

Research Article

A Systematic Review of Factors Associated with Special Education Teacher Recruitment

Jarrod Hobson¹¹. Department of Special Education and Counseling, Virginia Commonwealth University, United States

Addressing teacher shortage is a current and long-standing critical need in special education. Additionally, the current teacher workforce is not as diverse as the current student population. Nationwide, there continues to be a heavy emphasis on using uncertified teachers for unfilled positions. Unfortunately, this response has the potential for short and long-term impact on student and school outcomes. Teacher recruitment is a potential area of focus for stabilizing the supply of future educators. This systematic literature review was designed to identify strategies and factors associated with the recruitment of future special education teachers into the field. Identified factors include financial support, past experiences with individuals with disabilities, targeted recruitment, and flexible pathways. Implications for future researchers, teacher preparation programs, local school divisions, and policymakers are provided.

State departments of education in 48 states and the District of Columbia have identified special education as a shortage area for the 2021 – 2022 school year (tsa.ed.gov). The majority (86%) of reported special education shortages are across the entire K-12 setting (tsa.ed.gov). The two states not reporting shortages from this database have identified through their American Rescue Plan Elementary and Secondary School Emergency Relief Funds State plans (Office of Elementary and Secondary Education, n.d.) to also have difficulty with hiring special education teachers (New Hampshire) and categorized special education shortage as the most pressing need in the state (New Mexico). This signals a nationwide crisis. As a result, there continues to be a focus on addressing this shortage through emergency certifications and provisional licenses. During the 2017 – 2018 school year, 100,000 classrooms in the United States were staffed by unqualified instructors (García & Weiss, 2019).

Furthering the problem, the recent Covid-19 Pandemic has developed new levels of concern pertaining to the teacher workforce. A 2021 national teacher survey resulted in current teachers identifying high levels of anxiety (47%), burnout (54%), and stress (63%) (Steiner & Woo, 2021). Additionally, 40% of survey respondents indicated that they were considering leaving the field. Although teacher shortage is the status quo, this calls for direct and imminent action to stabilize the teacher pipeline. By focusing on how teachers become interested in the field, successful recruitment efforts, and the initial phases of teacher preparation the development of a, much needed, comprehensive approach to stabilizing the teacher workforce is possible.

Rise of Alternative Pathways

From 2009 to 2019, teacher preparation enrollment dropped 22% down from 719,081 to 650,500. Additionally, alternative routes to certification have become a popular route for many in the field. According to the 2020 Title II reports for the United States Department of Education, incoming teachers may prefer different routes to licensure based on their race and ethnicity. According to this data, prospective teachers that are White typically use traditional routes over alternative routes. However, all other reported races and ethnicities (Black, Hispanic, Asian, Pacific Islander, American Indian, Alaska Native, and two or more races) have used alternative routes more often than traditional pathways. This data provides an opportunity to explore factors that may influence the decision, the components of each pathway, and their success rates.

Schools have had difficulty recruiting special education teacher candidates from teacher preparation programs to specific regions or certain schools within their state (Mason-Williams et al., 2020). However, research indicates that most teachers end up teaching near the area in which they completed high school (Brown, 2016). It is important to consider the largest supply of future teachers are current students in secondary schools across the country (Gist et al., 2019). Schools that have an increased difficulty in recruitment are typically high-need schools that also have higher turnover rates (Mason-Williams et al., 2020; Wronowski, 2018).

The Importance of a Diverse Workforce

In addition to the teacher shortage, many school divisions are tasked with serving a racially and ethnically diverse student population when most teachers are White and female (Carver-Thomas, 2018; Gist et al., 2019; Goings et al., 2018; Leech et al., 2019). While the number of teachers of color (TOC) overall has increased from 12% to 20% over the last 30 years, it does not reflect the rate of growth of student populations (Carver-Thomas, 2018). When looking at growth in teacher diversity, a closer look shows that the number of Black and Native American teachers has decreased (Carver-Thomas, 2018).

There is potential to address both teacher shortage and diversify the workforce through intentional programming designed to recruit teachers of color (TOC) into the field of special education (Goings et al., 2018).

A more heterogeneous school faculty may offer the opportunity for racially matched role models that have higher expectations of students of color (SOC) (Leech et al., 2019). Higher expectations lead to higher outcomes for SOC. (Leech et al., 2019). These teachers may utilize cultural contexts and culturally relevant pedagogy to determine instructional strategies and manage behavior (Goldhaber et al., 2019; Leech et al., 2019). Attending a school where the teacher population matches more closely to the student population leads to improved academic outcomes for SOC (Goldhaber et al., 2019). A positive impact of having a diverse school staff does not just impact students of color. White students who are exposed to teachers of color reap the benefits of these positive experiences which can lead to extinguishing stereotypes (Goings et al., 2018). This is important not only from a school perspective, but also to challenge the inequities that are current within other aspects of society (Goings et al., 2018). Thus, a focus on opportunities to diversify the profession must be part of future discussions for stabilizing the teacher workforce.

Additional Recruitment Strategies

Many professional organizations and research centers have offered their perspective on effective recruitment strategies. The Learning Policy Institute released policy recommendations to support the recruitment of future special educators. Their recommendations included the development of teacher residencies, local grow-your-own (GYO) programs, increased salaries, strengthened hiring practices, and financial support programs (Podolsky et al., 2016). The American Institute for Research's Center on Great Teachers & Leaders (2009) endorsed financial incentives, alternative pathways, paraprofessional programs, partnerships between school divisions and higher education, and increasing diversity as important strategies to manage the special education workforce crisis. The CEDAR Center presented a collaboration between local school divisions and educator preparation programs as a potential contributor to increasing the supply of special education teachers (DeMonte et al., 2016).

Conceptual Framework

The Office of Special Education Programs (OSEP) has endorsed an approach focused on attracting, preparing, and retaining an effective workforce (See Figure 1.) Within this approach, there are multiple considerations at each phase of teacher recruitment, preparation, and retention. Attraction and Recruitment are the initial phases of stabilizing the special education workforce. A primary goal of attracting and recruiting is to increase the supply, or quantity, of potential teachers. OSEP has identified certain strategies, backed by research, to attract potential special educators to the profession. These strategies include alternative routes to certification, changing public perception, funding and loan forgiveness, and GYO programs as potentially influential in addressing critical shortages (Office of Special Education Programs, n.d.). In phase two, preparation, the goal is to adequately prepare teachers to enter their initial job with the necessary skills to manage the responsibilities effectively. OSEP has identified micro credentialing, practice-based opportunities, residencies, and simulations as effective mechanisms for adequate preparation (Office of Special Education Programs, n.d.). In the final phase, retention, opportunities to stabilize and establish longevity amongst the previously recruited and prepared teachers are present.

