Strategies for Attracting, Preparing, and Retaining Special Education Teachers through Alternative Route Programs

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Journal of Special Education Preparation
3(2), 8-16
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DOI: 10.33043/JOSEP.3.2.8-16
openjournals.bsu.edu/JOSEP

ABSTRACT

To address the national teacher shortage, the federal government has permitted alternative route preparation programs in an attempt to increase the supply of licensed teachers. Alternative route (AR) programs vary by state, but generally aim to train teacher candidates who do not have a traditional education preparation background to fulfill high-need teaching areas, such as special education. As a result, many AR special education programs are housed within various institutions of higher education across the United States. However, teacher educators often bear the responsibility to develop and sustain ARs within their institution of higher education with little guidance. The purpose of this manuscript is to provide a pillar framework for teacher educators in attracting, preparing, and retaining high quality AR special education teachers. Research-based strategies specific to AR infrastructure and teacher preparation policy implications are discussed.

KEYWORDS

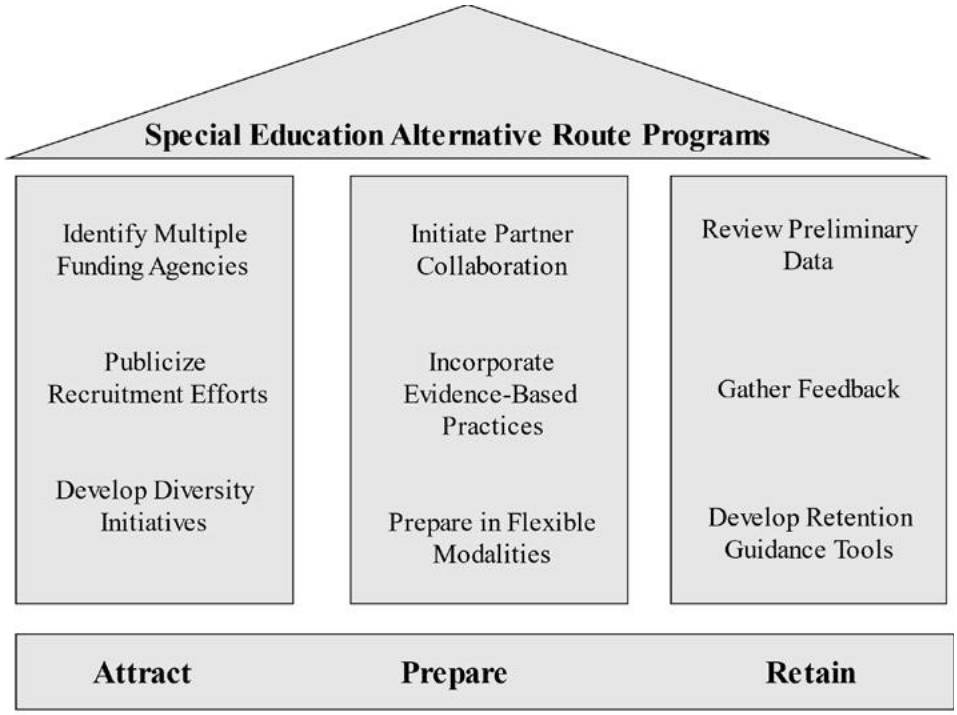
Alternative routes, education policy, special education teacher preparation, teacher retention, teacher recruitment

Over the last several decades, policymakers have strategized ways to combat teacher shortages by permitting various options to traditional preservice preparation to increase the teacher workforce (U.S. Department of Education [USDOE], 2020). Alternative route (AR) programs are one policy solution that aims to increase teacher supply by providing nontraditional pathways to obtain teacher certification (Day & Nagro, 2023). Although once viewed as the antithesis of traditional teacher preparation programs (Ng, 2003), ARs are now more accurately viewed on a continuum and vary greatly amongst each other (Day et al., 2023; Rosenberg et al., 2023). AR preparation programs differ in their program characteristics, participants, and infrastructure (Rosenberg & Sindelar, 2005), but are generally perceived by teacher candidates as (a) cost effective (Sindelar et al., 2012), (b) a viable preparation pathway for culturally and linguistically diverse teachers (Scott, 2019; Sutton et al., 2014), and (c) geographically desirable for teachers in rural and urban areas (Ault et al., 2019; Clark & Isenberg, 2020). As such, ARs have increasingly grown in popularity in special education teacher preparation.

