The current issue and full text archive of this journal is available on Emerald Insight at: https://www.emerald.com/insight/2833-2040.htm

PDSP 19,1

50

Received 30 November 2023 Revised 10 February 2024 Accepted 12 February 2024

Taking the LEAP: a districtuniversity partnership to address shortages in special education

Laura Hedin

Morgridge Endowed Chair, Northern Illinois University, DeKalb, Illinois, USA Lydia Gerzel-Short and Lisa Liberty Department of Special and Early Education, Northern Illinois University, DeKalb, Illinois, USA, and

Jason Pope

Department of Human Resources, Rockford Public Schools, Rockford, Illinois, USA

Abstract

Purpose – District-university partners increasingly rely on "grow-your-own" licensure programs to address teacher shortages. Because vacancies in special education represent a chronic issue, our district-university partnership developed LEAP – the Licensed Educators' Accelerated Pathway, successfully preparing 26 paraprofessionals as special education teachers (SEs). We describe a model university-district partnership in which we collaborated to design and implement paraprofessionals' SE licensure program.

Design/methodology/approach – In this general review, we describe a district-university partnership collaboration that resolved barriers experienced by paraprofessionals working toward licensure in special education (Essential #4, Reflection and Innovation). The specialized design and partnership solutions were grounded in SE preparation research literature.

Findings – 25 (28 entered the program and 25 completed) paraprofessionals from one large urban and several regional districts completed special education licensure through LEAP. Slightly more than half of LEAP participants were Black or Hispanic (see Table 1), contributing to the diversification of SE workforce. University-district partnership was successful in designing and delivering a program that allowed participants: a) to remain employed, b) attend evening classes in their geographic region or online, c) complete all field experiences in sponsoring districts (Essential #2) and d) receive concierge advising from a "completion coach." We describe solutions to barriers experienced by paraprofessionals and advocate for district-university collaboration to address chronic teacher shortages.

Research limitations/implications – Limitations include lack of data on success of program completers during their first year of teaching as they began this work in Fall 2023. Further, because the participating district was large and urban, generalization of program details for small and rural districts is difficult.

Practical implications – Practical tips for developing grow-your-own special education licensure programs are providing. Detailed descriptions of barriers candidates experienced and ways the district-university partners resolved these issues are included. Programs like the one described has the potential to positively impact teacher pipeline issues.

Social implications – The program described provided highly-trained teachers to fill chronic vacancies in special education in three participating districts/agencies. Because students receiving special education services are at risk for school failure and are disproportionately impacted by teacher turnover, addressing this area through grow-your-own licensure programs represents a diversity, equity and inclusion initiative. Further, upskilling diverse paraprofessionals to licensed teacher roles represent an economic boost, which they might not otherwise have achieved.

Originality/value – Available research literature signals alarm over persistent teacher shortages in hard-tostaff districts and lack of diversity in the teacher workforce, but few published accounts describe successful



PDS Partners: Bridging Research to Practice Vol. 19 No. 1, 2024 pp. 50-67 Emerald Publishing Limited e-ISSN: 2833-2059 p-ISSN: 2833-2040 DOI 10.1108/PDSP-11-2023-0039 © Laura Hedin, Lydia Gerzel-Short, Lisa Liberty and Jason Pope. Published in *PDS Partners: Bridging Research to Practice*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at http:// creativecommons.org/licences/by/4.0/legalcode

programs. Partner collaboration fostered a re-imagining of course formatting and delivery to accommodate adult learners, avoiding problems often reported with alternative programs.

Keywords Equity, Special education, Teacher preparation Paper type Practitioner paper

Nationwide, declining enrollments in teacher preparation programs and high attrition rates of special educators (SE) contribute to critical shortages (Irwin *et al.*, 2023). The National Center for Educational Statistics (Irwin *et al.*, 2023) reported that approximately 40% of districts nationwide had "hard-to-fill" vacancies in SE with "extreme difficulty" recruiting or retaining SEs. High rates of SE turnover, decreasing enrollments in SE preparation programs and increasing number of students qualifying for special education services contribute to persistent shortages (Sutcher, Darling-Hammond, & Carver-Thomas, 2019; Taie and Lewis, 2022). Districts serving diverse populations experience extreme difficulty in recruiting and retaining SEs that match their students' demographic profiles (Carver-Thomas & Darling-Hammond, 2017; Scott, 2019). "Grow-your-own" (GYO) licensure programs developed by district-university partnerships may be one way to address chronic SE shortages (Podolsky, Kini, Bishop, & Darling-Hammond, 2016) while attracting diverse individuals to teaching roles (Wojcik *et al.*, 2023). "GYO programs are supportive pathways into the teaching profession for local candidates who aspire to teach in their communities" (Muniz, 2020, p. 5).

This practice-focused article's aim is to describe one partnership initiative, providing readers with knowledge of how a public university and a PK-12 school district in Illinois collaborated to prepare paraprofessionals as licensed SEs. We describe *LEAP* – the Licensed Educator Accelerated Pathway, a GYO developed by Midwestern University (MU, pseudonym) in partnership with Riverfront School District (RSD, pseudonym), a large urban school district in Illinois. Like "step-up" programs for paraprofessionals described in early research-to-practice literature (e.g. Epanchin & Wooley-Brown, 1993), LEAP allowed paraprofessionals to complete all traditional licensure requirements at MU with RSD funding. Consequently, paraprofessionals advanced or "upskilled" their professional credentials. RSD and MU's ongoing collaborative work aligned with the Nine Essentials of school-university partnerships as shown in Figure 1.

Although LEAP's design addressed all Nine Essentials for school-university partnerships (National Association of Professional Development Schools [NAPDS], 2021), the scope of this descriptive article focuses primarily on two: the comprehensive mission (Essential #1, NAPDS) and reflection and innovation (Essential #4, NAPDS). First, LEAP's comprehensive mission (Essential #1, NAPDS) included advancing RSD paraprofessionals to SE licensure, specifically recruiting persons of color to diversify the SE teaching workforce. Next, LEAP was developed through partners' collaborative reflection and innovation (Essential #4, NAPDS) based on best practices literature on teacher preparation and continuous communication among stakeholders to improve the program. In its first cohort, 25 paraprofessionals, 51% self-identified as Black or Hispanic, obtained SE licensure and took teaching positions (90% completion rate) in RSD. We describe successes and challenges encountered and make recommendations for others launching GYOs. Our program design was grounded in SE preparation and retention research (Billingsley & Bettini, 2019; Brendli *et al.*, 2022; Rennells, Sindelar, & Austrich, 1997; Wojcik *et al.*, 2023).