This systematic literature review targets the initial stage, attracting and recruiting, of this approach to stabilizing the special education teacher workforce. While considering strategies for attracting and recruiting individuals into the field of special education, there are many potential considerations to explore. For example, it may be important to identify the population and setting in which successful strategies were implemented. There are additional scenarios where preferences can be identified through the intentional focus on the unique characteristics of research participants or the unique needs of the school division. A comprehensive approach to understanding the effectiveness of strategies and the details of their success has the potential to provide generalized knowledge to address specific needs across the country.

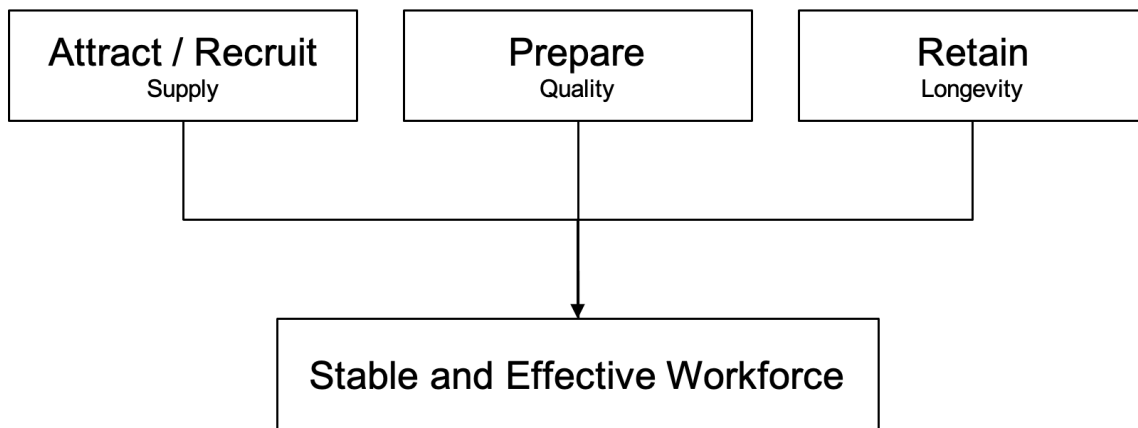


Figure 1. Stabilizing the Special Education workforce

Research Question

The goal of this literature review is to identify ways for successful recruitment, including strategies and personal factors, of individuals into the field of special education. Within these findings, the author identified additional components provided by researchers that provide detail into the participants of those that were recruited, the teacher preparation programs involved, and the school divisions that benefited from the implementation of this strategy. This allows for additional considerations to be connected that encourage specific strategies under unique circumstances. Therefore, the following research question was developed through the lens of the conceptual framework above identifying potential factors that may need to be considered in the planning and implementation of initiatives for attractions and retaining special education teachers.

1. What are the factors associated with successful special education teacher recruitment?

Methods

The long-term goal of this systematic literature review was to establish a starting point for gathering information related to teacher attraction and retention strategies to complement other teacher workforce literature reviews (I.E. [Billingsley & Bettini, 2019](#); [Billingsley, 2004](#); [Billingsley, 1993](#)) and the attract, prepare, retain framework ([Office of Special Education Programs, n.d.](#)) This supports the development of a comprehensive plan to stabilize the special education teacher workforce. This study serves as an initial step in identifying potential populations, settings, and interventions for future research to develop a more comprehensive understanding of the impact of strategies while exploring additional factors that may impact the intent and commitment to work as a special education teacher.

Inclusion Criteria

This review focused on empirical, peer review research within public schools in the United States. Additionally, participants included current and former special educators or those pursuing a career path in special education. Additional details regarding inclusion criteria can be found below.

Population and setting. This review focused on the special education teacher workforce. Therefore, any potential special education teachers were included. For example, studies exploring a phenomenon regarding the recruitment of secondary students, college students, and career switchers into the field of special education met inclusion criteria. Those considered meeting the requirements prior to becoming special educators were being recruited into a program with the outcome being a license in special education. Additionally, current and former special education teachers meet inclusion criteria due to their ability to reflect and present evidence of their intent and decision to go into the field.

Due to one focus area of dissemination including a policy focus, it is important to focus primarily on public schools within the United States. This will allow for considerations related to the previous federal policy as it pertains to the public school system verbatim. Additionally, the goal of this project is to support the sustainability of the public-school workforce. Within the schools, there are a wide range of responsibilities of special education teachers (CITE). Therefore, this review did not focus on a specific setting of the teachers (e.g., collaborative, self-contained) within special education.

Albeit a controversial decision, program descriptions were included within this review due to the level of detail provided. To be included in this review, program descriptions had to provide measurable data that showed evidence of growth (e.g., longitudinal data, pre/post data) and a description of recruitment efforts. While research indicates that an offer of alternative and traditional programs appeals to a variety of participants (U.S. Department of Education Title II Reports, 2020), proper documentation of these efforts and program designs are needed to unravel the details for the successful implementation of future initiatives.

Factors and Strategies

Through this review, the goal was to identify factors that help to understand the details surrounding successful special education recruitment. Essential details included the identification of the recruitment strategy. This was viewed as an event that was implemented with the intent to recruit individuals to become special education teachers or a naturally occurring event that happened in someone's life that may influence their career path. Additional factors analyzed include individual and environmental characteristics acknowledged within the literature (individual or intervener) that may provide insight into recruitment.

Exclusion Criteria

There were many factors that could lead to a study being excluded from the review. This included research that was not peer reviewed nor empirical. For example, white papers and program descriptions may provide specific information about recruitment. However, they would not meet the criteria due to likely being non-empirical, non-peer reviewed, or both. White and gray literature may provide strategy-specific information. However, it is more likely to be biased without going through a rigorous blind peer review process. Program descriptions without data or identifying recruitment plans were excluded. Research that occurred in charter schools or private schools was not included in this review. Some studies included higher education professionals as the participants. Although this may provide vital information, it was not a direct representation of the focus participants as they were reflecting on the recruitment process. Because these secondhand interpretations did not directly involve the targeted populations, they were excluded from the review. Although there are other professionals involved in the special education process (e.g., speech-language pathologists, school psychologists, school counselors, etc.), this review solely focused on special educators. Therefore, other professionals that were not special education teachers or pursuing special education were excluded.

