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Reimagining Educator Preparation through Innovative Programming and Partnerships

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ABSTRACT

Across the United States, Pre-kindergarten through 12th-grade (Pre-K–12) classrooms are facing a certified educator shortage due to teacher attrition and/or individuals not pursuing a teacher education degree, particularly educators who provide direct instruction to students in special education, bilingual education, and English as a second language (ESL). Today, more than ever, educator preparation programs (EPPs) are called to action to mitigate the teaching shortages; however, they must utilize innovative programming and collaborative partnerships with school districts to overcome these challenges. The advantages of EPPs becoming increasingly nimble in the delivery of program pathways allow for continuous improvement in university-level systems (e.g., application processes, advising), college/program-level systems (e.g., course offerings, advising, wraparound supports), and district-level systems (e.g., eligibility criteria, professional development, sustained mentorship). This article focuses on how one EPP in the southern region of the United States reimagined their educator preparation pathways through innovative educator on-ramps to better support the needs of incoming students aiming to become a degreed and certified educator. Recommendations on how EPPs could consider implementing innovative preparation pathways and collaborating with school districts to prepare future teachers are discussed.

Keywords: Adult Learner; Collaboration; Competency-Based Education; Educator Preparation; Grow Your Own; Partnerships

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1. Introduction

The U.S. education system stands at a critical inflection point, marked by a persistent and widening gap between the demand for qualified teachers and the declining supply of individuals entering the profession. Over the past several decades, the number of college students completing education degrees has fallen dramatically from nearly 200,000 in the 1970s to fewer than 90,000 by 2018–2019, with a further 2.5% decrease in undergraduate enrollment in teacher preparation programs for the 2024–2025 academic year[1, 2]. This decline reflects not only waning interest in teaching as a career but also growing apprehension about the profession's increasing accountability pressures, expanding workloads, and limited institutional supports[3, 4]. As expectations for instructional quality intensify, teacher recruitment and retention challenges have converged to form a self-perpetuating cycle of scarcity: fewer entrants to the field, higher rates of attrition, and greater strain on those who remain[5, 6]. After the 2022–2023 academic year, roughly 30% of novice teachers (those with fewer than three years of experience) left their schools along with 26% of teachers in their mid-career stages[7], with additional educators transferring schools, creating widespread instability across districts[8]. Research has identified that overall attrition rates now exceed 8% annually, with identified interconnected contributors including low salaries[9], diminished public regard for teaching[10], limited access to resources[11], and high occupational stress[12, 13]. These systemic pressures underscore the urgent need for EPPs (Educator Preparation Program) and school–university partnerships to strengthen the teacher pipeline through comprehensive induction models, equitable compensation, and inclusive preparation that empowers educators to serve diverse learners effectively[14, 15]. In the context of the teacher shortages, flexible and responsive pathways that support modern learners, such as "Grow Your Own (GYO)" initiatives, alternative certification routes, and hybrid learning formats, have become essential to addressing workforce needs[16, 17]. Developing sustainable systems to recruit, prepare, and retain adult learners in teacher education not only diversifies the profession but also offers a promising strategy to stabilize and strengthen the teaching workforce nationwide.

1.1. Teaching Shortages

Overwhelmingly, across the United States, teacher shortages exist in specialized areas such as special education, bilingual education, and English as a Second Language (ESL). Special education, specifically, has been the nation's largest teacher shortage area as early as the 1990's[18–20]. Meanwhile, bilingual and ESL teaching areas have ranked in the top five most scarce for the last 20 years[19, 20]. Further exacerbating the already dire situation, the population of English Learners in the United States has increased by 40% since 2000, impacting more than five million Pre-K–12 students. Due to the shortage of credentialed teachers for these critical teaching areas, approximately 55% of schools nationwide reported difficulty in finding certified special education teachers and a startling 23% of vacant positions were filled by uncertified teachers[19, 20]. Additionally, 25% of vacant bilingual and/or ESL positions were filled by uncertified teachers with many working in high-minority schools with students who live in low-socioeconomic status[19, 20]. In the 2024–2025 academic year, for example, more than 400,000 teaching positions nationally were either unfilled or filled by teachers that were not fully certified[19, 20]. These reports are disconcerting for school districts because a major contributing factor is that there is a general lack of qualified candidates for these positions. The areas that are most deeply impacted are schools that are found in rural areas and serve high percentages of racially and ethnically diverse students.

In the State of Texas, the Texas Education Agency (TEA) has designated bilingual, ESL and special education as critical shortage areas[21]. Like the efforts to fill these critical teaching areas at the national level, Texas has turned to hiring uncertified teachers, with nearly 40% of new teaching hires being uncertified[21, 22]. Unfortunately, hiring uncertified teachers is not a long-term solution to the teacher shortage issue because this can contribute to teachers leaving the classroom sooner due to under-preparation. The overall impact of placing uncertified teachers in special education, bilingual, or ESL classrooms is detrimental to student learning and systemic equity[23]. An uncertified teacher enters the classroom with an overall lack of pedagogical content knowledge and comprehensive classroom training in comparison to certified teachers that have received training through

an educator preparation program. As a result of the lack of training, a student taught by and uncertified teacher can expect to experience significant learning loss, equivalent to approximately a three-month learning loss in math and a four-month learning loss in reading when a student is taught by an uncertified teacher with no prior classroom experience [23]. Unfortunately, this loss in learning compounds over time, making it significantly harder for these students to catch up and become a critical junction for students that may already be struggling, such as those that receive special education services [23].