Literature review

In their comprehensive qualitative review of literature on SE turnover, Billingsley and Bettini (2019) defined attrition as teachers a) leaving the profession (e.g. career changes, retirement and nonwork reasons), b) moving to different schools or districts and c) changing teaching

| PDSP 19,1 | 1. Comprehensive Mission | 2. Clinical Preparation | 3. Professional Learning and Leading | 4. Reflection and Innovation | 5. Research and Results |
|--|--|--|---|---|--|
| 52 | RSD and MU share goals to fill critical shortages in special education diversify teaching workforce to reflect RSD student population provide advancement opportunity for paraprofessionals to promote economic equity | RSD and MU share commitment to provide clinical experiences equivalent to those in traditional preparation programs MU hires and trains supervisors in developmental perspective for field experience RSD allows job-swaps so paraprofessionals can complete field experiences | RSD communicates needs related to teacher shortages MU communicates findings of research literature related to alternative licensure programs and retention of teachers Partners' contribute knowledge and skills in design and delivery of aternative licensure program | RSD and MU champions' monthly meetings to reflect on and adapt aspects of program MU faculty plan and revise courses for paraprofessionals MU reformats course schedules Reflection on outcomes of first cohort used to redesign for second cohort | Data collection by RSD and MU on participant grades and completion rates self-efficacy for teaching perceptions of the licensure program plans to remain in teaching field Studies of participants during first year of teaching (post- graduation) |
| Figure 1. Alignment of the Riverside School District (RSD) and Midwestern University (MU) partnership with the Nine Essentials of school-university partnerships | 6. Articulated Agreements • Contractual agreement between RSD and MU articulaing services provided by each • Contractual agreement between RSD and paraprofessionals to articulate expectations and obligations • Program sheet with course requirements based on transcript review provided to all paraprofessionals Source(s): National | 7. Shared Governal Structures •RSD and MU champi with defined tasks overseeing the progra •Monthly joint administrative meetin •Champions plan for second cohort using "lessons learned" to re program | Roles Roles RSD administra teachers acted as instructors in Mi- courses/program MU faculty prov- professional dev for cooperating evise RSD and MU jaculty prov- professional dev reviewed partici- professional dev at MU workshop after participanti- teaching | tors and s U U tors and s U U tors and s tors and s tors and s U tors and s U u teachers teachers provided teachers teachers s' first year to s' first year to to to to to to to to to to to to to | advising) o all participants ources replace n courses celebration raduating s d event for cachers es free al development er first year of ion of findings and s |

Figure created by authors

assignments (e.g. from special education to general education). They not only estimated annual SE attrition at 17%, higher than that for all teachers, but also noted that much research examines reasons why SEs remain in the profession not why they leave. Based on 30 studies, Billingsley and Bettini provided in-depth descriptions of four key factors influencing SE retention: preparation and qualifications, school characteristics, working conditions and teacher demographics and nonwork reasons. Work demands emerged as a consistent factor influencing SEs' decision to stay or leave. "When [work] demands exceed their capacity to fulfill them, [SEs] may be at greater risk for attrition" (Billingsley & Bettini, p. 731), especially when these demands are not counterbalanced with strong administrative and social support. These authors also noted the difficulty in disaggregating the impact of inter-related factors based on the available research (e.g. working conditions such as caseloads, administrative support and collaborative relationships conflates with school characteristics such as highminority and high-poverty schools).

Equity and SE shortages

Early-career SEs and those in high-minority and high-poverty schools may experience heavy work demands with limited support leading them to change positions or leave the profession (Billingsley & Bettini, 2019), resulting in high attrition rates disproportionately impacting students of color (Brendli *et al.*, 2022) and those attending Title 1 schools (Billingsley & Bettini). The highest SE vacancy rates occur in high-poverty and high-minority schools as well as in schools in the rural and urban settings (Billingsley & Bettini). Brendli *et al.* (2022) noted that "90% of high-poverty schools report[ed] issues attracting high-quality" SEs (p. 77;

see also Carver-Thomas & Darling-Hammond, 2017). White teachers moved away from positions in high-poverty schools more frequently than teachers of color (Ingersoll & May, 2011); however, more recent studies are needed regarding this finding.

The chronic need for SEs, especially in highly diverse and Title 1 schools, represents an equity issue: the most vulnerable students receive instruction year after year from a) novice teachers with limited experience and b) under-qualified individuals with out-of-field or provisional licenses (Bettini *et al.*, 2022; Gershenson, Hart, Hyman, Lindsay, & Papageorge, 2018). Under-qualified SEs may hold provisional licenses that allow them to teach SE while working toward certification. Although provisional licensure requirements vary by state, in Illinois, an individual can obtain provisional licensure with 90 college credits and acceptance into a SE licensure program (Illinois State Board of Education). In contrast to those provisionally licensed, out-of-field teachers hold licenses outside of the area they teach (e.g. licensure in physical education but teaching special education). Although these teachers meet districts' immediate needs, they seldom have training in specially-designed instruction or the unique roles and responsibilities of SEs (e.g. writing IEPs, progress monitoring, collaborating with service providers from multiple disciplines and teaming with families). When students receive instruction from highly qualified SEs; however, academic, social and behavioral outcomes improve (Bettini *et al.*, 2022).

Preparing diverse SEs

Having access to diverse teachers improves outcomes for all students (Cherng & Halpin, 2016; Gershenson *et al.*, 2018), and students of color specifically benefit from having teachers that "mirror" their demographics (Banerjee, 2017; Fish, 2019). Despite changes in student demographics, with less than 50% coming from White households, more than 80% of teachers nationwide self-identify as White (Irwin *et al.*, 2023; Taie & Lewis, 2022). Less than 10% of SEs self-identify as Black, Hispanic or Asian/Pacific Islander (Fish, 2019). Paraprofessionals, by contrast, more closely match student demographics in their districts.

Paraprofessionals "work under the supervision of teachers to assist in the implementation of teacher-planned instructional programs and to evaluate student performance in relation to the education programs and services provided" (Karge, Pierson, & Robinson, 2011, p. 4). Nationally, paraprofessionals self-identify as White (61%), Black (12.8%), Hispanic (19%) and Asian (3.8%), making this group more diverse than licensed teachers (National Teacher and Principal Survey, 2017–18). Mason *et al.* (2021) found that paraprofessionals in focus groups were more diverse than participating teachers from the same district (teachers 87% White, 13% Black, n = 16; paraprofessionals 57% White, 21% Black, 14% Hispanic and 7% Native American, n = 14). Student demographics were not reported.

Wojcik *et al.* (2023) reported that individuals from diverse backgrounds enter GYOs and alternative licensure programs at higher rates than traditional licensure programs, and alternative programs may successfully attract black men to the teaching profession (Scott, 2019). Although some alternative pathways are not associated with institutes of higher education, others, like LEAP, feature district and university partnerships (Brownell & Sindelar, 2016, no page; Podolsky *et al.*, 2016; Zeichner, 2003). Alternative programs often eliminate barriers to licensure through state or federal funding for participants (Muniz, 2020) and local or online delivery of courses. However, programs that are shorter and less rigorous than traditional programs may yield less than optimal results; that is, their graduates leave teaching at higher rates and sooner than traditional program completers (Fish, 2019; Wojcik *et al.*, 2023).

Lack of field experience and minimal university coursework appear to contribute to attrition for alternative program graduates (Billingsley & Bettini, 2019). Having 10 or more weeks of student teaching improved the number of SEs still teaching after one year by 17%.