Within special education teacher preparation, ARs have proliferated (Rosenberg & Sindelar, 2005), and they continue to increase in popularity throughout the United States (USDOE, 2022). For example, Day et al.'s (2023) analysis showed the number of graduates who earned a special education teaching license in traditional preparation programs decreased by a steady average of -4% each academic year from 2012-2013 (N = 25,596) to 2019-2020 (N = 19,435). By contrast, AR programs in special education showed increasing trends representing an annual graduate mean increase of +6% each academic year from 2012-2013 (N = 5,264) to 2019-2020 (N = 8,610). Special education AR programs show no signs of diminishing in the years to come, and special education teacher educators need to be prepared for this growing

teacher candidate population. However, there is little guidance for teacher educators to effectively address the exigencies of this nontraditional population within special education preparation. In addition to preparing AR special education teacher candidates, teacher educators also often bear the responsibility to develop and sustain ARs within their institutions of higher education (Rosenberg et al., 2007). Therefore, the purpose of our paper is to provide strategies for teacher educators in attracting, preparing, and retaining high quality AR special education teachers. We provide research-based strategies within three pillars specific to special education (see Figure 1), so that future teachers in AR programs are effectively prepared in instructing students with disabilities.

FIGURE 1: Pillars of Special Education Alternative Route Programs



ATTRACTING AR SPECIAL EDUCATION TEACHER CANDIDATES

Although ARs have proliferated, shortages have not been diminished. Special education ARs provide a partial solution in addressing the shortage of teachers, specifically those serving students with disabilities who require a highly qualified special education teacher (USDOE, 2004). Effective recruitment of AR special education teacher candidates requires (a) multiple funding agencies to support enrollees, (b) publicizing the recruitment efforts to attract teacher candidates, and (c) recruitment initiatives to attract culturally and linguistically diverse teacher candidates into AR programs.

Identifying Funding Agencies to Support Enrollees

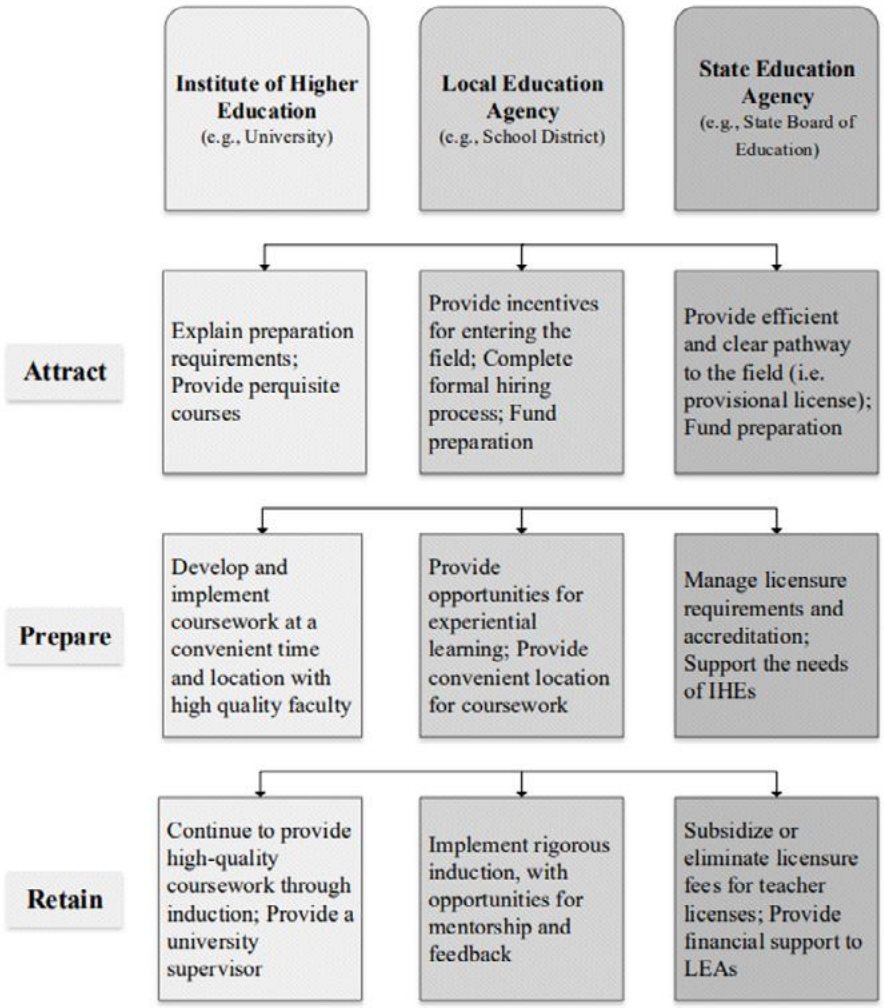
Prospective teachers are often faced with the financial burden of affording a teacher preparation program (e.g., tuition, technology, textbooks; Sindelar et al., 2012). Therefore, we recommend teacher educators and AR program directors identify multiple funding agencies to support enrollees. In a study examining the cost effectiveness of ARs in special education teacher preparation, Sindelar et al. (2012) estimated the average cost per completer of an AR program to range from $5,567 for local programs, up to $14,522 for internship programs, and $14,318 for step-up programs. These AR expenses were drastically lower than enrollment in traditional preparation programs housed in public institutions, which consisted of two-year enrollment costs of $31,000 in undergraduate studies and $25,000 in graduate studies. Given the rising cost of higher education and inflation expectations, it is likely that this cost has only increased (USDOE, 2022). In a survey assessing special education teacher's perceptions of their AR program's effectiveness, over 75% of the respondents expressed that the cost of the AR program influenced their decision to enroll (Scott et al., 2019). Furthermore, 90% of the special education AR teacher respondents in the survey indicated that they would not have pursued certification if the certification cost were higher than they could afford. As a result, we propose that teacher educators and affiliated partners identify multiple sources of funding to support enrollees to obviate the financial burden of attending a special education teacher preparation program. Providing funding directed to teacher candidates enrolled or planning to enroll in AR programs can be a valuable marketing tool to help offset the costs of attending (Chamberlin-Kim et al., 2019).