What sets apart a certified teacher in comparison to one who is uncertified is knowledge of foundational teaching practices such as differentiated instruction, content scaffolding, and assessment. For students who are classified as Emergent Bilingual, this means reduced access to culturally and linguistically responsive instruction, an essential component for literacy and content mastery. Similarly, the impact for students with disabilities is considerably more severe because having an uncertified teacher compromises the students' rights under the Individual with Disabilities Education Act [24], which guarantees the student a Free Appropriate Public Education (FAPE). Essentially, a school district that is relying on an uncertified teacher to provide services to students with disabilities is delaying or outright denying services to students with disabilities. Additionally, early intervention is a hallmark proven intervention for students with disabilities and uncertified teachers are not trained to recognize early warning signs of learning disabilities in the early grades to administer screen instruments in a timely manner, contributing to the underdiagnosis of learning disabilities like dyslexia [23].

Like the students that are most impacted by the lack of certified teachers, many of the most vulnerable schools are also affected. Staffing shortages and reliance on uncertified teachers are not equally distributed. Unfortunately, high poverty, high-minority, and rural schools are those that are disproportionately affected by certified teacher shortages. As a result, students who are already facing marginalization ore these students that are likely to receive instruction from and an uncertified teacher [25, 26]. Further, hiring uncertified teachers creates a self-perpetuating cycle of instability and high turnover within the school system. Uncertified teachers leave the field at two to three times the rate of teachers prepared through EPPs [26]. High attrition leads to a continuous classroom disruption for already vulnerable schools and student populations preventing the development of stable and collaborative school cultures. Finally, when a large number or uncertified teachers are hired, there is an undue burden on veteran, certified teachers to absorb the responsibility of mentorship while also attempting to manage their teaching load. These veteran teachers are called upon to provide training to compensate for their underprepared colleagues, contributing to burnout and attrition of experienced staff [27].

1.2. Educator Preparation Programs (EPPs)

The longevity and impact of EPPs rely heavily on student recruitment and degree pathways that can accommodate the many different types of students that universities encounter. For example, the recruitment of diverse and qualified EPP students can rely heavily on students who enroll directly from high school (i.e., First-Time-in-College, FTIC) and those who enter a four-year institution after attending community college (transfer students). While these two very different populations of potential students have various assets, they can also both experience barriers that may impact their success in an EPP.

1.2.1. First-Time-in-College

Students who are classified as FTIC are students that begin their postsecondary journey immediately following high school and represent the "traditional route" of matriculation through an EPP. Teachers who graduate from comprehensive, four-year programs are more likely to be retained in the profession after five years in comparison to those from alternative routes [26]. Therefore, extended time in a program for FTIC students allows for a deeper understanding of the hidden curriculum of a program, including navigating the demanding certification requirements [2]. FTIC students have immediate access to institutional resources, but the transition to college-level academics and forming a professional identity within the framework of an EPP can create a unique set of challenges, especially for first-generation students.

FTIC students often balance rigorous coursework in a variety of courses and field-based experiences, which demands a high level of organization and time management. For some FTIC students, the sudden level of rigor and volume of university work could lead to early academic struggles [28].

FTIC students may also have a difficult experience managing university-level writing expectations, fulfilling paper length requirements for coursework, and learning to use appropriate academic evidence are often reported as barriers [29]. Therefore, the success of an FTIC student often requires more than baseline academic ability, but rather an added layer of early socialization into the profession and mastery of pedagogical content through a sustained, multi-year exposure to the specific curriculum of an EPP, faculty, and field-based experiences. FTIC students who are also first-generation college students (FGCS) are students whose parents or guardians have not earned a bachelor's degree and often come from lower socioeconomic backgrounds [30]. This subset of students can face amplified challenges that may impact their overall trajectory towards a teaching career. While learning to navigate the hidden curriculum of the university is often a strength for FTIC students, it is an area of struggle for FGCS due to a lack of cultural capital or the unspoken knowledge of academic norms, bureaucratic processes, and faculty interaction that other FTIC students possess [31]. Additionally, FTIC students who are also FGCS could experience imposter syndrome and anxiety, financial pressures, work demands, family guilt, and isolation [32–34]. Due to the challenges related to FTIC students, it is extremely important for EPPs to be prepared to support this specific subset of students.

To maximize the potential success of any FTIC student in the EPP pipeline, it is critical to implement intentional, asset-based support strategies that include targeted transition programs, integrated mentoring and advising, and financial and clinical support. EPPs should be prepared to offer robust evidence-based programs that are mandatory first-year seminars, courses, or summer transition experiences that introduce students to the hidden curriculum of the university. Comprehensive peer mentoring programs specifically tailored to FTIC student can also serve as a conduit to improve a sense of belonging and academic preparedness [35]. Integrated mentoring and advising should also be at the forefront of planning. Proactive advising measures should be implemented to demystify the hidden curriculum of the. University by explicitly teaching students how to approach faculty, utilize campus resources, and prepare for high-stakes certification exams [2]. Finally, EPPs must advocate for increased financial assistance in the form of stipends or scholarships to aid in offsetting the costs of field experiences, particularly student teaching. By reducing the financial burden for FTIC students, EPPs will directly address a major barrier preventing low-income FTIC students from persisting in the program [26].

1.2.2. Transfer Students

Transfer students can be a unique, untapped stream of future educators. Transfer students, oftentimes, work full or part-time, and are more likely to be FGCS from lower-income families [36]. A primary barrier for transfer students is credit loss during the transfer process (on average, 13 semester credit hours or SCH) [37]. That equates to the student being required to take more classes, which can cause a significant financial burden and increase the time to degree for these students; ultimately, slowing down their entry into the teaching workforce. Furthermore, transfer students who are older and holding full or part-time jobs have a difficult time becoming involved in student organizations and have fewer interactions with faculty and/or peers. Because social integration is a key factor in predicting first-year success [38], creating ways for transfer students to become involved is critical to long-term positive outcomes.