PDSP
19,1Black first-year teachers, particularly those who completed alternative programs, were "3.5
times more likely to have no student teaching experience than all other first-year teachers
(29.4% vs. 8.3%)" (Carver-Thomas & Darling-Hammond, 2017, p. 173). Although Billingsley
and Bettini reported that "other aspects of preparation, such as coursework did not
significantly predict retention" (p. 710), their study did not differentiate between traditional
and alternative licensure programs. Comparing outcomes for these two routes to licensure,
Wojcik *et al.* (2023) reported that the numbers of years teachers remained in the profession
were equivalent if alternative preparation programs included a minimum of 27 college credit
hours and student teaching.

Licensure for paraprofessionals

The appeal of alternative licensure programs lies in part in accessibility for working adults like paraprofessionals. Paraprofessionals reported that they cannot leave work to attend daytime classes and field experiences (White, 2004) or afford to resign for full time classes. However, paraprofessionals show strong retention rates after graduating from "step-up" programs leading teaching licensure (Rennells *et al.*, 1997), remaining in their employing districts (Brownell and Sindelar, 2016). Sindelar, Rennells, Daunic, Austrich, and Eisele (1999) reported that skills of paraprofessionals who graduated from step-up programs were similar to those of traditional campus-based program completers and exceeded those of graduates of alternative programs.

With variables related to teacher shortages, diversity and features of alternative programs in mind, MU and RSD collaborated to design LEAP, an SE licensure program for paraprofessionals. RSD, as shown in Table 1, is a highly diverse Title 1 district, with more than 45% of students coming from low-income households (Illinois State Board of Education). Paraprofessionals working in schools represent ideal candidates for GYOs: they already have a) experience working with students with disabilities, b) established positive work histories and c) connections to their schools and communities. In designing LEAP, we attempted to eliminate barriers and provide resources needed by paraprofessionals advancing in their career pathway. In the next section, we describe (a) the comprehensive mission created by the partnership, (b) collaborative program development efforts between district and university and (c) innovative problem-solving among those involved in program delivery.

The comprehensive mission

Riverfront School District, one of the five largest school districts in Illinois, reported that 45% of their students lived in low-income households, 20% were English learners and 16% received SE services (ISBE, 2022; see Table 1). In 2022, RSD reported annual teacher retention of 83%, requiring that they recruit, hire and mentor almost 200 new teachers each year, a significant drag on district resources. Attrition also disadvantaged students who continually received instruction from novice or under-qualified teachers.

RSD personnel identified special education as an area with high rates of turnover and critical shortages. In response, MU and RSD personnel established a comprehensive mission for LEAP (Essential #1, NAPDS), endeavoring to: a) fill SE vacancies by preparing licensed SEs; b) improve SE retention by recruiting paraprofessionals for a GYO with rigorous coursework and field experiences and c) include 50% persons of color to diversify the SE workforce. All stakeholders expected to benefit from the proposed GYO as measured by these outcomes: at least 20 newly licensed SEs filling chronic vacancies in RSD in fall 2023; increased numbers of diverse SEs in the RSD workforce; increased MU enrollment in SE licensure courses with the added paraprofessional cohort; paraprofessionals' annual salaries doubled without incurring student loan debt; MU connected with experienced RSD

| | All participants | Riverfror Teachers | Riverfront school district (urban) eachers Students LEAI | ict (urban) LEAP | Teachers | Town 1 district Students | t LEAP | Tc Teachers | Town 2 district Students | LEAP |
|---|--|---|--|--|---|--|--|---|---|--|
| n (completion rate %) | 28 ^a (89.7) | 16,421 | 27,173 | 20^{a} (90) | 445 | 6,664 | 5 ^a (100) | 268 | 3,339 | $\begin{matrix} 1^a \\ (0) \end{matrix}$ |
| kace, Eunucity (%) White Black Hispanic | 44.8 34.5 17.2 | 86.3 3.1 4.7 | 26.1 30.8 31.4 | 45.0 35.0 15.0 | 88.2 2.5 7.2 | 34.0 27.8 30.3 | 20.0 60.0 20.0 | 87.2 6.9 2.3 | 43.1 25.8 14.0 | $\begin{array}{c} 100\\ 0\end{array}$ |
| Asian | 3.5 | 1.5 | 4.0 | 5.0 | ₩, 2, | 11 | 0 0 | 3.5 | 7 | 00 |
| Indigenous Pacific Islander | 0 0 | ⊽ ⊽ | ⊽ ⊽ | 00 | | V V | 0 0 | 00 | ⊽ ⊽ | 0 0 |
| Two or more Males (%) | unknown 25.0 | $4.0 \\ 27.4$ | 7.5 51.2 | unknown 25.0 | 1.5 25.0 | 8.4 51.0 | unknown 40.0 | $0 \\ 29.2$ | 16.0 50.5 | 00 |
| low income | n/a | n/a | 45.2 | n/a | n/a | 64.0 | n/a | n/a | 56.0 | n/a |
| Students with IEPs ESL/BL | n/a n/a | n/a n/a | 16.0 20.3 | n/a n/a | n/a n/a | 16.0 | n/a n/a | n/a n/a | 15.0 7.0 | n/a n/a |
| Note(s): LEAP = Licensed Educator Accelerated Pathway; IEP = individualized education program; ESL/BL = English as a second language/bilingual and $n/a = not$ applicable. Other participants not included in Table 1 were White females ($n = 2$) from a special education cooperative serving students with disabilities (100% completion rate) in rural communities. ^a LEAP participants who began the program. Two participants from Riverfront School District and one from Town 2 withdrew or were dismissed from LEAP ($n = 3$ non-completens) for an overall completion rate of 89.3%. ^b District demographic and other data are from the Illinois Report Card (2022). Demographic data not available for students or teachers in the special education cooperative Source(s): Table created by authors | sed Educator Accele ants not included in es. ^a LEAP participat e = 3 non-completers vailable for students d by authors | rated Pathwa Table 1 were ¹ mts who bega s) for an over or teachers in or teachers in | y, IEP = indiv White females in the program all completion in the special e n the special e | ridualized educ (n = 2) from a n. Two partici rate of 89.3% ducation coop ducation coop | ation program special educati pants from Ri ^b District den erative | Sducator Accelerated Pathway; IEP = individualized education program; ESL/BL = English as a second language/bilingual and $n/a = not$ not included in Table 1 were White females ($n = 2$) from a special education cooperative serving students with disabilities (100% completion EAP participants who began the program. Two participants from Riverfront School District and one from Town 2 withdrew or were i non-completens) for an overall completion rate of 89.3%. ^b District demographic and other data are from the Illinois Report Card (2022) ble for students or teachers in the special education cooperative authors | glish as a sec serving studer District and other data are | ond language/ ats with disabi one from Tow from the Illin, | bilingual and 1 lities (100% cc vn 2 withdrew ois Report Ca ois Report Ca | v/a = no mpletion d (2022) |
| Table 1 Teacher, student and LEAP participan demographic | | | | | | | | | 55 | LEAP in specia education |

PDSP 19,1 administrators and teachers who began teaching MU courses (Essential #8, Boundary Spanning Roles; NAPDS), enriching the experiences of all MU teacher candidates. Measures of SE effectiveness, self-efficacy and longevity in their positions are also planned with data collection underway.