Fortunately, there are state and federal funding sources for those looking to obtain their special education license through an AR program. In a survey of special education AR certification programs, Rosenberg et al. (2007) identified the following agencies responsible for funding for 235 AR programs: state education agencies (SEAs), institutions of higher education (IHEs), local education agencies (LEAs), and the federal government. University teacher prepara-

tion directors also indicated LEA-SEA and IHE-SEA-LEA partnerships as additional sources of program funding, which supports preparation infrastructure and may alleviate the tuition cost for prospective teacher candidates. Federal funding has also shown promise in further supporting the financial needs for AR special education teacher candidates. For example, Washington state has a competitive federally funded personnel grant called the Alternative Route Block Grant to support IHE and LEA partnerships in developing ARs in key shortage areas. The Alternative Route Block Grant supports teacher candidates with scholarships of $8,000 per year. AR teacher candidates must agree to teach in a Washington public school for 2 years (Garcia et al., 2019), thus setting a minimum retention threshold once they enter the special education workforce. This grant program is an example of a state that utilized federal funding to address the challenge of recruiting and retaining teachers in high-needs schools by providing financial assistance to AR teacher candidates.

Another example of teacher educators utilizing federal funding for AR special education recruitment is The University of Utah (Jameson et al., 2019). From 2004 to 2018, The University of Utah alternative teacher pathway recruited AR teacher candidates to earn a license in low incidence disabilities through an Office of Special Education Program (OSEP) funded personnel preparation grant (H325K) and state improvement funding. These multiple sources fully covered the AR teacher candidates' tuition and books, provided them with a laptop, and offered them a stipend to offset any additional costs. As a result, AR teacher recruitment increased by 250% and was sustained for the duration of the four-year grant. Special education AR enrollees reported that they would not have been able to manage the financial burden without them. Both Washington and Utah can be seen as exemplars of successfully identifying multiple agencies to support recruitment efforts. Offering financial support to prospective teacher candidates is undoubtedly an effective method to attract individuals seeking low-cost entrance into special education; however, these efforts to recruit special education teachers must be communicated and accessible to those interested or exploring teaching students with disabilities as a career.