Typically, many four-year institutions of higher education focus heavily on supporting FTIC students and dedicate an abundance of resources to that population [39], therefore, identifying resources specifically focused on supporting transfer students could be a critical step in ensuring degree completion and successful integration into the workforce. Transfer students often enter the four-year university experience with unique assets that include extensive work experience and diversity in comparison to FTIC students [40]. The implementation of intentional strategies such as streamlined articulation pathways, targeted supports, clear advising structures, and opportunities to bring in credit for prior learning can support transfer students to ensure that credits can seamlessly apply to the EPP degree requirements and not extend the time to graduation [2, 41]. Additionally, the creation of transfer-specific learning communities or first-year experience programs for transfer students can significantly improve both social and academic integration and has been found to be crucial for persistence through EPPs [42, 43]. Finally, advising structures can be confusing and inconsistent, therefore, ensuring timely access to detailed information related to transfer qualification and matriculation pathways is essential. Insufficient advising support is one of the most common

hurdles for the transfer student population [44, 45]. As EPPs strengthen pathways for transfer students, collaboration with school districts becomes an equally critical component in supporting a sustainable teacher pipeline. By aligning recruitment, field experiences, and induction supports with district needs, higher education institutions and K-12 partners can create cohesive, locally responsive systems that both attract and retain a diverse pool of teacher candidates.

1.2.3. School District Collaboration and the Teacher Pipeline

Effective collaboration between EPPs and school districts is essential to addressing persistent teacher shortages and ensuring a more stable, well-prepared workforce. Research consistently highlights that partnerships bridging higher education and Pre-K–12 systems can improve both teacher quality and retention by aligning coursework with the authentic demands of classroom practice [46, 47]. When school districts and universities co-design clinical experiences (i.e., teacher residencies and apprenticeships), mentorship structures and induction supports, new teachers enter the profession with a clearer understanding of their local contexts and greater confidence in their instructional skills [48]. Collaborative models such as professional development schools, teacher residency programs, and "Grow Your Own" pathways, also facilitate continuous feedback loops between universities and districts, leading to curricula that are more responsive to evolving student and community needs [49, 50].

School–district partnerships are particularly critical for adult learners and nontraditional teacher candidates, who often balance academic study with full-time employment or family responsibilities. District-based preparation models offer these candidates flexible pathways, such as paid residencies, evening coursework, and hybrid or competency-based programs [16, 17]. These arrangements not only expand access to teacher certification for individuals historically excluded from traditional programs but also strengthen the district's workforce pipeline by cultivating teachers who are already embedded in their local communities [51, 52]. Adult learners in such collaborative programs tend to demonstrate higher persistence and stronger initial performance than peers in more fragmented or isolated certification routes [53]. Thus, intentional collaboration between EPPs and school districts can serve as a mutually beneficial strategy supporting both workforce diversification and long-term teacher retention. Moreover, sustained partnerships between universities and districts promote professional learning ecosystems that extend beyond initial licensure. Jointly developed induction programs, co-mentoring models, and shared professional development initiatives help teachers build ongoing expertise while maintaining connections with both academic and practitioner communities [13, 54]. These collaborations also enhance data-sharing and accountability practices, allowing both institutions to track teacher effectiveness, attrition, and career advancement in more systematic ways [50]. As the teaching profession continues to evolve amid demographic shifts and labor shortages, these cross-institutional networks represent a critical mechanism for cultivating a stable, adaptive, and equity-driven educator workforce.

1.3. Expanding Teacher Pathways through Innovation and Flexibility

Traditional EPPs have long served as the cornerstone of teacher development in the United States, offering structured, university-based pathways that combine pedagogical coursework, content specialization, and supervised clinical practice [55, 56]. These programs are typically designed to culminate in a bachelor's degree and corresponding state certification, ensuring that candidates develop a comprehensive understanding of curriculum, instruction, and student diversity [57, 58]. For those pursuing special education or dual certification, preparation often extends further, emphasizing collaboration, differentiation, and inclusive instructional design to meet the needs of students with disabilities [59, 60]. However, even with rigorous coursework and extended clinical experiences, traditional EPPs often struggle to keep pace with the evolving realities of today's educational landscape—one characterized by teacher shortages, shifting licensure requirements, and a diversifying student population [61, 62].

To remain relevant and responsive, teacher preparation must become increasingly agile, developing "on-ramps" that meet candidates where they are without compromising quality or rigor. This adaptability is particularly critical for adult learners, paraprofessionals, and career changers who enter teaching through nontraditional routes or Grow Your Own programs [49]. Innovative hybrid, competency-based, and residency-style models offer promising pathways that blend the strengths of traditional preparation with the accessibility of alterna-

tive programs[17, 63]. Such models provide opportunities for candidates to earn credentials while remaining embedded in their local schools, merging theory and practice in authentic, context-rich environments[5, 63]. Importantly, these flexible pathways must also preserve the hallmarks of effective preparation: deep pedagogical learning, robust mentorship, and sustained opportunities for clinical application[5, 13].

While alternative certification programs have succeeded in expanding the teacher pipeline, research consistently shows mixed outcomes in teacher effectiveness and retention[64, 65]. Teachers prepared through accelerated or minimally supervised pathways are less likely to remain in the profession long-term and often report feeling underprepared for the complexities of diverse classrooms[6, 61]. In contrast, educators who receive comprehensive preparation—particularly through extended clinical residencies or co-teaching models demonstrate higher levels of instructional competence and greater persistence in the field[5, 62]. These findings affirm that the future of teacher preparation must not be an either/or choice between traditional and alternative routes. Rather, the field must embrace a continuum of nimble, equity-driven pathways that integrate rigorous preparation with the flexibility necessary to attract and retain a diverse, well-prepared teaching force[66].

Grow Your Own

Grow Your Own (GYO) initiatives have emerged as a transformative approach to cultivating a sustainable and representative educator workforce amid persistent teacher shortages and declining enrollment in traditional preparation programs. These initiatives symbolize a shift from fragmented, reactive recruitment practices to intentional, community-anchored strategies that grow educators from within the very ecosystems they serve[63, 67]. Although GYO programs differ across states, targeting high school students, paraprofessionals, community members, or noncertified school staff; their shared philosophy lies in forging reciprocal partnerships between EPPs and local school districts. These collaborations aim to dismantle systemic barriers to entry, such as prohibitive tuition costs, certification testing fees, and the lack of structured mentorship opportunities that disproportionately impact racially and linguistically diverse candidates[5, 50].