The articulated agreement

RSD, MU and paraprofessional commitments were delineated in contractual agreements (Essential # 6, NAPDS). RSD committed to recruiting paraprofessionals, coordinating field experiences including student teaching and fully funding the cost of tuition for paraprofessionals' licensure course sequence. MU committed to providing an accessible licensure course sequence for up to 30 paraprofessionals, hiring instructors and supervisors for field experiences and providing concierge advising services. Paraprofessionals signed contractual commitments with their districts to maintain a B or better in coursework and work in district SE positions for at least three years after graduation. They also agreed to repay tuition to the district if they chose to leave or were dismissed from the program.

Paraprofessional recruitment

Recruitment of appropriate paraprofessionals for LEAP began while MU and RSD were still designing the GYO. MU faculty assisted RSD with recruitment for LEAP. Preferred qualifications for paraprofessionals included a) positive work history with few absences, b) a minimum of an associate degree from a community college and c) recommendations from supervising teachers. Solicitation of recommendations from supervising teachers by RSD and an interest survey developed by MU resulted in a pool of 30 paraprofessionals and individuals working as SEs with provisional licensure. MU reviewed transcripts for all interested paraprofessionals and then held online informational meetings to explain licensure and degree requirements and timelines for completion. Interested paraprofessionals had a range of educational attainment including master's and bachelor's degrees, associate degrees from community college (Muniz, 2020); However, several paraprofessionals entered LEAP as freshmen and needed to complete all requirements for licensure and their bachelor's degree. No potential candidates were eliminated based on how many courses they needed to complete, but several opted out.

The final pool consisted of 20 RSD paraprofessionals and provisionally licensed teachers. Because RSD had contracted for up to 30 individuals, they subcontracted the remaining seats to other educational entities. Recruitment activities were held separately with school districts in Town 1 and Town 2 and a special education cooperative. These partners recruited 5, 1 and 2 participants, respectively (see Table 1), resulting in 28 LEAP candidates in the cohort.

Candidates' ages ranged from 23 to 55 years and included seven men (24%, see Table 1). In keeping with the goal to recruit diverse SEs, 17% and 34.5% of LEAP candidates self-identified as Black and Hispanic, respectively. A total of 12 LEAP candidates held bachelor's degrees and seven worked as SE teachers with provisional licenses. All other candidates held applied associate or associate of arts degrees from community colleges or had no degree but "some community college credit." Several years prior to LEAP recruitment, two candidates had been dismissed from MU based on poor academic performance. However, when these candidates applied for LEAP, they appealed for reinstatement into MU which was approved. All LEAP candidates completed MU's usual admissions process at their own expense, one of the few costs to candidates enrolled in the program. The RSD cohort began coursework in February 2022.

Reflection and innovation

LEAP was designed not only to eliminate financial barriers to licensure cited by working adults but also increase access to coursework (White, 2004). Reflecting on barriers to

licensure for paraprofessionals and other working adults was foundational to program innovations (Essential #4, NAPDS). District and university "champions" provided leadership crucial to program success. Partnership champions included five district partners (two from RSD, one each from the other districts/cooperative) and three from MU (one department chair and two faculty members). Champion meetings were foundational to shared governance of LEAP (Essential #7, NAPDS). Initially, meetings occurred twice monthly with email check-ins and questions as needed. Later, meetings occurred monthly. Champions provided clear lines of communication among participants, led programmatic decision-making and coordinated district-university tasks. Partnership discussions resulted in a purposefully designed program focused on the needs of working adults. LEAP was not a "short-cut to licensure" (Zeichner & Schulte, 2001), but included the full licensure course sequence and field experiences in an accelerated format.

LEAP's design

LEAP candidates entered the licensure program as juniors or post-baccalaureate students, immediately enrolling in methods courses. Because classes held during the day and full-time course loads (15–18 credits for 16-week semester) were unrealistic for full-time employees, LEAP licensure courses followed an adapted format and sequence (see Table 2). RSD funded.

LEAP using revenue sources with hard expenditure deadlines (see Podolsky *et al.*, 2016), requiring that candidates complete licensure within an 18-month timeframe. This was six months shorter than MU's traditional on-campus professional course sequence. Adapting the course sequence to this timeframe required reflection on essential and enduring content for courses and innovation in course delivery. Unlike alternative programs, LEAP included the entire licensure course sequence, assuring adequate preparation in areas such as instruction, behavior management and assessment (Billingsley & Bettini, 2019; Wojcik *et al.*, 2023).

Given these constraints, champions planned for candidates to complete two variable duration classes in short sessions lasting 5–8 weeks (dynamic scheduling) depending on course content. As compared to traditional 16-week semesters with five classes taken concurrently, the LEAP format allowed candidates to focus on essential content in two classes for a shorter time period. When possible, MU delivered two inter-related courses concurrently (e.g. Tier 1 and Tier 2 Behavior Interventions course with Functional Behavior Assessment course). Faculty determined the length of each course (5, 6 or 8 weeks) based on content and complexity of assignments. Unlike the traditional licensure program, LEAP courses met in the summer with brief or no breaks between sessions.

Creating access

All LEAP classes met from 5:00 p.m. – 8:30 p.m. on the same days of the week throughout the program (e.g. Tuesday and Thursday). Consistency enabled working adults to plan for family and childcare responsibilities far in advance. LEAP courses included two 3.5-h lessons per week (one asynchronous module and one in-person or synchronous meeting) with weekend due dates for most assignments. Faculty's experience teaching online during the COVID-19 pandemic bolstered their confidence in delivering content asynchronously and synchronously and supervising field experiences virtually. Faculty taught 50% of classes' in-person in RSD's geographic location to build rapport and a sense of belonging at MU.

Due to the cost and challenge of obtaining textbooks for shortened courses, most LEAP instructors used online readings from professional research-to-practice journals and highquality videos from reputable sources (e.g. CEEDAR Center) instead. For several courses, online versions of textbooks were made available to candidates free of charge through MU's library, providing easy access to materials required for assignments. For courses requiring

| PDSP 19,1 | Traditional licensure program course sequence | LEAP course sequence |
|---|--|---|
| 10,1 | Six 16-week semesters, 5–6 classes/semester, no summer courses <i>Pre-professional semester (1)</i> - Reading–writing methods, general education | Ten dynamic sessions, 5–8 weeks each, two classes per session, required summer courses <i>First session (6 weeks, spring)</i> - Collaboration, communication and co-teaching |
| 58 | Multi-tiered systems of support/Interventions Assessment in SE Multi-cultural methods course Human development Field experience (100 observation hours) Professional semesters (4) Elementary grades, mild disabilities focus Reading-writing methods in SE Math methods in SE Assessment in SE Professional practice (IEP writing, legal aspects) Field experience (20 full days, elementary | Multi-tiered systems of support/Interventions Second session (6 weeks, spring) Introduction to SE (online modules) Math methods in SE Professional practice (IEP writing and legal aspects) Field experience (8 days, elementary resource) Third session (8 weeks, spring) Reading-writing methods, general education Reading-writing methods in SE Field experience (8 days, elementary resource) Fourth session (5 weeks, summer) Assessment in SE |
| | resource) <i>Middle-secondary grades, mild disabilities focus</i> Middle-secondary academic methods in SE Collaboration and co-teaching Tier 1 and 2 behavior interventions Transition assessment and planning Instructional technology Field experience (20 full days, middle/secondary resource-co-teaching) <i>Moderate-severe disability focus (any grade/age)</i> Assistive technology in SE Methods for students with autism, moderate-severe disabilities Behavior interventions (Tier 3 and SE), FBAs, and BIPs History or Philosophy of education Capstone (preparing for student teaching) Teacher performance assessment preparation Field experience (20 full days, any grade, students with moderate-severe disabilities) Student teaching (full semester or two 8-week placements) | Human development Fifth session (5 weeks, summer) General Education electives as needed Tier 1 and 2 behavior interventions Behavior interventions (Tier 3 and SE), FBAs, and BIPs Sixth session (8 weeks, fall) Middle-secondary methods in SE Transition assessment and planning Field experience (8 days, middle-secondary resource or co-taught) Seventh session (8 weeks, fall) Methods for students with autism, moderate-severe disabilities Assistive technology in SE Field experience (8 days, students with moderate-severe disabilities) Eighth session (8 weeks, spring) Instructional technology Capstone (preparation for student teaching) Teacher performance assessment preparation Ninth session (10 weeks, spring): Student teaching |
| Table 2.Traditional and thelicensed educatoraccelerated pathwaylicensure coursesequence | Note(s): LEAP = Licensed Educator Accelerated Pa behavior assessment; BIP = behavior intervention plan Source(s): Table created by authors | |