FIGURE 2: Opportunities for Collaboration in AR Teacher Education



Note. IHE = institution of higher education; LEA = local education agency

Publicize the AR Recruitment Efforts

Publicizing AR programs is an effective way to spread the word that AR programs are a viable and efficient way to enter the field (OSEP, 2022). Hollo et al. (2019) provides several strategies that SEAs should consider for effectively publicizing ARs. For example, the authors noted that states often use terminology unique to their settings, which may confuse prospective teacher candidates. Universal vocabulary pertaining to ARs can be an effective solution, allowing better understanding of the teacher preparation information. In addition, states are often not explicit in their language regarding certification

through AR programs. The authors noted that during their data collection, they were sometimes unsure if the ARs included a special education endorsement. An example of an effective strategy can be found with the Virginia Department of Education's explicit mention that special education endorsement may not be obtained through testing. Explicit language in this regard eliminates unnecessary confusion. Another barrier to teaching certification discovered by Hollo et al. (2019) was overly complicated search pathways on state websites and the difficulty of obtaining certification information over the telephone because access to a certification specialist was only available to those who can provide a state teaching license number. As a result, teacher educators are well-advised to publicize their AR program through digital advertising such as websites, interest webinars, or email listservs. Strategies can then be leveraged by teacher educators in recruiting a highly qualified and diverse special education teacher workforce through ARs.

Diversity Recruitment Initiatives

Cultivating a culturally and linguistically diverse (CLD) special education teacher workforce is critical to meet the needs of PK-12 students with disabilities (Scott & Proffitt, 2021). Federal, state, and local agencies are developing a variety of initiatives to attract highly qualified CLD special education teacher candidates. For example, the U.S. Department of Education recently continued their efforts to strengthen and diversify the teacher workforce through an $8 million grant to the Augustus F. Hawkins Centers of Excellence that supports high-quality teacher preparation programs at historically black colleges and universities (HBCUs), minority serving institutions (MSIs), and tribal college and universities (TCUs) (USDOE, 2022). HBCUs, MSIs, and TCUs prepare more CLD teachers than predominantly white institutions (PWIs) and partners predict Hawkins Centers of Excellence support will assist with the recruitment and retention of diverse SETs (USDOE, 2023).

Some AR programs within PWIs are successful in attracting CLD special education teacher candidates through a variety of methods (e.g., Bianco et al., 2019; Delgado et al., 2021; Scott, 2019). We posit that teacher educators can leverage these diversity initiatives to attract highly qualified special education teacher candidates in their respective ARs, which have historically been appealing for CLD teachers (Scott et al., 2019). For example, Carver-Thomas (2018) identified (a) service scholarships/loan forgiveness programs, (b) teacher residencies, (c) grow your own programs, and (d) mentoring and support programs as promising strategies to attract CLD special education teacher candidates.

Service scholarships and loan forgiveness programs provide tuition support or reimbursement for students who commit to teach in high need schools or subject areas for a predetermined number of years. AR programs like the North Carolina Teaching Fellows Program (see https://myapps.northcarolina.edu/ncteachingfellows/) and Minnesota's Collaborative Urban and Greater Minnesota Educators of Color Program (see https://mn.gov/pelsb/assets/) serve as effective examples of service scholarships recruiting CLD special education teacher candidates by offsetting the burden of higher education cost. Teacher residency programs are also known to recruit CLD special education teacher candidates through partnerships between LEAs and IHEs. They typically subsidize and enhance teacher preparation for high need schools and subject areas. For example, Boston Teacher Residency and San Francisco Teacher Residency recruit high percentages of CLD candidates, both having more than 50% of their teachers identifying as CLD. Whereas, Grow Your Own programs recruit high school students, paraprofessionals, after-school program staff, and other community members as potential teacher candidates (Bianco & Marin-Paris, 2019). These candidates are more likely to be representative of their local community and remain as teachers after obtaining their teacher license. For example, the South Carolina Teacher Cadet and Pathways2Teaching program provide CLD high school students with (a) opportunities to learn about the teaching profession, (b) college credit, and (c) assistance with identifying and applying to college. Lastly, mentorship and support programs offered to CLD AR teacher candidates are another effective strategy for recruiting and retaining special education teachers. Call Me Mister (acronym for Mentors Instructing Students Toward Effective Role Models), California Mini Corps, and The Fellowship: Black Male Educators for Social Justice provides CLD teacher candidates with mentorship in a cohort system for social and cultural support (see https://www.clemson.edu/education/programs/programs/call-me-mister.html). In addition to robust teacher mentorship, these programs also offer CLD teacher candidates loan forgiveness, academic and peer support, preparation for state licensure exams, and assistance with job placement. Teacher educators can replicate many of these successful diversity initiatives to recruit highly qualified CLD special education teacher candidates within their respective ARs. Successful teacher candidate recruitment is the first step in fostering a prosperous AR special education teacher program which is ultimately sustained through a robust preparation of teacher candidates.