In many ways, GYO programs embody the educational ecosystem's capacity for regeneration, reinvigorating local talent pipelines while reinforcing the bond between schools and the communities they serve[68]. By recruiting paraprofessionals, adult learners, and career changers who are already embedded within the district, GYO initiatives not only address immediate staffing needs but also enhance cultural responsiveness and community continuity in classrooms[16]. This alignment between local context and teacher preparation has proven especially critical for nontraditional candidates, such as adult learners re-entering higher education after years away from formal schooling[69, 70]. For these individuals, GYO programs often provide scaffolds (e.g., flexible scheduling, financial aid, mentorship, and embedded practicum experiences) that enable persistence and degree completion while maintaining family and work responsibilities[17, 49]. The adaptability of GYO models reflects a broader paradigm shift toward collaborative innovation in education, one where universities and districts co-construct solutions rather than operate in silos. Through shared governance, resource pooling, and joint accountability, these partnerships advance not only recruitment but also retention by cultivating belonging, efficacy, and professional identity among novice educators[13, 14]. Importantly, GYO programs also reinforce a sense of continuity and shared purpose, planting the seeds of professional commitment that can mature into sustained teaching careers. As the teaching profession continues to weather the storms of attrition, accountability pressures, and waning public trust, such locally grounded and equity-oriented initiatives represent a vital anchor of stability and renewal within the field[14, 46].

2. Materials and Methods

In response to three individual district-issued requests for proposals (RFPs) from three school districts in 2022 and 2023, respectively, situated in the southeastern portion of the state where the authors resided, the partnership sought to develop sustainable teacher pipelines by supporting current paraprofessionals (or other employees from the partner school district) in earning both degrees and full teacher certification. The proposals required an outline specifying certification pathways that would be provided by the EPP and detailing the instructional and structural supports that would be embedded throughout candidates' academic journeys. Certification pathways outlined in each of the RFPs

centered on the preparation of early childhood educators, early childhood–6th grade (EC–6), and 4th–8th grade, all offering candidates the option to pursue dual certification in ESL, bilingual education, or special education, all fields identified by the district as areas of persistent need.

2.1. Research Design

Following the award of funding, the university's educator preparation program (EPP) engaged immediately with district leaders to co-construct a framework for recruitment, enrollment, and retention that aligned with both institutional priorities and district workforce goals. This partnership was intentionally guided by a wraparound philosophy, emphasizing holistic, equity-centered student support. Grounded in the understanding that adult learners and paraprofessionals often navigate complex academic, professional, and personal demands, the team sought to design systems that removed barriers rather than reinforced them[15, 63]. The wraparound approach was conceived as a collaborative and reflexive process integrating academic advising, mentorship, and field-based supports to ensure that every stage of the student experience, from application to program completion, reflected the partnership's shared commitment to access, belonging, and success. This intentional design process drew upon institutional data, stakeholder feedback, and district-level insights to map existing structures and identify potential gaps in recruitment, enrollment, and student persistence.

To mindfully collect data that continuously improved the GYO programming and collaborative partnership with school districts, the authors utilized a qualitative self-study approach with the students who were enrolling and/or who were already enrolled in the EPP to analyze the organizational frameworks and operational dynamics of our GYO teacher preparation partnership with the collaborating school districts. The self-study design provided an effective lens for interrogating continuous improvement through professional practice, enabling a critical exploration of equity, partnership, and institutional transformation within real-world educational contexts. Through iterative cycles of reflection, data collection, interpretation, and responsive action, we sought to deepen our understanding of how the GYO initiative advanced pathways for diverse teacher candidates while maintaining coherence with broader institutional and systemic objectives in educator preparation.

2.2. Research Setting and Participants

This research investigated partner GYO teacher preparation initiatives situated at a public university in the southern United States, developed in partnership with a large, urban and suburban school district in the same state. This GYO program sought to intentionally cultivate a pipeline of certified educators by recruiting paraprofessionals, community members, and other nontraditional candidates, many from historically underrepresented backgrounds, who were currently employed within the partner district's schools. Participants for this study were identified through purposive sampling (e.g., students enrolled at the university in the EPP from our partner districts) to ensure a comprehensive understanding of the program's operation and impact.

2.3. Data Sources and Collection

To fully examine the complex systems, structures, and experiences embedded within the GYO pathway, multiple data sources were employed to ensure a robust and nuanced analysis.

1. Descriptive Data: GYO program enrollment per partner school district.
2. Program Documentation and Artifacts: Online materials such as meeting agendas, shared planning documents/notes, internal reports, and partner correspondence (e.g., emails) were reviewed to trace program design decisions and collaborative processes.
3. Semi-Structured Interviews: Interviews with university faculty, district liaisons, program coordinators, and students explored perceptions of communication, coordination, and the alignment between institutional and district priorities.

Collectively, these data sources provided a comprehensive view of the multi-layered interactions between institutional faculty/leadership, district stakeholders, and GYO participants, thereby illuminating both the affordances and constraints of the partnership model. Through this collaborative inquiry, university and district teams co-developed new technological mechanisms for communication via data sharing and in advising practices to mitigate identified barriers. Equity-minded reflection played a central role throughout the process; partners examined

existing institutional norms and policies to ensure that decision-making practices were inclusive and responsive to the lived experiences of GYO participants. Ultimately, the co-constructed framework functioned not only as an operational plan but as a continuous improvement model, positioning the GYO program as a dynamic, learning-oriented system designed to evolve alongside the needs of its students and the community it serves, which will be discussed in detail below.