Search String and Databases

Based on the proposed inclusion and exclusion criteria, as well as the population and setting, the following initial search string was developed in collaboration with Virginia Commonwealth University's library resources: "((("special ed*" AND "teacher*") OR ("special education teacher*") OR (TI("special ed*") AND TI(teacher*)) OR (AB("special ed*") AND AB(teacher*))) AND ("recruit*" OR "teacher recruitment" OR "teacher* selection" OR "teacher supply and demand" OR "recruitment of teacher*" OR "teacher* hiring" OR "hiring of teacher*")." The first portion of the search string targets the population of special education teachers while the second portion has been generated to capture literature on recruitment. Additionally, the databases searched were PSYCinfo, ERIC (EBSCO), Education Research Complete (EBSCO), ProQuest, Academic Search Complete, Business Source Premier, Education Full Text, and the Psychology and Behavioral Sciences Collection. A preliminary search to test the search string of the ERIC (EBSCO) database yielded 598 results. A thorough investigation of the first five pages of results showed promise that the search string captured intended research to investigate the research question.

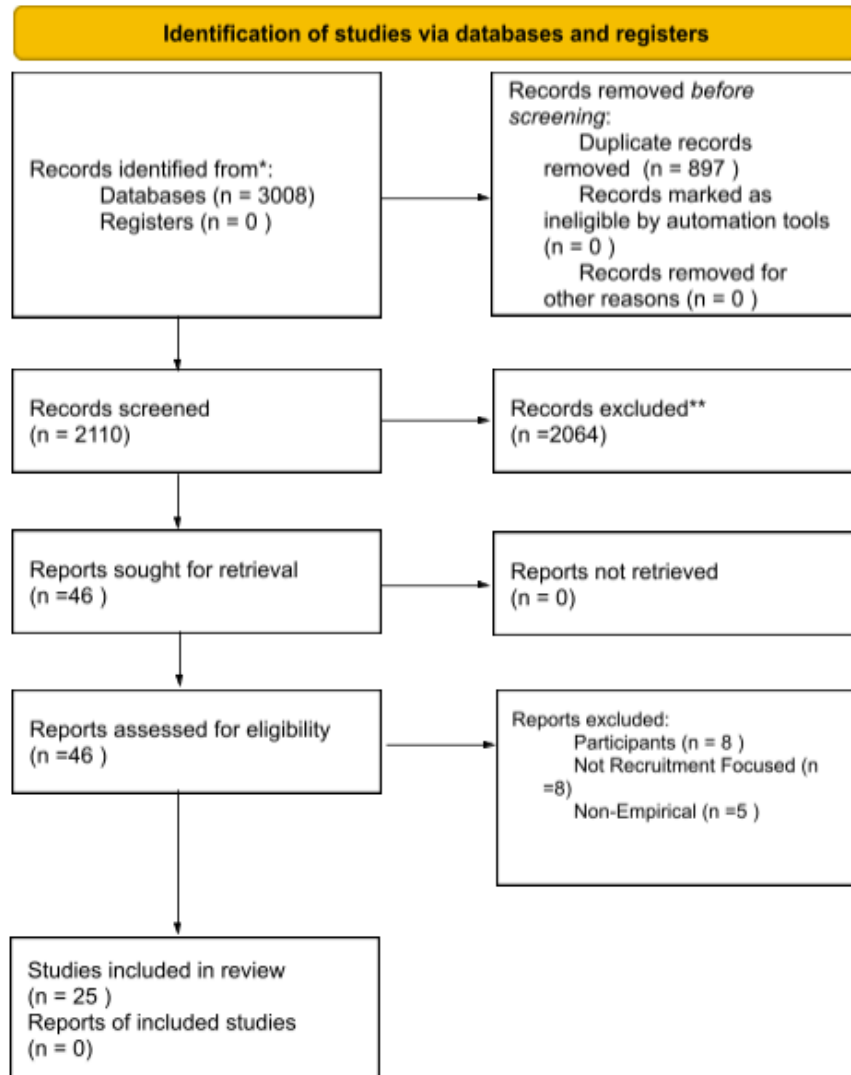


Figure 2. PRISMA Diagram

IOA Procedures

Two doctoral students in Special Education coded 20% of the included articles together to proactively determine any misunderstandings of the assessment of quality standards. Coding procedures were determined based on quantitative (Gersten et al., 2005) and qualitative (Brantlinger et al., 2005) quality indicators. Across the coded articles, the two students scored the quality indicators with 100% agreement. Both students had in-depth discussions following the coding to discuss any challenges with the coding process and to further explain the reasoning behind their responses. Program descriptions do not have a quality indicator checklist. However, they were analyzed for the information provided based on the standards set forth for qualitative and quantitative indicators. This is noted as a limitation of this review.

Results

The search of databases identified 3,008 records. 2,110 records remained after the removal of duplicates. 46 articles remained after a preliminary screening of articles' titles and abstracts using previously described inclusion criteria. Of the full-text articles screened, 21 were excluded due to not

meeting inclusion criteria. Eight studies did not meet participant research criteria, eight were not recruitment-focused, and five were non-empirical studies. On the final step, 25 articles met the criteria for inclusion in the final literature review. Results are organized based on the components of their research design and the recruitment factors analyzed or discovered. Table 1 outlines specific information on components of the research design and a summary of outcomes of each included study.

Research Design

Of the 25 reviewed studies, research methods varied to include quantitative and qualitative methods, program descriptions with links to targeted recruitment while providing outcome data, and an exploratory analysis. Within the various designs, data sampling included current and former teachers, pre-service teachers, non-teaching college students, high school students, and paraprofessionals. Another variation amongst the reviewed studies included the dynamic of partnerships between stakeholders and how that impacted recruitment.

Methodologies

Ten of the reviewed studies incorporated a qualitative research design. Researchers used a variety of methods including interviews ([Dieker et al., 2003](#); [Green & Martin, 2018](#); [Kurtts et al., 2007](#); [Reeves et al., 2021](#); [Scott, 2018](#); [Scott., 2019](#); [Scott & Alexander, 2019](#); Stephens & Fish, 2010; [Wall et al., 2005](#)) and surveys ([Burbank et al., 2009](#); [Lawson & Firestone, 2018](#); [Mamlin & Diliberto, 2020](#)) to uncover the context surrounding participants' decision making around their decision to become special education teachers. Six studies utilized a quantitative data analysis to draw conclusions regarding factors associated with special education recruitment ([DeSutter & LeMire 2016](#); [Fish & Stephens, 2010](#); [Sutton et al., 2014](#); Zascavage et al., 2008; [Zhang et al., 2014](#); [Zhang et al., 2020](#)). Nine of the reviewed studies were program descriptions with outcome data ([Burbank et al., 2009](#); [Coulter, 2004](#); [Jameson et al., 2019](#); [Kurtts et al., 2007](#); [Larwood, 2005](#); [Prater et al., 2008](#); [Sears et al., 2009](#); [Sundeen & Wienke, 2009](#); [Wall et al., 2005](#); [White, 2004](#)).