PREPARING AR TEACHERS

The abbreviated nature of some AR preparation programs combined with the unconventional sequence in which teachers are prepared may lead some to question the quality of preparation. Indeed, AR preparation programs vary widely in quality (Day et al., 2023; Rosenberg et al., 2023). It is also true that research on AR teacher quality compared to traditionally prepared teachers is not as conclusive as some may claim (Huang & Moon, 2009; Whitford et al., 2018). What is clear from decades of research regarding special education teacher preparation is the benefits of stakeholder collaboration, the inclusion of robust teacher mentoring, the opportunity to practice implementing evidence-based practices, and the ability to meet candidates' needs using a variety of different modalities. These special education teacher education components, when used in conjunction by teacher educators, can be applied to AR programs to effectively prepare teacher candidates.

Preparation Collaboration

Effective AR programs require collaboration among teacher educators and other partners to ensure that coursework, mentorship, and licensure requirements are in alignment (see Figure 2). Concerning the program itself, teacher educators are most typically responsible for providing pedagogical coursework (Rosenberg et al., 2007). Therefore, teacher preparation programs must attract, prepare, and retain faculty to teach the courses. Teacher licensure changes at the state level also impact teacher preparation programs as coursework must be developed or modified to meet state regulations. Consequentially, teacher educators spend considerable time and energy ensuring their programs meet accreditation standards and are approved by the SEA.

Furthermore, many effective AR programs have similar program organization infrastructures that can add to their efficacy. Namely, they include teacher educators facilitating robust mentorship and supervised fieldwork with LEAs. Rosenberg et al. (2007) examined 101 AR programs and found that roughly half of AR teacher candidates had received no more than 3 months of training before becoming teachers of record. Even so, regardless of the length of preparation prior to entering the classroom, most AR programs lasted more than 18 months, and more than 90% of the reported ARs included mentorship and supervised fieldwork. Rosenberg et al. (2007) noted, "…complementing the time in the classroom with substantive standards-based training and effective support minimizes the level of risk involved with an inexperienced teacher" (p. 235).

Thus, teacher educators often work in close alignment with LEAs regarding the mentorship and clinical supervision of AR special education teacher candidates. After all, AR teachers are being prepared to work for LEAs; therefore, formal partnerships between program providers such as IHEs and LEAs can provide significant benefits for both partners and, most importantly, a streamlined preparation program with wrap-around support for AR teachers. For example, Grow Your Own programs (PESB, 2016) or cohort programs (Mastropieri et al., 2008) can provide a seamless experience for AR teachers due to strong collaboration between teacher educators and LEAs. The LEA has an essential role in preparing AR teachers by providing mentorship during their induction. Supports during induction, such as relevant professional development and mentoring, are critical components of retaining novice teachers, particularly alternatively prepared teachers (Hunt et al., 2013). Therefore, we posit the importance of teacher educators collaborating with LEAs to ensure special education AR teacher candidates receive adequate mentorship to instruct students with disabilities.

Additionally, teacher educators also often assume the collaborative role with SEAs to meet teaching licensure requirements through ARs (Rosenberg et al., 2007). The SEA must collaborate closely with the AR to ensure that licensure and accreditation requirements are being met. SEAs vary in the rigor of their education requirements, particularly regarding AR special education programs. If states have a strong and organized licensure program with clear requirements for special education teachers depending on their preparation program, then teacher educators can better facilitate coursework relevant to preparing profession-ready teachers.

Mentorship During Preparation

Mentorship and supervised fieldwork are vital components of any successful teacher preparation program but are particularly useful for AR programs because teacher candidates are often also teachers of record while completing preparation (Scott et al., 2019). Mentorship refers to licensed teachers or instructional coaches collaborating with novice teachers to plan lessons, evaluate instruction, and reflect on teaching practices (USDOE, 2022). Mentor teachers can support novice special education teachers with various other tasks, including family communication, classroom management, assessing learning, case management, and other LEA or school-specific tasks (USDOE, 2022). Regarding the specific components of mentoring, Humphrey et al. (2007) found that AR teachers appreciated observing their mentor's instruction, discussing student progress, planning lessons, and receiving instructional materials. Therefore, we recommend that novice teachers and mentors are paired based on their teaching responsibility to improve the

likelihood of a successful mentoring experience. Specifically, special education AR teachers should have a high quality and an experienced special education teacher serve as their mentor. This mentor teacher should have experience implementing evidence-based practices because an essential role of the mentor teacher is directing novice teachers to evidence-based practices and helping them to implement them in their own classrooms.