3. Results

Descriptive and qualitative data analyses were conducted to identify longitudinal trends of students enrolled in innovative preparation program pathways at a university located in the southern United States. All data sources were anonymized. Results of this study suggest that EPPs providing innovative pathways for students to become educators allowed for the removal of student barriers at the programmatic, college, university, and school district levels.

3.1. Enrollment Analysis

A descriptive analysis of the fall 2023 and fall 2024 as seen in **Table 1** suggests an overall enrollment growth across the university for FTIC students and a slight decline in transfer students. While inferential statistical testing was considered, a purely descriptive approach was deemed more appropriate for this qualitative self-study. The intent of these data was not to establish statistical significance or generalizability, but to describe the institutional environment and programmatic trends. When looking closely at the education majors, there are clear markers in the areas of early childhood–3rd grade (EC–3) and ESL/Special Education, which rose by 31 students or 387%, highlighting a surge in transfer enrollment. This surge was in large part due to our Grow Your Own innovative partnerships with three urban and suburban school districts. These innovations took advantage of co-identification, co-recruitment, inventive course delivery formats, and implementing an on-call undergraduate program coordinator to support these students.

Table 1. Enrollment by Program, Year, and Term.

Term	Student Type	Enrollment Count	Total SCH	Average SCH	Full Time Count	Part Time Count	Average Age	Pell Awards	Any FA Award	Degree Earned
EC–6										
2023 Fall	FTIC	249	2842	11.41	176	73	20.05	145	224	10
2023 Fall	Transfer	427	3754	8.79	166	261	26.75	234	343	18
2024 Fall	FTIC	209	2452	11.73	158	51	20.04	118	180	9
2024 Fall	Transfer	366	3567	9.75	174	192	27.37	230	289	32
Pre-K–3										
2023 Fall	FTIC	8	95	11.88	6	2	21.75	4	7	0
2023 Fall	Transfer	10	87	8.7	4	6	29.3	5	7	0
2024 Fall	FTIC	25	305	12.2	23	2	20.96	18	23	0
2024 Fall	Transfer	72	666	9.25	35	37	32.97	55	66	0
4th–8th										
2023 Fall	FTIC	34	416	12.24	26	8	20.03	18	28	0
2023 Fall	Transfer	63	637	10.11	32	31	26.92	28	49	4
2024 Fall	FTIC	37	496	13.41	31	6	20	23	32	1
2024 Fall	Transfer	47	520	11.06	33	14	30.17	24	35	2

Note: FTIC = First-Time-in-College; SCH = Semester Credit Hours; FA = Financial Aid.

While there was a drop in EC–6 in both FTIC and transfer enrollment when comparing fall 2023 to fall 2024, the difference was not as steep as we had initially anticipated when speaking to other administrators who have similar roles at similar-sized universities in our region. Altogether, there was an enrollment shortfall of 49 students from 2023 to 2024 with FTIC students, and a shortfall of 61 for transfer students. This shortfall in part is due to students choosing the EC–3 instead of the EC–6 pathway or deciding to attend another institution.

Another major shift in our advising practice came from the district partners themselves calling us to explicitly advise students to seek supplemental certification, given the shortages in the areas of special education and ESL. To meet this need for our GYO districts and to make our students more marketable, we designed degree pathways that sought to pre-

pare students to get these supplemental certificates alongside their core EC–6 or EC–3. Today, it is expected that every student in the GYO pathway will meet bilingual, ESL, or special education supplemental certification by the time they graduate.

The analysis also provides evidence that the average age of our transfer students rose from 26.75 years in fall 2023 to 27.37 years in fall 2024 for students who were seeking EC–6 certification. For the Pre-K–3 certification pathway, there was also a noticeable shift in the age of the adult learner, as it rose from 29.3 years to 32.97 years in fall 2024. This data coincides with the growing paraprofessional population we serve in our residency pathways. To that end, our faculty and staff are engaging in innovative ways to reach, support, and advice students who are adult learners in their early thirties who have full-time jobs, growing academic and professional responsibilities, and families to support both financially and socially. **Tables 2** and **3** below illustrate the top 10 programs across the university. For both years, the largest programs for FTIC and transfer students include nursing, biology (pre-med), and psychology. Traditionally, the nursing Entry, BSN, and other allied health fields have been the most widely sought degree pathways at our university. Still, Education EC–6 remains at the core of the degree seekers in our institution.

Table 2. 2023 TWU Students by Major.

FTIC	Count	Transfer	Count
Nursing Entry—BS	1014	Nursing—BSN	457
Nursing—BSN	276	Nursing Entry—BS	253
Biology—Pre-Med Track—BS	225	General Studies 2 Concentrations—BGS	193
Kinesiology Exercise Science PT Track—BS	198	Kinesiology Exercise Science PT Track—BS	121
Psychology Entry—BS	165	Education EC–6 Core Subjects—BS	115
Dental Hygiene Entry—BS	150	Business Administration—BBA	114
Education EC–6 Core Subjects—BS	105	Psychology—BS	110
Social Work—BSW	84	Business Human Resources—BBA	110
Psychology—BS	75	Education EC–6 ESL—BS	107
Business Administration—BBA	73	Child Development Track—BS	96

Note: BS = Bachelor of Science; BSN = Bachelor of Science in Nursing; PT = Physical Therapy; BBA = Bachelor of Business Administration; BSW = Bachelor of Social Work.

Table 3. 2024 TWU Students by Major.

FTIC	Count	Transfer	Count
Nursing Entry—BS	1076	Nursing—BSN	501
Nursing—BSN	279	Nursing Entry—BS	241
Biology—Pre-Med Track—BS	244	General Studies 2 Concentrations—BGS	162
Psychology Entry—BS	200	Education EC–6 Core Subjects—BS	131
Dental Hygiene Entry—BS	194	Kinesiology Exercise Science PT Trac—BS	111
Kinesiology Exercise Science PT Track—BS	188	Business Administration—BBA	108
Education EC–6 Core Subjects—BS	101	Psychology—BS	94
Marketing—BBA	86	Business Human Resources—BBA	93
Psychology—BS	82	Psychology Entry—BS	92
Social Work—BSW	68	Education EC–6 ESL—BS	84

Note: BS = Bachelor of Science; BSN = Bachelor of Science in Nursing; PT = Physical Therapy; BBA = Bachelor of Business Administration; BSW = Bachelor of Social Work.