Participants

Sampling and data sources. Each study was coded for inclusion of participants' descriptions based on how it was reported by the authors. Participant samples included paraprofessionals (n = 5), preservice teachers (n = 7), undergraduate students (n = 7), graduate students (n = 4), career switchers (n = 1), special education teachers (n = 6).

Demographics. For the purpose of this review, one goal was to focus on the characteristics of those individuals that were recruited into the field of special education. While many of the studies included an emphasis on diversifying the teacher workforce, 15 studies reported race and ethnicity demographics. Gender (n = 15) and disability status (n = 1) of participants were also coded within this review.

Partnerships. Many studies described their initiatives and programs through the lens of the teacher preparation program as the primary driver (n = 20). However, other partners were involved in program development and implementation. In the CREATE program ([Sutton et al., 2014](#)), a three-way collaboration was described between the South Carolina Department of Education, Local Education Agencies, and Institutes of Higher Education across the state. Similarly, Burbank and colleagues (2009) describe the collaborative efforts of an urban school district, College of Education, and Community-Based Research grant. The ParaMet training program involved a partnership between a teacher preparation program, a disability service provider, and a public school system ([Wall et al., 2005](#)). The University of Utah Alternative Pathway program developed a partnership between the teacher preparation program, the State Department of Education, local school districts, tribal partners, and the Office of Special Education Programs ([Jameson et al., 2019](#)). California Northstate University's alternative pathway intern program involved a partnership with over 50 surrounding school districts and a county consortium in one of the largest metropolitan areas in the country ([Sears et al., 2009](#)).

Some referenced a shared partnership where local education agencies provided support, such as in recruitment. For example, [White \(2004\)](#) described local directors of special education and principles as the main source of recruitment within school divisions. However, that appeared to be the extent of their involvement in the program. Similarly, the San Jose State University distance education program for deaf education partnered with school administrators that had hired candidates in the past to build a capacity of partnerships across California ([Larwood, 2005](#)). Over time, the goal appeared to be for the program to utilize these partnerships to continuously facilitate new information involving program opportunities to recruit from within these divisions

Quality of Included Studies

A thorough review of the quality of each study indicated some concerns. For example, there were no randomized controlled trials among the quantitative studies reviews. For studies using quantitative methods, sample sizes were generally small. Additionally, program descriptions are loosely empirical, therefore do not meet the mark of a rigorous research design. Due to the research methods used, there were few opportunities to show causal

relationships between factors and strategies and their ability to recruit special education teachers into the field. Some positive notes include reporting of race and gender amongst participants. Also, program descriptions included a great amount of detail.

Recruitment Factors

Financial Support

Financial support was dispersed in a variety of ways and obtained through numerous partnerships. For example, [White \(2004\)](#) evaluated a longstanding program (1998 – 2004) at the University of North Carolina designed to fund the special education pathway for paraprofessionals. This program was sponsored by the Office of Special Education Program's Division of Personnel Preparation. This funding enabled the program to cover tuition, textbook, and transportation costs for future special education teachers. Additionally, paraprofessionals kept their employment with the local schools while taking night classes. Across the country, the University of Utah successfully recruited cohorts of future special educators through an alternative pathway program designed to reach rural and remote communities ([Jameson et al., 2019](#)).

[Jameson and colleagues \(2019\)](#) provide evidence that the amount of funding provided played a crucial role in recruitment. Years without federal funding resulted in a reduction in overall enrollment. An OSEP personnel preparation grant, however, provided enough support for tuition, books, necessary supplies, and a stipend. During the OSEP-funded years, the program grew from 4 (2004–2006) to 20 (2010–2012). [Sutton and colleagues \(2014\)](#) identified sinking funds, provided on a first come, first serve basis, allowed for their Grow-your-own program to recruit a broad pool of candidates from across the state of South Carolina on a yearly basis. These funds covered tuition and textbook costs for qualified participants. Funding was also provided by the state government for a graduate certificate program for special education in a rural area that provided financial support for tuition, fees, books, additional materials, and a stipend ([Sundeen & Wienke, 2009](#)).

Funding was essential for 10 paraprofessionals recruited into a year-long professional development that set them up to transition into teaching ([Burbank et al., 2009](#)). This seminar included paid tuition for the year-long three-credit classes, portfolio materials, necessary materials, and refreshments during each class period. Funds also covered test registration fees for those applying to a teacher licensure program. An average of over half (52%) of the paraprofessionals in the program were people of students of color. Over the four cohorts, an average of 99% of the completers were employed upon graduation. When looking back at the first cohort who completed their program 13 years prior to the publication of this study, all were still teaching in public schools as special education teachers. Not all programs offered this level of financial support. Project RESTART, an alternative pathway in North Carolina targeting career switchers and paraprofessionals, provided tuition support that covered partial costs of the program to their 17 future special education teachers ([Kurtts et al., 2007](#)).

[Scott and Alexander \(2019\)](#) asked Black male special education teachers to reflect on their time in teacher preparation programs. Tuition support was a key theme identified as a method for attracting more Black men into the field. For example, participants explained that financial aspects of programming were important to their decision-making (e.g. avoiding debt) and in reflection would be a larger part of their decision-making to attend a specific program if they had to do it all over again. Additionally, alternative route programs that offered funding to fully pay or reduce tuition played a factor in the recruitment of Black male special education teachers ([Scott, 2019](#)). Additional interviews regarding the recruitment of Black students into teacher preparation programs indicated a need for stronger financial support. ([Scott, 2018](#)).

Flexible and Intentional Pathways

A wide variety of programs and pathways are described within the included literature, many consisting of flexibility in their programming with intentions of fulfilling a need. A statewide initiative to manage the special education shortage crisis in South Carolina resulted in the development of Grow-your-own style programs. Findings from CREATE SC Grow-Your-Own Program indicated a significantly higher percentage of program completers in rural school districts ([Sutton et al., 2014](#)). While jobs supporting low-incidence disabilities continue to have significant shortages, alternative pathways have utilized distance education opportunities to recruit outside of the program's local pool of candidates ([Larwood, 2005](#)). The San Jose State University Deaf Education Alternative Program grew from 10 students (1999) to 86 students (2003). [Scott and Alexander \(2019\)](#) interviewed 18 participants, 11 of which enrolled in an expedited pathway to a degree or license. Some of those programs offered flexibility to continue their current lifestyle while they pursued the goal of becoming special education teachers. Another example of a flexible alternative pathway, the California Northstate University intern program, was responsible for one-third of the university's special education credential candidates ([Sears et al., 2009](#)). This program grew from producing 30 candidates in 1994 to a cumulative of 300 in 2005 with 40% of candidates with diverse backgrounds.