textbooks, LEAP faculty and the completion coach helped participants locate affordable options.

Advising support

Many candidates entered LEAP without recent college coursework or with limited experience with online programs. To provide concierge advising and support, MU hired a "completion coach", a retired director of special education (Essential #9, Resources and Recognition,

NAPDS). During recruitment, the completion coach played a traditional advisor role, reviewing transcripts and assisting participants with the admissions process. Initially, LEAP candidates met with the "completion coach" every other week for individualized support. The completion coach's other tasks evolved over time and included: a) teaching technology use for online course platforms and navigation of MU websites (e.g. how to check schedules, grades, transcripts, etc.), b) coaching in professional communication, c) building prior learning assessment portfolios and writing reflections and d) teaching test-taking skills and leading licensure examination study sessions. Unlike students in alternative programs, some of whom "did not know who their assigned mentors were" (Zeichner & Schulte, 2001, p. 270), candidates in LEAP always had their completion coach available as a resource, even once classes ended.

These strategies aimed to improve paraprofessionals' self-efficacy (Mason *et al.*, 2021), which in turn may influence retention. Candidates also needed assistance locating courses that met their general education requirements. One faculty champion and the completion coach developed a spreadsheet showing where paraprofessionals could take those courses online. Finally, the completion coach served as a liaison between district and university course instructors when concerns arose regarding students' performance and professionalism.

Ensuring course quality

MU faculty ensured that compressed LEAP courses met the same professional teaching standards as the traditional 16-week courses, re-examining course objectives, identifying areas of "driff" or misalignment of content, activities, assignments and objectives in traditional courses, improvements that also enhanced the traditional program. This occurred in collaboration with RSD faculty and administrators who recommended specific ways course content needed realignment (Muniz, 2020). Many faculties participated in MU course-redesign workshops and collaborated with program peers who taught an inter-related course. Workshops often carried a stipend for faculty and instructors who updated their materials, reorganized course websites and learned online engagement strategies and revised assignments and rubrics. To support LEAP candidates, MU personnel developed a standardized course shell and syllabus template. With these tools, candidates recognized course organization immediately, eliminating confusion.

To further enhance LEAP participants' learning, MU asked RSD to recommend teachers and administrators that were then hired as instructors. This led to boundary-spanning roles (Essential #8, NAPDS) and sharing of resources (Essential #9) as RSD personnel began teaching in higher education. For example, RSD personnel taught "the individualized educational program (IEP) class", in which candidates wrote parts of an IEP for a case student in the district. District personnel used their districts' policies and procedures in course content and provided LEAP candidates with access to the district's electronic IEP systems, something MU faculty could not do. The result was deeper learning for LEAP candidates and stronger district-university ties.

Belonging

MU personnel reordered the traditional course sequence so LEAP candidates had their first classes with highly supportive and engaging instructors. These purposefully-selected instructors that understood the challenges of university coursework for working adults made strong connections with students and encouraged belonging. LEAP's cohort model, characteristic of successful licensure programs (Zeichner & Schulte, 2001) also helped candidates develop a sense of belonging as they supported one another and shared resources.

MU faculty and the completion coach worked with candidates to develop their professional dispositions and a sense of belonging in the MU licensure program. When working as paraprofessionals, candidates had not been encouraged to advocate for themselves. Working long-term in paraprofessional roles resulted in some of them waiting for direction or supervision rather than taking initiative. Consequently, some questioned their ability to complete coursework, had difficulty in asking for assistance and needed a sense of belonging in professional positions. MU instructors and the completion coach facilitated this transition through group activities with rotating leadership roles and practice instruction conducted online by candidates.

Because the cohort was quite diverse, misunderstandings related to communication style and vocabulary used in discussing students and coursework sometimes arose. Some LEAP paraprofessionals had worked with diverse students but had never collaborated with Black or Hispanic teachers or paraprofessionals. Instructors led cohort members in open conversations addressing cultural differences and advantages of understanding diverse perspectives when problem-solving. Having those experiences in LEAP enriched candidates' experience and revealed individual biases of which they were previously unaware and deepened their understanding of culturally-responsive instruction (Zeichner, 2003).

Within-district field experiences

Past reports on alternative programs identified lack of supervised field experiences as problematic and potentially leading to attrition of teachers (Carver-Thomas & Darling-Hammond, 2017; Wojcik *et al.*, 2023). As a result, RSD and MU personnel planned for LEAP candidates to complete field experiences equivalent to those completed by traditional licensure candidates (Essential #2, Clinical Preparation; NAPDS, see Figure 1). Whereas traditional candidates completed 60 days total in three different special education settings for early field experiences, LEAP candidates completed eight days in four different settings (32 days total; see Table 3).

In the different field experience settings, LEAP candidates shadowed their cooperating teachers, sometimes teaching from their lesson plans but also creating and delivering their own lessons as part of methods course assignments. For example, four different methods courses required that candidates work with a case student from the field experience to collect data, plan and deliver lessons. Another course required that candidates conduct post-secondary transition assessments and write a transition plan for a case student in the field experience. An MU supervisor evaluated written lesson plans, observed at least one lesson that candidates planned and delivered and provided written and verbal feedback.

In addition to early field experiences, all LEAP candidates completed 10 weeks of student teaching as compared to 16 weeks for traditional candidates (see Table 3). LEAP candidates completed all assignments required of traditional student teachers including writing lesson plans, a functional behavior assessment and an IEP. During student teaching, MU supervisors reviewed written lesson plans, conducted three observations of LEAP candidates 'instruction and guided reflective conversations for feedback. Seven LEAP candidates teaching on provisional licenses completed student teaching in their own classrooms with additional RSD and MU supervisions. For the rest of the LEAP candidates, RSD either hired substitutes to fill their paraprofessionals' positions or arranged "job swaps" (i.e. paraprofessional and supervising teacher exchanged roles in classrooms where they worked). These arrangements eliminated the need for candidates to quit their jobs during student teaching and early field experiences.