In 2025, the enrollment for transfer students in the Early Childhood Education PK–3 degree rose from 72 to 150 students, more than doubling from 2024 to the present. This sharp rise is largely due to the Grow Your Own initiative, as most of the Pre-K–3 students are paraprofessionals in the districts we serve. However, please note that projections for 2025 are included as preliminary indicators of programmatic trajectory based on current enrollment patterns.

Seeking supplemental certification in the areas of English as a Second Language (ESL), bilingual education, and special education is another area of growth we are noticing with our GYO partners during the past three years. **Table 4** below delineates our three largest partners and the certification areas their paraprofessionals are seeking. You will notice that the largest groups of supplemental certifications are in the areas of special education (37), and ESL (24).

Historically, the smallest group continues to be bilingual education (15) as there are not as many students who possess both the academic Spanish and English fluency to gain certification.

Table 4. Enrollment by State Certification Band and GYO District.

Certification	District 1	District 2	District 3
PK–3rd ESL	5	2	3
PK–3rd SPED	12	4	1
PK–3rd BIL	7	0	0
EC–6th ESL	14	3	2
EC–6th SPED	15	8	1
EC–6th BIL	7	3	0
4th–8th ESL	2	0	1
4th–8th BIL	8	2	1

Note: PK = Pre-Kindergarten; EC = Early Childhood; ESL = English as a Second Language; SPED = Special Education; BIL = Bilingual Education.

The data above demonstrates that innovative educator preparation pathways have largely succeeded in removing barriers and increasing opportunities for students at a southern U.S. university. Enrollment trends from Fall 2023 to Fall 2024 reveal that while FTIC student enrollment shows modest growth, transfer enrollment has slightly declined across key education programs. A standout finding is the dramatic 387% increase in transfer enrollments in Early Childhood Education EC–3 ESL/Special Education, an outcome driven by GYO partnerships with local school districts that employ inventive recruitment strategies and provide enhanced support for paraprofessionals. Despite a dip in EC–6 enrollments for both FTIC and transfer students, the decrease was not as steep as projected, indicating effective retention and competitive standing relative to peer institutions.

The analysis also highlights a demographic shift, with the average age of transfer students in both EC–6 and PK–3 pathways increasing, reflecting the university's growing adult learner and paraprofessional population. These trends are matched by academic adaptations, including pathways to supplemental certifications in high-need areas such as ESL, bilingual education, and special education. Health and behavioral science majors, especially nursing and allied health, remain the largest degree pathways, but pathways in education, specifically innovative and partnership-based routes, continue to be central to the university's mission and student body growth.

3.2. Qualitative Data Analysis & Findings

The researchers used a longitudinal qualitative self-study approach that was grounded in a critical perspective, which allowed us to systematically examine how institutional structures within our EPP functioned to reduce barriers and increase persistence for teacher candidates over time. Self-study methodology situates itself well in research for educator preparation as it allows faculty and program leaders to intentionally interrogate their own practices while maintaining a commitment to continuous improvement. Qualitative data components were designed to complement descriptive and longitudinal trends of students enrolled in innovative GYO preparation program pathways to provide insight into the 'how' and 'why' aspects of such pathways contributed to the removal of student barriers.

Qualitative data consisted of programmatic documents who were collected longitudinally during the implementation of the GYO pathway. Data consisted of internal electronic program notes which were generated by EPP faculty and leadership documenting implementation decisions, challenges, and adaptations across the semesters; online meeting agendas; interviews with students and school district leadership personnel; supporting materials that were acquired from regularly scheduled planning and implementation meetings, and; quarterly online evaluation reports authored by an external evaluator who was independent of the EPP and charged with monitoring program implementation and outcomes.

Consistent with a self-study and improvement-oriented qualitative research design, qualitative data collection was intentionally iterative and responsive rather than fixed at the outset. Interviews with students and district leaders were conducted on an as-needed basis throughout each semester to better understand emerging implementation challenges, student experiences, and partnership dynamics. Participants were

recruited through purposeful sampling, including students actively enrolled in the GYO pathway and district personnel directly involved in recruitment, supervision, or program coordination. The number and timing of interviews varied by semester and were guided by analytic need rather than predetermined quotas. Interview protocols were semi-structured and flexible, allowing researchers to adapt questions in response to the program phase and emerging findings. Guiding interview questions focused on topics such as perceptions of program access and support, experiences with admissions and advising processes, preparation for certification exams, communication across institutions, and perceived barriers and facilitators to persistence. Follow-up prompts were used to clarify implementation issues or explore unexpected concerns raised by participants.

Qualitative data analysis followed a multi-cycle coding process. All data sources were imported into a qualitative analysis software and reviewed prior to coding to support familiarity with the dataset and to identify primary analytic insights. The researchers went through two formal coding cycles. During the first cycle, descriptive and in vivo coding were used to remain closely grounded in the language of the data sources and to capture concrete references to program structures, policies, and practices influencing student access and participation. Codes in the first phase reflected observable actions, institutional processes, barriers and supports. The second cycle of coding involved pattern coding, where first-cycle codes were grouped into broader themed categories by year (**Figure 1**). These themed categories allowed the researchers to engage in analytic memoing to document emerging interpretations, note longitudinal shifts, and contradictions within the data. Memos served as a critically reflexive tool, supporting theory building and ensuring analytic decisions were transparent.

