and curriculum implementation.
  - Support for Parents and Families: Measure the extent and quality of engagement with families.
  - Quality Instruction and Program Development: Gauge satisfaction with instructional quality and program design.
  - Mutual Support: Understand collaboration and support among staff.

- Human Development and Learning: Explore beliefs about student growth and learning processes.
- Collaboration: Assess teamwork and shared decision-making.
- Appropriate Education for Students with Disabilities: Evaluate how well schools meet the needs of students with disabilities.
- Professional Development and Ethical Practice: Examine access to training and adherence to ethical standards.
- Quantitative Data
  - Support for School Leaders: Measure the availability and effectiveness of leadership support systems.
  - Leadership Skills: Rate competencies such as vision-setting, problem-solving, and team building.
  - Communication: Assess clarity, frequency, and effectiveness of communication from leadership.
  - Laws and Policies: Evaluate understanding and implementation of special education laws and policies.
  - Educational Curriculum and Models: Measure familiarity with and use of inclusive and evidence-based instructional models.

### *Interviews (Principals)*

- Attitudinal and Perceptual Data
  - Explore principals' beliefs, values, and perceptions about inclusive leadership and special education.
  - Key Question: How do successful principals describe their university-based preparation for leading inclusive schools?

- Decision-Making Processes
  - Understand how principals make decisions related to special education and inclusion.
  - Key Question: What leadership practices and beliefs are central to inclusive reform, and how were they developed?
- Contextual or Situational Data
  - Gather information about the school environment, community context, and systemic factors influencing leadership.
- Thematic Data
  - Identify recurring themes across interviews to inform broader patterns in leadership practices and challenges.

### *Focus Groups*

- Teachers
  - Explore how teachers perceive their principals' leadership and support.
  - Gather insights on teacher involvement in IEP development and implementation.
  - Understand teacher perspectives on how administrators support Free Appropriate Public Education (FAPE).
  - Identify challenges in collaboration, resources, or leadership support.
- Students
  - Understand student experiences with school leadership and inclusivity.
  - Explore student involvement and voice in their education planning.
  - Identify unmet needs, barriers to learning, or desired changes.
- Parents

- Capture parent perceptions of school leadership and communication.
- Assess parent involvement and satisfaction with IEP or 504 processes.
- Understand how parents view the administrator's role in ensuring appropriate services.
- Identify areas where parents feel unsupported or excluded.

*Additional Data*

- Trend Analysis
  - Examine historical data to identify patterns in student outcomes, disciplinary actions, or service delivery.
- Resource Allocation
  - Analyze how resources (staff, funding, materials) are distributed and whether they align with student needs.
- Compliance and Accountability
  - Review documentation and reports to ensure adherence to IDEA, Section 504, and other regulations.
  - Reference: OSEP Part B State Performance Plan and Annual Performance Report (SPP/APR)

**-Additional assistance is required to evaluate and interpret the results of this instrument effectively.**

## Glossary

This review will utilize a variety of terms. All terms related to special education are defined, and therefore, their definitions are either paraphrased or directly quoted from the legislature or peer-reviewed sources.

Term	Definition
Free and Appropriate Public Education.	Free and Appropriate Public Education (FAPE): FAPE is a foundational principle of IDEA, ensuring that all children with disabilities receive an education that is tailored to their individual needs at no cost to their families. This includes special education and related services designed to meet their unique needs
Inclusion	Inclusion is the educational practice of educating students with disabilities alongside their non-disabled peers in general education classrooms, with appropriate supports and services. The goal is to ensure access to the general curriculum and participation in school activities to the maximum extent appropriate.
Individualized Education Plan	An IEP is a legally binding document for each child with a disability that is developed, reviewed, and revised in a meeting according to IDEA regulations. The IEP outlines the child's present levels of performance, measurable annual goals, special education and related services, participation with non-disabled peers, accommodations, and methods for measuring progress. The IEP is developed by a team that includes educators, parents, and, when appropriate, the student.
Least Restrictive Environment.	LRE refers to the requirement that students with disabilities are educated with non-disabled peers to the maximum extent appropriate. Removal from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with supplementary aids and services cannot be achieved satisfactorily. LRE is a guiding principle in placement decisions under IDEA.
Leadership standards	A set of standards that outline the knowledge, skills, and practices necessary for educational leaders to effectively support students with disabilities. They include promoting a shared vision, supporting educators, and maintaining high expectations for all students

Office of Special Education Programs	OSEP is a section of the U.S. Department of Education responsible for the implementation of the IDEA. It carries out activities related to state eligibility for IDEA funds and monitoring state compliance with IDEA requirements.
Service provider	A service provider is a professional who delivers special education or related services to students with disabilities as specified in the student's Individualized Education Program (IEP). Examples include speech-language pathologists, occupational therapists, physical therapists, and special education teachers.
Special Education	Specially designed instruction, provided at no cost to the parents, to meet the unique needs of a child with a disability, including (i) Instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and (ii) Instruction in physical education. (2) Special education includes each of the following, if the services otherwise meet the requirements of paragraph (a)(1) of this section: (i) Speech-language pathology services, or any other related service, if the service is considered special education rather than a related service under State standards; (ii) Travel training; and (iii) Vocational education [34 CFR §300.39(a)].
Student with a Disability	IDEA defines as “a child evaluated in accordance with §§300.304 through 300.311 as having an intellectual disability, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as “emotional disturbance”), an orthopedic impairment, autism, traumatic brain injury, another health impairment, a specific learning disability, deaf blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.”
Transition Services	A coordinated set of activities designed to facilitate a student’s movement from school to post-school activities, including post-secondary education, vocational training, employment, independent living, and community participation. Under IDEA, transition services are included in the IEP by age 16 (or earlier, if appropriate) and are based on the individual student's needs, strengths, preferences, and interests.

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