After student teaching, 25 paraprofessionals accepted SE positions in their employing districts (89.7% completion rate). Of the LEAP completers, nine self-identified as Black, six as Hispanic and one as Asian. Seven were male. Because together RSD and the other

60

PDSP

19.1

| Program component | Traditional licensure program | Licensed educators accelerated pathway | LEAP in special |
|-------------------------------------|---|---|--|
| Early field experiences | Four early field experiences (60 days) 100 observation hours, any SE setting Elementary/mild disabilities and resource (20 days) Middle-secondary/mild disabilities, resource or co-teaching (20 days) Self-contained/moderate-severe disabilities (20 days) University personnel identify placements Data collection, lesson planning and video recording of lesson in each setting Feedback on lessons provided by university supervisor | Four early field experiences completed with assignments from aligned methods courses (8 days each, 32 days total)* Elementary/mild disabilities, resource and math Elementary/mild disabilities, resource and reading—writing Middle-secondary/mild disabilities, resource or co-teaching Self-contained/moderate-severe disabilities District personnel identify placements Data collection, lesson planning, video or real-time lesson observation each setting University supervisor reviews, observes lessons and provides feedback Participants use prior learning/work experience portfolio for university credit | education 61 |
| Student teaching | One semester (16 weeks) student teaching One placement, 16 weeks OR Two placements, 8 weeks each Students can continue student teaching in their third professional placement if approved by school and university University personnel identify student teaching placement in region requested by student | 10 weeks of student teaching – one placement only District personnel identify placement | |
| Course delivery | Average of five courses per semester (14–18 credits) In-person, on-campus classes during the day for undergraduates (university recommendation) Faculty determine modality for instruction: in-person, hybrid, synchronous, asynchronous or a combination Faculty determines due dates for assignments Faculty office hours most often during the day Monday through Thursday | Two courses (6–8 credits) each 5-, 6- or 8-week session Program set one in-person or synchronous meeting per week plus one asynchronous module per week All cohort courses met in the evening on same days of the week (Tuesday– Thursdays or Monday–Wednesday) Assignment due dates on Sunday afternoon or evenings to allow time for working adults Evening/weekend office hours and study sessions to address questions during nonwork hours for paraprofessionals | |
| Advising and student supports | One full-time department-level advisor for all undergraduate programs (caseload approximately 250 students) One meeting with advisor per semester to discuss and register for courses for following semester All other communication via email or university platforms Referral to university centers and organizations for study skills, writing, etc | One half-time dedicated LEAP advisor (caseload approximately 60 students) On-line meetings with individual students or | Table 3. |
| | P = Licensed Educator Accelerated Program dicates a feature of LEAP that differs from education | the traditional on-campus licensure program. | Comparison of traditional on-campus licensure and LEAP |

SE = special education Source(s): Table created by authors

licensure and LEAP program components

PDSP 19,1 participating districts employed more than 2,000 teachers, LEAP did not substantially impact the percentage of teachers of color in their respective workforces. However, the overall proportion of candidates with diverse backgrounds successfully completing the program (64%) was encouraging.

We now turn to a discussion of challenges RSD and MU encountered when designing and delivering LEAP and ways they partnered to resolve these issues. RSD and MU continue to reflect on these issues to improve LEAP and create a smoother pathway for paraprofessionals pursuing licensure in future cohorts.

Challenges and solutions for partners

District-level challenges

RSD personnel faced several challenges including funding LEAP, arranging field experiences and screening participants. LEAP initially was funded through federal COVID-19 pandemic dollars provided to address student learning gaps. However, Every Student Succeeds Act, Title I and IDEA revenues and state grants for teacher preparation offer potential funding streams (Podolsky *et al.*, 2016). Without state or federal revenues, it is unlikely that programs like LEAP can be delivered, particularly in small rural communities or under-resourced districts.

Next, RSD had difficulty in arranging for field experiences and hiring substitutes. Loss of paraprofessionals in the work settings negatively impacted students, supervising teachers and building principals, making collaboration among stakeholders critical for success. Originally, LEAP champions had not included building principals even though they were often responsible for arranging for substitute paraprofessionals and coordinating various job swaps for field experiences. In the swap model, candidates either exchanged roles with their supervising teacher or with another LEAP paraprofessional in the appropriate field experience setting (e.g. a high-school classroom assistant with an elementary classroom assistant). Including principals and directors of special education early in LEAP would have helped resolve challenges with coordinating field experiences (Essentials #2, #3 and #7).

Long-term, RSD personnel noted that upskilling current paraprofessionals to teaching roles exacerbated shortages of paraprofessionals. MU offered to send traditional licensure candidates to LEAP districts to fill paraprofessional roles either as paid employees or as clinical students. Districts also began recruiting new paraprofessionals from their high school graduates following state guidelines and revisiting their district policies. We recommend that partners consider the entire teacher pipeline, beginning with high school Future Teacher clubs, to avoid new shortages caused by shifting personnel, extending to practicing teachers who mentor those in their early careers.

An additional challenge related to LEAP candidates who were teaching on provisional licenses. In many cases, these individuals received little to no supervision prior to engagement with MU's field experience supervisors. Although some indicated that they had in-building mentors, others did not. This gap in guidance prompted RSD personnel to address the issue with their talent development team, building principals and directors of special education.

Finally, because LEAP was funded through time-restricted revenue sources, recruitment and screening of participants and planning were curtailed before classes began. Whereas the first LEAP cohort started within two months of the program's conception, planning and recruitment for the second LEAP cohort began more than a year prior to classes starting. Early screening and acceptance to GYOs allow time for paraprofessionals to communicate with their families, evaluate the impact of the GYO on their lives and make informed decisions about participation. District partners need sufficient planning time to include teachers and principals in the process, carefully identify participants and plan for field experiences and substitute coverage. Increasing building principal engagement, making clear to them LEAP's objectives, benefits and outcomes and inviting them to participate in planning has already benefited the program. University partners also benefit from sufficient time to review transcripts and interview candidates.

University level

MU experienced several challenges when delivering LEAP to the first cohort, requiring reflection and innovation. First, because time to screen paraprofessionals prior to LEAP's start was limited, many candidates began the program with gaps in their coursework. To obtain an undergraduate degree at MU, students complete more than 30 credits distributed across general education courses (e.g. English, math and science). Candidates completing LEAP as post-baccalaureates (n = 12) or with certain associate degrees (n = 8) had fulfilled these general education requirements already. The rest of the LEAP candidates had to either obtain transfer credit for similar courses taken at other institutions or complete general education courses concurrently with licensure classes. With early screening, candidates learned of these general education requirements and in some cases were advised to wait for a later LEAP cohort. When informed of additional general education courses needed, many paraprofessionals opted out of LEAP after the first informational meeting with MU. For those who decided to move forward despite the additional general education classes, the completion coach and LEAP faculty located online general education courses through area community colleges. RSD agreed to pay for these general education courses, reimbursing LEAP candidates for their tuition once they passed the course. However, the load of taking general education courses along with licensure courses was an unexpected but avoidable situation. Advising paraprofessionals who are strong candidates for licensure early in their employment about community college courses to take to prepare for a licensure program is critical to long-term planning. Those who did not enter LEAP's first cohort received a list of courses to take at area community colleges to prepare for the next cohort.