Incorporating Evidence-based Practices in AR Preparation

Evidence-based practices (EBPs) are instructional practices that support students with disabilities and have been deemed effective based on research and professional experience (Cook et al., 2008; McCray et al., 2017). Many teachers, including AR teachers, may receive only an introduction to these practices in their coursework. Even so, they may build significant declarative knowledge (i.e., general facts) about them (Peeples et al., 2019). This might include a cursory understanding of what they are and their utility. However, many AR special education teacher candidates have not yet had the opportunity to practice implementing EBPs until near the end of their coursework, if at all. This is problematic as the findings from decades of research are clear: carefully sequenced, well-scaffolded opportunities to use EPBs and obtain high-quality feedback in an authentic setting is a critical component of effective teacher preparation (Billingsley & Bettini, 2017; Leko et al., 2015). These opportunities for instructional practice most commonly occur in clinical experiences, often called field experiences, internships, or student teaching. Yet, there are concerns regarding AR teachers' access to practice-based opportunities before entering the classroom as a teacher of record (Darling-Hammond & Skyes, 2003; Gaines, 2022). Although these concerns are reasonable, Day et al. (2023) found that approximately 84% of all special education AR programs at IHEs require some form of clinical experience. In contrast, only 61% of special education AR programs not affiliated with an IHE required some form of clinical experience, which warrants preparation concerns.

Given the pervasiveness of special education teacher shortages, it is important that we keep in mind that we are not preparing teachers to work for only one or two years. Furthermore, in any preparation program, striving to produce expert teachers who can step foot in a classroom only after they are perfectly polished is unrealistic. Our preparation of teachers will ideally pay dividends for years to come. As a result, we must provide all novice AR teachers with the opportunity to hone their craft and receive feedback, whether preservice or while working as a teacher of record. AR programs that do not currently require some form of clinical experience should consider doing so. Partnering with LEAs through a school-university partnership may be an efficient way to connect AR teachers with mentors. School administrators should facilitate professional development specifically for this growing cohort of teachers and regularly observe their instruction. Incorporating observation, guided feedback, and reflective practice into induction at the school level could also be a way to improve teacher quality, increase teachers' feeling of administrative and collegial support, and improve their overall retention rates (Kunemund et al., 2022; Nagro & Monnin, 2022).

Preparation in Various Modalities

As teachers do with their PK-12 students, teacher educators must meet candidates where they are, both metaphorically and literally. Providing opportunities for different modalities of AR instruction is one way to do this. The COVID-19 pandemic has shifted how we communicate, work, and attend classes. It has provided opportunities and infrastructure for higher education professionals and AR special education teacher candidates to learn and work in a virtual setting. Though there are drawbacks, virtual learning has expanded teacher candidates' access to high-quality instruction. This is particularly true for AR teacher candidates, who are more likely than traditionally prepared teachers to be career switchers, older, and currently working in schools (Rosenberg et al., 2007). Teacher educators within IHEs and other non-IHE programs should consider different instructional modalities for their AR teacher candidates. For example, virtual learning opportunities may allow instructional access to AR special education teachers who are geographically bound, such as those that live in rural areas (Jameson et al., 2019; Sutton et al., 2014). Similarly, asynchronous, bichronous, or hybrid coursework may make accessing coursework possible for those who work full-time during the day. At the very least, coursework should occur at a location (i.e., centralized, affordable to park) and at a time (i.e., evenings) convenient for AR teachers. When special education teacher candidates receive flexible, evidence-based instruction and sufficient mentorship in AR preparation, retention in the special education workforce may be positively impacted.

RETAINING AR TEACHERS

To ensure that AR teachers are well-prepared and retained in the special education workforce, it is essential to examine the current methods for providing feedback, accessibility, and alignment with teacher demographics. This can lead to better-prepared AR teachers who

will remain in the field for years to come and ultimately improve teacher retention rates. While there is a dearth of research regarding the retention of AR special education teachers, we leverage OSEP and other research-based retention recommendations to provide teacher educator suggestions.