Experiences with Disability and Teaching

Experience was identified to be a statistically significant predictor for pursuing special education as a career path when 146 undergraduate students taking an introductory course in education were surveyed ([DeSutter & LeMire, 2016](#)). Similarly, an analysis of initial and transfer college students' survey responses yielded contact with a person with a disability as top importance for why they chose to go into the field (Zascavage et al., 2008). Through interviews with current black male special educators, [Scott and Alexander \(2019\)](#) revealed that having a family member with a disability or having a previous work experience with disabilities sparked the interest in becoming a special educator. Similarly, Stephens and Fish (2010) interviewed current and former special education teachers, in which participants indicated having a family member or friend with a disability contributed to their motivation to become a special education teacher. Survey data from participants in a graduate certificate special education program showed that 26% of participants had previous experience working with people with disabilities ([Sundeen & Wienke, 2009](#)). In another study, experience working with children with disabilities was identified as a factor leading Black male special educators into the field ([Scott, 2019](#)). Zhang and colleagues (2014) identified personal and work experiences with individuals with special needs to have a statistically significant indirect effect on undergraduate students' interests and commitment to individuals with disabilities. In a similar investigation, work experience and training experience were determined to be significant predictors in deciding intent and decision-making to go into special education ([Zhang et al., 2020](#)).

Providing college students with tutoring opportunities may support their decision to go into special education. [Coulter \(2004\)](#) describes a university program that used advanced special education students as site leaders, faculty as supervisors and program developers to provide college students with tutoring opportunities. Out of the 144 tutors, twelve went on to enroll in the school's special education program. When 134 college students completed a survey regarding motivators to become a special educator, the opportunity to work with a person with a disability (with or without the course) was chosen as the most influential ([Lawson & Firestone, 2018](#)).

Influence on K-12 students to choose special education as a pathway can come through experiences with special education programming and experiences. In a survey of Special Education teacher candidates, most respondents indicated that they decided to become teachers while they were K-12 students ([Mamlin & Diliberto, 2020](#)). Specifically, students indicated that teacher cadet programs, which allowed high school students the opportunity to volunteer in a classroom serving special education students, were influential in generating interest in the field of special education ([Mamlin & Diliberto, 2020](#)).

Targeted Recruitment

Considerations for current needs in teacher preparation programs and local education agencies led to targeted recruitment of participants to meet those needs. In an effort to produce future teacher candidates from racial, ethnic, and language minority groups, paraprofessionals reflecting these criteria were recruited into a year-long seminar for professional development (Burbank et al., 2009). This seminar series included a curriculum on the introduction to teaching and a comprehensive overview of the underpinnings of teacher education, while also providing support in teacher licensure and navigating higher education. Targeted recruitment also brought Black male special education teachers into the field by intentionally pursuing them seeking during their undergraduate years into a teacher residency program ([Scott, 2019](#)).

According to [Prater and colleagues \(2008\)](#), A traditional teacher preparation program consisted of developing a comprehensive recruitment plan that focused on the targeted recruitment of diverse candidates. This recruitment plan was successful in expanding their reach within the community through their involvement in community and cultural events and dissemination of materials in areas where populations were more diverse. This led to an increase in the recruitment of interested future special education teachers of diverse backgrounds into their program. Identifying potential candidates (1,924) through various undergraduate majors and tailoring recruitment events and materials to reach those candidates were part of a structured recruiting program for one graduate certificate program in special education ([Sundeen & Wienke, 2009](#)).

Making an Impact

Through qualitative interviews, current special education teachers provided first-hand accounts of what led them into the field. These teachers reported a predisposition to teach with their motivation derived from a desire for change, to provide students with role models, and to give back to their communities ([Dieker et al., 2003](#)). [Fish and Stephens \(2010\)](#) indicated through surveys with elementary and secondary schools that the most influential factor in becoming special educators was to have the opportunity to help those in need. In an additional study, current and former special educators explained that empathy for serving students with special needs impacted their decision to go into the field (Stephens & Fish, 2010). A survey of 19 individuals who completed a special education program revealed that all respondents had a desire to be an advocate for students with disabilities ([Reeves](#)

et al., 2021). This passion led many of the survey respondents to change career paths into special education. Students in alternative pathways identified the opportunity to be a role model to future students as a motivating factor in becoming a teacher (Green & Martin, 2018; Kurtts et al., 2007).

Teacher Shortage

As much of special education shortage research is presented as a problem, researchers identified that knowledge of ongoing shortages and frequent job vacancies could be used as a recruitment tactic. For example, DeSutter & Dale (2016) identified an important factor to potential teachers was knowing a job would be available for them as they chose which type of education to pursue (76.6% of respondents). Fish & Stephens (2010) also revealed through surveys with special education teachers and paraprofessionals that job security played into the initial decision-making for pursuing a career in special education.

Discussion

This review of strategies and factors that contributed to the recruitment of future special education teachers provides context to be considered for future researchers, policymakers, and stakeholders directly involved in the process. The most commonly found recruitment strategies that provided opportunities or predicted intent to pursue a special education career were financial support (Burbank et al., 2009; Jameson et al., 2019; Kurtts et al., 2007; Scott & Alexander, 2019; Scott, 2019; Scott, 2018; Sundeen & Wienke, 2009; Sutton et al., 2014; White, 2004) and having a past experience related to working with disabilities (Coulter, 2004; DeSutter & LeMire, 2016; Lawson & Firestone, 2018; Mamlin & Diliberto, 2020; Reeves et al., 2021; Scott & Alexander, 2019; Scott, 2019; Stephens & Fish, 2010; Sundeen & Wienke, 2009; Zascavage et al., 2008; Zhang et al., 2014; Zhang et al., 2020). These findings indicate that there are potential considerations throughout the duration of a person's life that can impact whether they go into a teacher preparation program for special education. Recruitment can begin early by increasing opportunities for individuals to work with people with disabilities. On the other hand, financial support may recruit candidates closer to the time that they would begin a teacher preparation program. This is critical to understand for all stakeholders to consider in their process for developing a strategic plan for recruitment. This opens a window for recruitment to a wider range of participants and timeframes.