MU also encountered difficulties in accepting transfer credits from other institutions. With articulation agreements with MU, courses could be accepted for transfer credit relatively simply. Without an articulation agreement, however, candidates had to obtain the course syllabus and submit it for review and approval by specific MU departments (e.g. English, Political Science, Biology, etc.). LEAP faculty and MU's admissions officials collaborated to streamline the transfer course approval process. Though not directly the result of LEAP, admissions personnel revised policies and procedures, reducing the number of transfer courses requiring full reviews. For future cohorts, MU's new process eliminates labor-intensive syllabus review.

Finally, most LEAP paraprofessionals had extensive work experience that fulfilled field experience or specific course requirements. Due to state licensure requirements, MU faculty preferred that specific courses appear on LEAP participants' transcripts. MU's special education faculty created a one-credit hour course, *Prior Learning Assessment Portfolio* to assign transcript credit for work/life experiences. For the prior learning assessment, paraprofessionals, in collaboration with the completion coach, developed a portfolio showing evidence from their work experience aligned with specific courses. MU faculty reviewed the portfolios with a rubric, comparing evidence to course objectives (rubric available from first author) and where appropriate, assigned course credit. This new process not only required agreement of SE program faculty but also a curricular change through the university system. These institutional challenges resolved many issues in anticipation of the next LEAP cohort. However, more needs to be done to prepare paraprofessionals as potential licensure candidates.

LEAP in special education

PDSP Planning for paraprofessional advancement

Successful GYOs like LEAP depend on identification and recruitment of appropriate candidates for licensure programs. We recommend that this process begin as soon as districts note that individuals have an interest in and positive dispositions for teaching. This process can begin well before paraprofessionals are employed with their districts. Partners can collaborate to begin recruiting candidates as early as their high school years. Starting Future Teacher clubs make it possible to recruit high school students who can enter paraprofessional roles as soon as they are eligible. Allowing them to volunteer in special education clubs and classrooms helps high school students develop an understanding of and passion for working with students with disabilities.

Further, GYO personnel can make long-range plans for promising paraprofessionals as early as their first year of employment. The Individuals with Disabilities Education Act (IDEA, 2004) requires that districts provide training and meaningful professional development for their paraprofessionals. Paraprofessionals' professional development activities can focus on steps leading to licensure (e.g. tasks related to teaching roles, data collection and analysis, etc.) including courses at community colleges in preparation for eventual entry into licensure classes.

Districts can also assist promising candidates to develop an understanding of teaching and a professional mindset while they are still paraprofessionals (Delgado, Baese, & Hauptman, 2021). Many LEAP candidates worked primarily in the self-contained settings or as one-on-one aides for individual students under the close supervision of SEs (Karge *et al.*, 2011). LEAP candidates were unaware that resource services and co-teaching were SE roles, demonstrating a relatively weak understanding of SE roles and responsibilities (Mason *et al.*, 2021). Like paraprofessionals in focus groups conducted by Mason and colleagues, most LEAP candidates had never read an IEP, seen how IEPs were co-constructed by teams of service providers or observed an IEP meeting. Experiences like these would better prepare paraprofessionals for GYO participation.

Finally, many LEAP candidates had learned to wait for direction from supervising teachers, making it challenging for them to step into leadership roles even in MU classes. Mason *et al.* (2021) reported that both SEs and paraprofessionals were unclear about roles and responsibilities of the latter. Paraprofessionals reported receiving little training on how to work with students as part of their job assignments, and SEs had little training in paraprofessional management (Karge *et al.*, 2011; Mason *et al.*, 2021). These factors may have negatively impacted LEAP candidates' self-efficacy (Mason *et al.*) and willingness to advocate for themselves and take leadership roles. Training for paraprofessionals to advance not only their knowledge and skills but also their leadership responsibilities may enhance their self-efficacy (Mason *et al.*) and effectiveness as future teachers. These factors in turn may lead to greater SE retention and improved student outcomes.

Final thoughts

Despite "building the plane while we flew it," our GYO program successfully prepared 25 SE, more than 50% of whom self-identified as Black or Hispanic. All passed their state licensure examination and completed student teaching. Subsequently, candidates filled positions and reduced SE vacancies in their sponsoring districts. While the true test of these SEs' success will be measured by their teaching effectiveness and longevity in the field, we believe GYOs like LEAP have the potential to address critical shortages. Further, their retention depends in part on the mentoring and induction they receive as early-career teachers, something that RSD and MU continue to discuss during collaborations. Future cohorts of programs like LEAP will benefit from action steps district-university partners can take prior to launching coursework.

19.1

First, district-university partners should consider how to provide meaningful, differentiated professional development for paraprofessionals interested in pursuing teacher licensure. Paraprofessionals have limited time to learn about or read IEPs or learn curriculum used with students with whom they worked (Mason *et al.*, 2021). Training paraprofessionals received was undifferentiated and often repetitive (i.e. repeatedly covering same topics; Mason *et al.*). District-university partners can collaborate to provide explicit training that enhances paraprofessionals' understanding of effective pedagogy and special education more broadly (i.e. beyond disability classifications). Training in knowledge and skills relevant to their roles and authentic, on-going practice with feedback prior to entry into licensure programs not only enhance paraprofessionals self-efficacy and role performance (Mason *et al.*, 2021) but also increase their interest in teaching as a long-term career choice. Differentiated training for paraprofessionals creates a within-district scaffold for future teachers. District-university partners can deepen their collaboration to design and deliver this professional development and advising for paraprofessionals.

Second, paraprofessionals benefit from explicit understanding of their own roles and responsibilities and those of SEs (Mason *et al.*, 2021). This understanding may help paraprofessionals transition from their supporting role to the lead SE role; however, both paraprofessionals and SE teachers noted a lack of clarity about roles and responsibilities or what training paraprofessionals might need (Karge *et al.*, 2011; Mason *et al.*). In working to assist in conversations about roles and responsibilities, districts can recruit university faculty as neutral parties to engage with teachers, paraprofessionals and administrators. Further, university supervisors and faculty can incorporate more content related to leading and supervising paraprofessionals in coursework (Karge *et al.*).

Finally, GYOs produce new teachers "from the community, for the community" (Muniz, 2020), but more empirical studies are required focused on their retention rates and impact on diversification of teacher workforce. Research showing whether paraprofessionals from GYOs remain in their special education positions and districts as long or longer than those taking other licensure routes is needed to support future investment in programs like LEAP. Current efforts to retain LEAP candidates in their positions mirror those for other RSD SE. This includes a global induction program, procedural coach support in each building in the district, access to monthly in-person trainings on IEP writing and compliance as well as numerous asynchronous and in-person trainings (e.g. curriculum, data collection, behavior interventions, etc.). LEAP candidates teaching in self-contained settings have an assigned mentor, and resource teachers rely on procedural coaches and informal mentoring relationships with other SEs.

Given that the field of special education continues to evolve, the students benefit from highly qualified diverse SE teachers that are connected and committed to their home communities as well as teachers of color. LEAP and similar GYO initiatives have the potential to bring effective highly qualified and diverse SEs to under-served students.