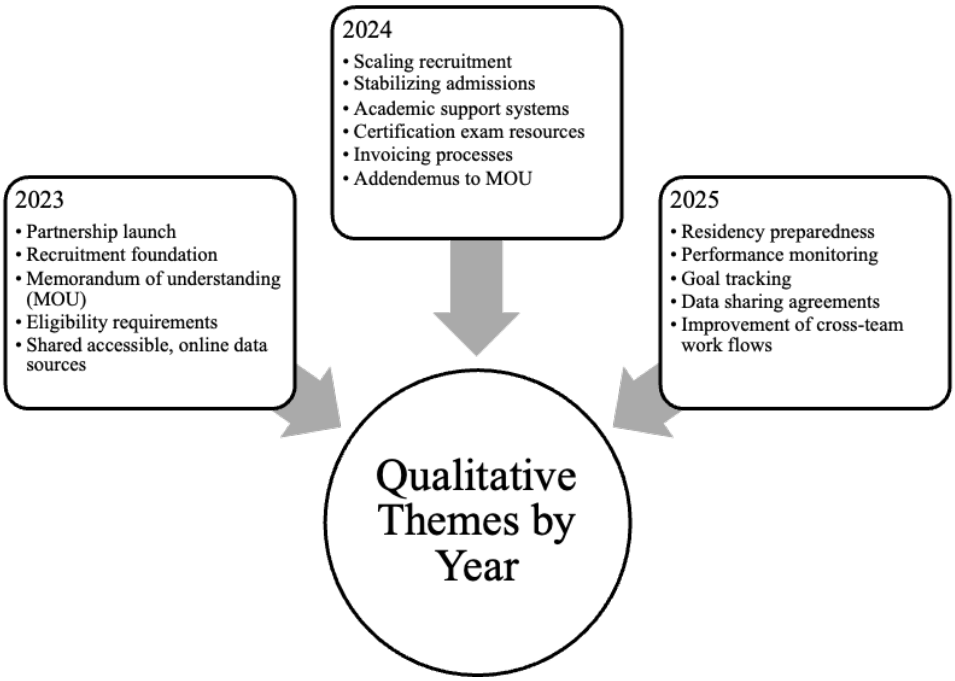


Figure 1. Qualitative Themes Noted by Year.

Interview data was treated as one component of a broader qualitative dataset and were triangulated with program documentation and external evaluation reports. In addition, peer debriefing was regularly used during team meetings to surface alternative interpretations and challenge dominant narratives about program effectiveness. These discussions directly informed revisions to the coding, the refinement of analytic categories, and the interpretation of longitudinal trends. Reflexive insights were explicitly referenced during second-cycle coding to ensure that emerging themes were grounded in data rather than researcher expectations. Although qualitative data did not follow a fixed interview schedule or predetermined sample size, rigor was maintained through systematic documentation, triangulation

across multiple sources, and iterative analytic review. This approach aligns with qualitative self-study and design-based research traditions, which prioritize responsiveness to context and continuous improvement while maintaining transparency and analytic coherence. By clearly documenting how data were generated, analyzed, and reflexively examined, the study provides a trustworthy account of how the GYO pathway evolved over time.

The role of the external evaluator was integral to enhancing analytic rigor and interpretive credibility. Quarterly evaluation reports were incorporated as a distinct data source and analyzed alongside internal documents and interview data. The evaluator's independent analysis provided an internal perspective on program implementation, communication, access, financial structures, and wraparound supports. In several instances, evaluator findings prompted the research team to revisit internal interpretations, identify blind spots, and further interrogate assumptions related to student readiness, partnership alignment, and institutional capacity. Rather than serving as confirmatory evidence alone, external evaluation reports functioned as a critical counterpoint that informed reflexive memoing and strengthened triangulation across data sources. This integration helped to ensure that findings reflected both insider knowledge and independent assessment of program progress.

To ensure analytic rigor and consistency, two of the researchers independently coded 80% of the same shared subset of data source documents. Initial coding was assessed using a percentage agreement, which resulted in an agreement rate of 95%. Coding discrepancies were addressed through consensus discussions so that code definitions could be clarified and refined prior to the remaining data being coded. The researchers emphasized interpretive consensus, an approach that values collaborative sense-making and transparency, which strengthened interpretation coherence and preserved contextual nuances. The researchers also realized that as faculty and leadership within the EPP and/or GYO program, they occupied 'insider positions' that afforded deep contextual knowledge of program design and implementation. At the same time, these positions required sustained reflexivity to mitigate the influence of position bias. Reflexive practices included the maintenance of analytic memos, peer debriefing among the research team members, and regular engagement with findings presented in the external evaluator's reports. This qualitative approach allowed the researchers to identify longitudinal trends that contextualized and extended descriptive findings. Specifically, qualitative results illuminated how innovative EPP pathways systematically reduced institutional barriers across multiple levels, providing insight into the mechanisms through which programmatic change translated into improved access and persistence for teacher candidates.

Longitudinal analysis revealed that across each year of implementation, programmatic adaptations contributed to the progress and removal of student barriers at the programmatic, college, university, and school district levels. In 2023, findings centered on the initial establishment of the partnership with District 1. During this first year, the GYO program pathway prioritized targeted recruitment efforts in collaboration with the district stakeholders while jointly developing a more streamlined admissions and eligibility criteria (**Figure 1**). Analysis of early recruitment outcomes revealed a misalignment between established criteria and the characteristics of interested candidates, as many prospective students did not meet the minimum required GPA of the EPP (2.75) and/or lacked an Associate of Arts in Teaching (AAT) degree. Staff responses echoed these findings related to not having the required GPA or not having the required courses equivalent to the AAT: *"Candidates bring transcripts…must be core complete".* In response to these findings, the program implemented several structural adjustments by the following fall semester, including coordinated recruitment events, the development of a revised application fee structure, and the initiation of a GYO program advisor to provide sustained support to candidates from application to the university through completion of their program (i.e., graduation). A GYO student response indicated positive sentiments surrounding a dedicated advisor, *"Our GYO advisor has reached out…scheduling a 1:1 meeting to help me succeed,"* and *"I appreciated the frequent checkups because it held me accountable".*