Findings also indicate that regardless of the type of pathway, both traditional routes to licensure programs and alternative pathways programs, targeted recruitment can successfully bring students into programs (Kurtts et al., 2007; Mamlin & Diliberto, 2020; Prater et al., 2008; Scott, 2019; Sundeen & Wienke, 2009). Additionally, some students may need flexibility within that pathway based on their individual needs (e.g. paraprofessionals). However, there are indicators for both the need for traditional and alternative pathways to reach a wide variety of potential special education teachers. Some of these pathways rely heavily on partnerships. This review provides further evidence that partnerships between stakeholders are important to the success of recruiting individuals into a career as a special education teacher. State agencies, teacher preparation programs, local education agencies, and other community groups were involved in the strategic planning of programs designed to recruit special education teachers into the field.

Implications

There are gaps present within the included studies on the involvement of stakeholders outside of teacher preparation programs. Researchers should consider focusing on the role of local education agencies' involvement in this process. This includes their involvement in the initial recruitment process, providing financial support, and ensuring that candidates have ample support from the time they are recruited until they begin their career in the school division.

There are additional opportunities to identify lesser-known partnerships within the community that may impact the recruitment of potential special education teachers. For example, organizations that work with individuals with disabilities may provide opportunities for future teacher candidates to have an experience through volunteer work. Based on the findings of this review, this additional partnership may lead to a peak of new interest in a career in special education.

None of the included studies actively pursued secondary students as potential special education teachers. Many of the studies that referenced intent from that era required reflection of the participant on their secondary school years. Future researchers should consider ways to incorporate current secondary students into future research opportunities as it is referenced in the literature as a potential untapped resource (Brown, 2016).

Further consideration of the role of education policy may lead to an additional understanding of the political role in providing opportunities for recruitment, particularly through funding and licensure requirements. Policymakers are often engaged with stakeholders on solutions that require targeted funding or adjustments to policy (e.g., licensure). Policymakers play an essential role in the success of programs designed to recruit special education teachers (Jameson et al., 2019; Sundeen & Wienke, 2009; Sutton et al., 2014; White, 2004). Through personnel preparation grants and additional funding sources enabled through policy, programs can recruit from a larger pool of potential candidates. This may include addressing specific needs

through focused innovative policy initiatives (e.g., rural or urban workforce support). Policymakers should consider the success of these strategies in future legislative decisions and funding allocations.

Some studies intentionally focused on specific participants (e.g. Black males) to better understand their experiences of enrolling in a teacher preparation program. This insight is valuable and should be replicated across other underrepresented groups within the workforce (I.E. Hispanic, American Indian). This could provide further evidence of generalization across groups of individuals, while also providing context of the uniqueness of each group. Additionally, quantitative researchers could compare groups of individuals to better understand the effect of a strategy or factor on a specific population, rather than the generalized whole sample.

Current teacher preparation programs should collect, manage, and report longitudinal data on the impact of their recruitment plans. A comprehensive understanding of the vast number of programs and their unique characteristics could lead to the development of an overall blueprint for future programs. For example, Grow-your-own programs are commonly pushed as one solution to teacher shortage. However, a blueprint for the design and programming does not exist.

Limitations

While this study focused on special education teachers, there are additional concerns about the staffing of additional professionals that work with students with disabilities. For example, there are shortages of school psychologists, social workers, and related service providers. Although there is potential for crossover in these findings, these strategies cannot be further applied outside of special education teachers. Although IOA data was completed for this systematic review, one researcher was responsible for completing the review. Due to this, there is potential for researcher bias and subjectivity.

There are no standard quality indicators for reporting program descriptions. The researcher used a combination of components from the qualitative and quantitative indicators to assess these programs. It should be noted that this measure of quality indicator had not been validated through use prior to this review.

Conclusion

The systematic literature review proposed is not only essential for the next generation of teacher preparation, but for the current ongoing crisis that is occurring in our schools. Students need teachers. More specifically, students with disabilities need stability. The current scenarios playing out in our school divisions do not offer schools nor students stability. The findings from this study offer opportunities to recruit future teachers into the special education workforce. Ensuring that our future students have opportunities early to have experiences with individuals with disabilities may lead them into this field of work. Stakeholders must invest in the future of the special education workforce through targeted recruitment, flexible programming, and financial support. By focusing on methods for recruiting and attracting future special education teachers into the field, this portion of the teacher pipeline can be stabilized. However, there are additional factors that may need to be considered by all stakeholders making future teacher workforce decisions around the preparation and retention of the workforce.

References

- Billingsley, B. (1993). Teacher retention and attrition in special and general education: A critical review of the literature. *Journal of Special Education*, 27, 137-174. <https://doi.org/10.1177/002246699302700202>
- Billingsley, B. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *Journal of Special Education*, 38, 39-55. <https://doi.org/10.1177/00224669040380010401>
- Billingsley, B., & Bettini, E. (2019). Special Education Teacher Attrition and Retention: A Review of the Literature. *Review of Educational Research*, 89(5), 697-744. <https://doi.org/10.3102/0034654319862495>
- Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative Studies in Special Education. *Exceptional Children*, 71(2), 195-207. <https://doi.org/10.1177/001440290507100205>
- Brown, D. (2016). Professionalizing the first steps of the teaching journey. *Phi Delta Kappan*, 98(1), 31-35. <https://doi.org/10.1177/0031721716666051>
- Burbank, M. D., Bates, A. J., & Schrum, L. (2009). Expanding Teacher Preparation Pathways for Paraprofessionals: A Recruiting Seminar Series. *Teacher Education Quarterly*, 36(2), 199-216.
- Carver-Thomas, D. (2018). Diversifying the teaching profession: How to recruit and retain teachers of color. Palo Alto, CA: Learning Policy Institute. <https://doi.org/10.54300/559.310>