References

Banerjee, N. (2017). Student-teacher ethno-racial matching and reading ability group placement in early grades. *Education and Urban Society*, 51(3), 395–422. doi: 10.1177/0013124517721948.

- Bettini, E., Nguyen, T. D., Gilmour, A. F., & Redding, C. (2022). Disparities in access to well-qualified, well-supported special educators across higher-versus lower-poverty schools over time. *Exceptional Children*, 88(3), 283–301. doi: 10.1177/00144029211024137.
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of literature. *Review of Educational Research*, 89(5), 697–744. doi: 10.3102/0034654319862495.

| PDSP 19,1 | Brendli, K., Taylor, J. P., Scott, L. A., Hobson, J., Powell, C., & Ruiz, A. (2022). Won't stop, can't stop: Alternative route to licensure in special education teachers' persistence in their careers. <i>Journal</i> of Education and Learning, 11(6), 76–85. doi: 10.5539/jel.v11n6p76. |
|--------------|---|
| | Brownell, M. T., & Sindelar, P. T. (2016). Preparing and retaining effective special education teachers: |

- Brownen, M. 1., & Sindelar, P. 1. (2016). Preparing and retaining effective special education teachers: Systemic solutions for addressing teacher shortages. EdPrepMatters, available at: https:// edprepmatters.net/2016/03/preparing-and-retaining-effective-special-education-teacherssystemic-solutions-for-addressing-teacher-shortages/
- Carver-Thomas, D., & Darling-Hammond, L. (2017). Why Black women teachers leave and what can be done about it. In A. Farinde-Wu, A. Allen-Handy, & C. W. Lewis (Eds.), *Black female teachers: Advances in race and ethnicity in education* (Vol. 6, pp. 159–184). Emerald Publishing Limited.
- Cherng, H. Y. S., & Halpin, P. F. (2016). The importance of minority teachers: Student perceptions of minority versus white teachers. *Educational Researcher*, 45(7), 407–420. doi: 10.3102/ 0013189X16671718.
- Delgado, L., Baese, K., & Hauptman, A. (2021). A pathway to teaching for paraprofessionals of color. *Phi Delta Kappan*, 103(3), 17–21. doi: 10.1177/00317217211058508.
- Epanchin, B. C., & Wooley-Brown, C. (1993). A university-school district collaborative project for preparing paraprofessionals to become special educators. *Teacher Education and Special Education*, 16(2), 110–123. doi: 10.1177/0888406493016002.
- Fish, R. E. (2019). Teacher race and racial disparities in special education. Remedial and Special Education, 40(4), 213–224. doi: 10.1177/0741932518810434.
- Gershenson, S., Hart, C., Hyman, J., Lindsay, C., & Papageorge, N. W. (2018). *The long-run impacts of same-race teachers*. National Bureau of Economic Research. NBER Working Paper No. 25254. Available from: https://www.nber.org/system/files/working_papers/w25254/w25254.pdf
- Illinois State Board of Education (n.d.). Illinois report card. Available from: https://www. illinoisreportcard.com/Default.aspx
- Individuals with Disabilities Education Improvement Act. (2004). 20 U.S.C. x 1400.
- Ingersoll, R., & May, H. (2011). Recruitment, retention and the minority teacher shortage. Consortium for Policy Research in Education Report. Available from: http://www.cpre.org/recruitmentretention-andminority-teacher-shortage
- Irwin, V., Wang, K., Tezil, T., Zhang, J., Filbey, A., Jung, J., ... Parker, S. (2023). Report on the condition of education 2023 (NCES 2023-144rev). Washington, DC: National Center for Education Statistics: U.S. Department of Education. Available from: https://nces.ed.gov/pubsearch/ pubsinfo.asp?pubid=2023144rev
- Karge, B. D., Pierson, M., & Robinson, S. (2011). Alternative certification teachers: Building partnerships with paraprofessionals. *Journal of the National Association for Alternative Certification*, 6(2), 3–10. Available from: https://files.eric.ed.gov/fulltext/EJ1053489.pdf
- Mason, R. A., Gunersel, A. B., Irvin, D. W., Wills, H. P., Gregori, E., An, Z. G., & Ingram, P. B. (2021). From the frontlines: Perceptions of paraprofessionals' roles and responsibilities. *Teacher Education and Special Education*, 44(2), 97–116. doi: 10.1177/0888406419896627.
- Muniz, J. (2020). Investing in grow your own teacher programs: Leveraging state-level competitive grants to promote quality. New America. ERIC Number: ED609158, Available from: newamerica.org/ education-policy/reports/investing-grow-your-own-teacher-programs/ (accessed 13 August).
- National Association for Professional Development Schools (2021). What it means to be a professional development school. In *The nine essentials* (2nd ed.), [Policy statement]. Available from: www.napds.org
- 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.
- Rennells, M. S., Sindelar, P. T., & Austrich, C. (1997). Volusia County/University of Florida collaborative training program case study. Gainesville, FL: University of Florida, Department of Special Education, Project SEART-C (Technical Rep. No. 8).

- 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. doi: 10.1177/0013124517719971.
- Sindelar, P. T., Rennells, M. S., Daunic, A., Austrich, C., & Eisele, M. (1999). Systematic evaluation of alternative routes to teaching competence: Project SEART-C final report. Gainesville, FL: Center for School Improvement (Technical Rep. No. 10).
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives*, 27(35), 35. doi: 10.14507/epaa.27.3696.
- Taie, S., & Lewis, L. (2022). Characteristics of 2020–21 public and private K–12 schools in the United States: Results from the national teacher and principal survey first look (NCES 2022-111).
 Washington, DC: National Center for Education Statistics: U.S. Department of Education. Available from: https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2022111
- White, R. (2004). The recruitment of paraprofessionals into the special education profession: Review of progress, select evaluation outcomes, and new initiatives. *Remedial and Special Education*, 25, 214–218.
- Wojcik, A. J., Hicks, M., Scott, L. A., Thoma, C. A., Bowman, R. W., & Frazier, R. (2023). A comparison of service time and racial categories with traditional and alternative route internship programs for special education licensure. *Teacher Education and Special Education*, 46(2), 162–177. doi: 10.1177/08884064221119166.
- Zeichner, K. M. (2003). The adequacies and inadequacies of three current strategies to recruit, prepare, and retain the best teachers for all students. *Teachers College Record*, 105(3), 490–519. doi: 10. 1177/016146810310500307.
- Zeichner, K. M., & Schulte, A. K. (2001). What we know and don't know from peer-reviewed research about alternative teacher certification programs. *Journal of Teacher Education*, 52(4), 266–282. doi: 10.1177/0022487101052004002.

Further reading

- American Association of Colleges for Teacher Education (n.d.), Washington, DC. Available from: https://edprepmatters.net/2016/03/page/2/
- Carver-Thomas, D. (2017). Diversifying the field: Barriers to recruiting and retaining teachers of color and how to overcome them. Literature Review. In *Equity Assistance Center Region II*. Intercultural Development Research Association. Available from: https://flesericedgov/fulltext/ ED582730pdf
- U.S. Department of Education (2022. Teacher shortage areas. Available from: https://tsa.ed.gov/ #/reports

Corresponding author

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com LEAP in special education