Leveraging Data for AR Program Improvement

To improve AR teaching programs and retain special education teachers in the field, it is important to review preliminary data on AR teacher candidate outcomes (OSEP, 2022). This can include gathering information on completion rates, state test scores, and field placement observations. Additionally, gathering feedback from the AR faculty, teacher candidates, and affiliated LEA personnel is crucial in understanding the strengths and areas for improvement of the program, as well as the needs and perspectives of the partners directly involved. This data-driven information can then be used by teacher educators to adjust and improve their AR program. We hypothesize that gathering feedback from various entities and leveraging the information to make data-driven decisions in ongoing AR program improvement will ultimately lead to better special education teacher retention. Additionally, reviewing teacher candidate outcome data (e.g., state licensure test scores, special education PRAXIS, annual evaluations of novice AR special education teachers, etc.) also enables a more comprehensive understanding of program characteristics and variations across programs.

For successful retention of new AR special education teachers, teacher educators can communicate with school leaders about the importance of building integrated school cultures where collaboration and continuous learning are emphasized. The support of school administration is also seen as critical, as new special education teachers may stay in schools where they feel supported even if they face resistance from others within the school community (Macedonia, 2021). AR pre-service and induction experiences are significant in promoting professional integration and success, satisfaction, and retention in teaching (Jorissen et al., 2002). These findings can be useful for program planners and teacher educators looking to address teacher shortages and improve the current state of teacher preparation and induction.

Sustaining School District Collaboration

We recommend teacher educators establish ongoing mentorship and professional development opportunities after candidates complete an AR program to improve novice teacher outcomes. For example, Nagy and Wang (2007) surveyed 155 AR teachers across high schools in the state of New Jersey and found that practices to support AR teachers differed significantly across districts. More than half of the AR teachers in the study did not experience a preservice or induction program. Additionally, 40% of AR teachers were found to be teaching subjects in which they did not have an undergraduate or graduate degree or any work experience. The study highlights the need for districts, principals, and mentors to make better efforts to assist AR teachers in their transition to the classroom and to provide equal access to professional support and development.

To provide novice teachers with the necessary tools and resources to excel in their profession and to improve teacher retention rates, it is important to establish consistent and standardized mentorship and support programs. Whitaker (2000)'s survey of 156 first-year special education teachers in South Carolina illuminated that those who felt supported and had a mentor during their first year were more likely to stay in the teaching profession. Thus, teacher educators can collaborate with LEAs in providing effective professional development and support for novice AR special education teachers. One form of professional development is called "bug in ear" (BIE) coaching to build evidence-based classroom management and instructional skills. BIE devices allow discreet communications between supervisor and teacher where the trainee wears an earbud audio receiver, while the supervisor or coach provides input or feedback through a microphone (Regan & Weiss, 2020). In a longitudinal investigation of eCoaching through advanced online BIE, Rock et al. (2014) examined the effects of BIE technology on teacher performance and student engagement. They found that BIE technology had successful long-term effects, with teachers showing continued improvements in behavior and students showing increased academic engagement. Furthermore, the study found that the use of BIE technology was well-received by participants, with many expressing a desire for continued use. These findings suggest that teacher educators may consider ongoing professional development for AR completers by incorporating BIE technology as a component of their mentorship and professional development offerings.

CONCLUSION

The importance of effective AR programs for special education teacher candidates cannot be overstated. Although there are some challenges, teacher educators can effectively recruit, prepare, and support the retention of highly qualified special education teacher candidates by leveraging our research-based recommendations. Though there are certainly similarities, preparing AR teacher candidates is not the same as preparing teacher candidates who par-

ticipate in traditional teacher preparation programs, and specific considerations must be made to better support them and meet their unique needs. Teacher educators and partners at various levels can work collaboratively to ensure licensure requirements are relevant and are being met by program providers. At the district and school level, strong induction and mentoring programs must instill a sense of wrap-around support for these teachers and foster collegial and administrative support. Similarly, AR teachers must have the opportunity to receive frequent and timely feedback on their instruction and implementation of EBPs. Lastly, because most AR teachers work during the day and their CLD demographics do not mirror the traditional teacher population, consideration should be made for where and how they access their coursework. When done in conjunction, these components are likely to result in better-prepared AR special education teachers who will remain in the field for years to come.

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