- Coulter, G. (2004). Reaching the Summit: The Contribution of America Reads and AmeriCorps to School and University Partnerships. *Teacher Education & Special Education*, 27(2), 202-205. <https://doi.org/10.1177/088840640402700210>
- DeMonte, J., Holdheide, L., & Sindelar, P. (2016). Teacher Shortages: Meeting the Demand without Sacrificing Quality Preparation and Support. State Policy and Practice Portrait. *Collaboration for Effective Educator Development, Accountability and Reform Center*. <https://cedar.education.ufl.edu/wp-content/uploads/2016/10/Teacher-Shortages-Policy-and-Practice-Portrait.pdf>
- DeSutter, K. L., & LeMire, S. D. (2016). Exploring the Special Education versus Regular Education Decisions of Future Teachers in the Rural Midwest. *Rural Special Education Quarterly*, 35(4), 3-9. <https://doi.org/10.1177/875687051603500402>
- Dieker, L. A., McTigue, A., Campbell, G., Rodriguez, J., Savage, M., & Jackson-Thomas, A. (2003). Voices from the Field: Teachers from Culturally and Linguistically Diverse Backgrounds Entering the Profession through Alternative Certification. *Teacher Education and Special Education*, 26(4), 328-340. <https://doi.org/10.1177/088840640302600408>
- Fish, W. W., & Stephens, T. L. (2010). Special Education: A Career of Choice. *Remedial and Special Education*, 31(5), 400-407. <https://doi.org/10.1177/0741932509355961>
- García, E., & Weiss, E. (2019). The Teacher Shortage Is Real, Large and Growing, and Worse than We Thought. The First Report in "The Perfect Storm in the Teacher Labor Market" Series. Economic Policy Institute. <https://www.epi.org/publication/the-teacher-shortage-is-real-large-and-growing-and-worse-than-we-thought-the-first-report-in-the-perfect-storm-in-the-teacher-labor-market-series/>
- Gersten, R., Fuchs, L. S., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional children*, 71(2), 149-164. <https://doi.org/10.1177/001440290507100202>
- Gist, C. D., Bianco, M., & Lynn, M. (2019). Examining grow your own programs across the teacher development continuum: Mining research on teachers of color and nontraditional educator pipelines. *Journal of Teacher Education*, 70(1), 13-25. <https://doi.org/10.1177/0022487118787504>
- Goings, R. B., Brandehoff, R., & Bianco, M. (2018). To diversify the teacher workforce, Start early: this grow-your-own program offers a model for disrupting inequity by attracting high school students of color into teaching. *Educational Leadership*, 75(8), 50-55. <https://eric.ed.gov/?id=EJ1178312>
- Goldhaber, D., Theobald, R., & Tien, C. (2019). Why we need a diverse teacher workforce. *Phi Delta Kappan*, 100(5), 25-30. <https://doi.org/10.1177/0031721719827540>
- Green, S. L., & Martin, D. (2018). Playing the Game: Recruiting Black Males in Teaching. *Multicultural Learning and Teaching*, 13(1), 26-44. <https://doi.org/10.1515/mlt-2017-0005>
- Jameson, J. M., Walker, R. M., Farrell, M., Ryan, J., Conradi, L. A., & McDonnell, J. (2019). The Impact of Federal Personnel Preparation Grants on Special Education Teacher Candidate Recruitment for Rural and Remote Alternative Teaching Pathways. *Rural Special Education Quarterly*, 38(4), 201-209. <https://doi.org/10.1177/8756870519860514>
- Kurtts, S. A., Cooper, J. E., & Boyles, C. (2007). Project RESTART: Preparing Nontraditional Adult Teacher Education Candidates to Become Special Education Teachers. *Teacher Education and Special Education*, 30(4), 233-236. <https://doi.org/10.1177/088840640703000403>
- Larwood, L. (2005). A Promising Practice: Low Incidence Teacher Education in Rural and Remote California. *Rural Special Education Quarterly*, 24(3), 25-29. <https://doi.org/10.1177/875687050502400304>
- Lawson, J. E., & Firestone, A. R. (2018). Building the Field: The Case for Community Service Learning. *Teacher Education and Special Education*, 41(4), 308-320. <https://doi.org/10.1177/088840641727942>
- Leech, N. L., Haug, C. A., & Bianco, M. (2019). Understanding urban high school students of color motivation to teach: Validating the FIT-choice scale. *Urban Education*, 54(7), 957-983. <https://doi.org/10.1177/0042085915623338>
- Mamlin, N., & Diliberto, J. A. (2020). There's No Place Like Home: Finding Teachers in Your Backyard. *Rural Special Education Quarterly*, 39(2), 104-112. <https://doi.org/10.1177/8756870520912465>
- Mason-Williams, L., Bettini, E., Peyton, D., Harvey, A., Rosenberg, M., & Sindelar, P. T. (2020). Rethinking shortages in special education: Making good on the promise of an equal opportunity for students with disabilities. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 43(1), 45-62. <https://doi.org/10.1177/0888406419880352>
- Office of Elementary and Secondary Education. (n.d.). <https://oese.ed.gov/offices/education-stabilization-fund/elementary-secondary-school-emergency-relief-fund/stateplans/>
- Office of Special Education Programs. (n.d.). Attract, prepare, retain: Effective personnel for all. OSEP Ideas That Work. Retrieved from <https://osepideasthatwork.org/attract-prepare-retain-effective-personnel-all>
- Putney, L. L., (2009) Key Issue: Recruiting special education teachers. National Center to Improve Recruitment and Retention of Qualified Personnel for Children with Disabilities (Personnel Improvement Center) at the National Association of State Directors of Special Education (NASDE)

https://gtlcenter.org/sites/default/files/docs/KeyIssue_RecruitingforSpecialEd.pdf

- Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). Solving the Teacher Shortage: How to Attract and Retain Excellent Educators. Palo Alto, CA: Learning Policy Institute.
- Prater, M. A., Wilder, L. K., & Dyches, T. T. (2008). Shaping One Traditional Special Educator Preparation Program toward More Cultural Competence. *Teaching Education*, 19(2), 137-151. <https://doi.org/10.1080/10476210802040765>
- Reeves, L. M., Parrish, C. W., & Guffey, S. K. (2021). Choosing a Career in Special Education. *Journal of Research in Special Educational Needs*, 21(2), 73-85. <https://doi.org/10.1111/1471-3802.12500>
- Scott, L. A. (2018). Recruiting and Retaining Black Students for Special Education Teacher Preparation Inclusion Programs: Black Special Educators. *Inclusion*, 6(2), 143-157. <https://doi.org/10.1352/2326-6988-6.2.143>
- Scott, L. A. (2019). Experience of black male special education teachers: Are alternative licensure programs the desired route for recruitment and preparation? *Education and Urban Society*, 51(3), 332-350. <https://doi.org/10.1177/0013124517719971>
- Scott, L. A., & Alexander, Q. (2019). Strategies for Recruiting and Retaining Black Male Special Education Teachers. *Remedial and Special Education*, 40(4), 236-247. <https://doi.org/10.1177/0741932517732636>
- Sears, S., Burstein, N., Ashton, T., & Murawski, W. (2009). Moving toward Standards-Based Alternative Certification in Special Education. *Journal of the National Association for Alternative Certification*, 4(1), 54-72.
- Steiner, E. D., & Woo, A. (2021). Job-Related Stress Threatens the Teacher Supply: Key Findings from the 2021 State of the U.S. Teacher Survey. Santa Monica, CA: RAND. https://www.rand.org/pubs/research_reports/RR41108-1.html
- Stephens, T. L., & Fish, W. W. (2010). Motivational Factors toward Pursuing a Career in Special Education. *Education*, 130(4), 581-594.
- Sundeen, T. H., & Wienke, W. D. (2009). A Model for Recruiting and Preparing New Rural Special Educators: Mining an Untapped Potential. *Rural Special Education Quarterly*, 28(1), 3-10. <https://doi.org/10.1177/875687050902800102>
- Sutton, J. P., Bausmith, S. C., O'connor, D. M., Pae, H. A., & Payne, J. R. (2014). Building Special Education Teacher Capacity in Rural Schools: Impact of a Grow Your Own Program. *Rural Special Education Quarterly*, 33(4), 14-23. <https://doi.org/10.1177/875687051403300403>
- U.S. Department of Education, (n.d.) Teacher Shortage Areas, tsa.ed.gov
- Wall, S., Davis, K. L., Winkler Crowley, A. L., & White, L. L. (2005). The Urban Paraeducator Goes to College: RASE. *Remedial and Special Education*, 26(3), 183-190. *Applied Social Sciences Index & Abstracts (ASSIA)*. <https://doi.org/10.1177/07419325050260030601>
- White, R. (2004). The Recruitment of Paraeducators Into the Special Education Profession: A Review of Progress, Select Evaluation Outcomes, and New Initiatives: RASE. *Remedial and Special Education*, 25(4), 214-218. *Applied Social Sciences Index & Abstracts (ASSIA)*. <https://doi.org/10.1177/07419325040250040401>
- Wronowski, M. L. (2018). Filling the void: A grounded theory approach to addressing teacher recruitment and retention in urban schools. *Education and Urban Society*, 50(6), 548-574. <https://doi.org/10.1177/0013124517713608>
- Zascavage, V., Schroeder-Steward, J., Armstrong, P., Marrs-Butler, K., Winterman, K., & Zascavage, M. L. (2008). Considerations for the Strategic Recruitment of Special Educators. *Teacher Education Quarterly*, 35(4), 207-221.
- Zhang, D., Wang, Q., Losinski, M., & Katsiyannis, A. (2014). An Examination of Preservice Teachers' Intentions to Pursue Careers in Special Education. *Journal of Teacher Education*, 65(2), 156-171. <https://doi.org/10.1177/0022487113510743>
- Zhang, D., Whitford, D. K., Hsu, H., & Wang, Y. (2020). Soft and hard variables in determining pre-service teachers' intentions and decisions to pursue a special education career. *Journal of Research in Special Educational Needs*, 20(3), 265-276. <https://doi.org/10.1111/1471-3802.12484>

Tables

Author(s)/Year	Methodology			Participants				Setting		Factor or Strategy			
	Qualitative	Quantitative	PD with Outcome Data	Description	Gender	Race/Ethnicity	Disability	Teacher Preparation Program	Local School Division	Financial Support	Experience	Flexible Programming	Target Recruits
(Burbank et al., 2009)	Y	N	N	Paraprofessionals	N	Y	N	Y	Y	Y	N	N	N
(Coulter, 2004)	N	N	Y	Undergraduate and Graduate Students	N	N	N	Y	N	N	Y	N	N
(DeSutter & LeMire 2016)	N	Y	N	Undergraduate Students	Y	Y	N	N	N	N	Y	N	N

(Dieker et al., 2003)	Y	N	N	SET	Y	Y	N	N	N	N	N	Y	N
(Fish & Stephens, 2010)	N	Y	N	SET, Paraprofessionals	N	N	N	N	N	N	N	N	N
(Green & Martin, 2018)	Y	N	N	PST	Y	Y	N	Y	N	N	N	N	N

(Jameson et al., 2019)	N	N	Y	PST	N	N	N	Y	Y	Y	N	N	N
(Kurtts et al., 2007)	N	N	Y	Career Switchers, Paraprofessionals	Y	Y	N	N	N	Y	N	N	Y
(Larwood, 2005)	N	N	Y	PST	N	N	N	Y	Y	N	N	N	N
(Lawson & Firestone, 2018)	Y	N	N	Undergraduate Students	Y	N	Y	Y	N	N	Y	N	N

(Mamlin & Diliberto, 2020)	Y	N	N	PST	Y	N	N	Y	N	N	Y	N	Y
(Prater et al., 2008)	N	N	Y	PST	N	Y	N	Y	N	N	N	N	Y
(Reeves et al., 2021)	Y	N	N	Graduate Students	Y	Y	N	Y	N	N	Y	N	N
(Scott & Alexander, 2019)	Y	N	N	SET	Y	Y	N	Y	N	Y	Y	Y	N

(Scott, 2019)	Y	N	N	SET	Y	Y	N	Y	N	Y	Y	N	Y
(Scott, 2018)	Y	N	N	PST	Y	Y	N	Y	N	Y	N	N	N

(Sears et al., 2009)	N	N	Y	PST	N	N	N	Y	Y	N	N	Y	N
(Stephens & Fish, 2010)	Y	N	N	Current and Previous SETs	N	N	N	N	N	N	Y	N	N
(Sundeen & Wienke, 2009)	N	N	Y	Graduate Students	N	N	N	Y	N	Y	Y	N	N

(Sutton et al., 2014)	N	Y	N	SET, Paraprofessionals	Y	Y	N	Y	Y	Y	N	N	N
(Wall et al., 2005)	N	N	Y	Paraprofessionals	Y	Y	N	Y	Y	N	N	N	N
(White, 2004)	N	N	Y	Undergraduate and Graduate Students	N	Y	N	Y	Y	Y	N	N	N
(Zascavage et al., 2008)	N	Y	N	Undergraduate Students	Y	N	N	Y	N	N	Y	N	N

(Zhang et al., 2016)	N	Y	N	Undergraduate Students	Y	Y	N	Y	N	N	Y	N	N
(Zhang et al., 2020)	N	Y	N	Undergraduate Students	Y	Y	N	Y	N	N	Y	N	N

Table 1. Literature Review Matrix, Included Studies

*SET = Special Education Teacher,

**PST = Preservice Teacher

Declarations

Funding: The author(s) received no specific funding for this work.

Potential competing interests: The author(s) declared that no potential competing interests exist.