In 2024, findings reflected a transition from program planning to full implementation of the GYO initiative. By January 2024, the analytic focus shifted from establishing admissions criteria to refining the entrance requirements to more closely align with district workforce needs (**Figure 1**). Concurrently, the program began to develop formalized student support structures and more systematically monitor

candidates who met, or were approaching, eligibility thresholds in subsequent semesters. These findings prompted the adoption of 'intrusive advising' by the GYO program advisor, which was characterized by early and frequent outreach to students to proactively monitor academic progress, exam readiness, and emerging areas of potential concern. As implementation progressed, qualitative evidence documented the expansion of wraparound supports, particularly in preparation for certification examinations and noted numerous times as a positive by district leadership and GYO students, as evidenced by external reports *"Saturday sessions (support for certification exams) being planned."* This data prompted the researchers to send out invitations to all GYO students with information about formal sessions to support the teaching certification exams. Altogether, we held several summer and fall sessions either virtually for the PK–3 Exam or in person for the other content exams.

Qualitative findings also surfaced persistent institutional barriers related to financial and administrative systems, related to the complexity of establishing internal university processes to accept and disperse grant funds from district partners that directly supported students in the GYO pathway. Although a revised reimbursement schedule was submitted and implemented, it still took approximately one year from grant award to successful fund acceptance. During this period, administrative leaders at both the university and the district collaborated to ensure that GYO students remained enrolled and supported despite unresolved fiscal processes, underscoring the importance of cross-collaborative coordination in sustaining innovative pathways.

By 2025, qualitative evidence indicated that several partnerships had matured and shifted toward advanced implementation phases focused on residency placements, student retention, and operational refinement. Program efforts centered on identifying candidates prepared for residency and supporting districts developing placement plans for the subsequent academic year (**Figure 1**). However, analysis revealed misalignment between projected readiness and actual student preparedness, as many GYO students had not yet demonstrated sufficient performance on practice certification exams and/or completion of the required state teaching certification exams. Additional findings emphasized the critical role of data-sharing infrastructures in supporting partnership effectiveness. The advancement of a formal data-sharing protocol is critical between the university and school district, as it is necessary for seamless communication between students (**Figure 1**). In spring 2025, the first partnership with District 1 successfully graduated its first three certified teachers, who are now employed in the school district. Current GYO pathway projections suggest continued growth in program completers as certification exam scores now exceed initial expectations. Moving forward, programmatic focus has shifted toward quality assurance, closer alignment of student progression and certification exam preparation that align with school district placement timelines, and ongoing monitoring of candidate quality, given the strong correlation observed between admissions criteria and certification exam success.

4. Discussion

The purpose of our work with GYO initiatives initially was to better develop innovative pathways that targeted the working professionals across the state to meet local teaching shortages using talent that is local to the school districts. To do so, our EPP has had to reimagine recruitment efforts, retention strategies, programmatic delivery systems, online technological support mechanisms, and preparation for certification exams. While this study focused primarily on program implementation and barrier reduction, early outcomes suggest meaningful broader impacts. By 2025, the first cohort of GYO candidates completed their degree and certification requirements and secured teaching positions within partner districts, indicating improved progression and workforce placement.

4.1. Implications for Research

Although long-term retention and student achievement outcomes were beyond the scope of this study, these findings point to the need for longitudinal follow-up examining teacher persistence, effectiveness, and student learning in GYO-supported classrooms, as such work is critical for understanding the full impact of GYO pathways as a strategy for addressing national teacher shortages and advancing educational equity. As EPPs and school districts continue to address persistent shortages and diversification needs within the teaching profession, future research should explore the role of Credit for Prior Learning (CPL) and Competency-

Based Education (CBE) as innovative, equity-driven pathways for teacher preparation. These models have the potential to recognize the accumulated expertise of adult learners, paraprofessionals, and other nontraditional candidates who often bring rich experiential knowledge to the profession but lack formal credentials [71, 72]. By offering academic credit for demonstrated competencies such as instructional assistance, classroom management, or applied child development, EPPs could both accelerate degree completion and reduce financial barriers that historically limit access to teacher licensure [69, 73]. However, empirical work is needed to examine how CPL frameworks can be systematically aligned with state certification standards, ensuring rigor while maintaining flexibility. CBE approaches similarly warrant expanded study as part of the next generation of teacher preparation. Rather than emphasizing seat time or course accumulation, CBE prioritizes mastery of clearly defined competencies in an online format that reflects professional teaching standards, such as those outlined by the Council for the Accreditation of Educator Preparation (CAEP) and the Interstate Teacher Assessment and Support Consortium (InTASC) [74]. When embedded within GYO and residency models, CBE can allow candidates, particularly adult learners already employed in schools, to progress at individualized paces, demonstrating proficiency through authentic, practice-based assessments [49, 75]. Research exploring the efficacy of CBE within teacher education could shed light on its potential to promote both personalization and accountability through the use of technology integration and explicit mastery of competencies, supporting a more diverse pool of educators without compromising preparation quality.

Moreover, future research should interrogate how CPL and CBE intersect with institutional partnerships, policy frameworks, and workforce sustainability efforts. Effective implementation will depend on the degree to which higher education institutions, state agencies, and school districts collaborate to establish transparent articulation agreements, competency maps, and shared assessment systems [62, 63]. Longitudinal studies could investigate outcomes such as teacher retention, instructional efficacy, and student learning in CPL/CBE-based programs relative to traditional EPPs. By systematically integrating these flexible models into GYO pathways, the field has an opportunity to reimagine teacher preparation as a continuum—one that honors prior experience, values demonstrated skill and expands access to a profession essential for educational equity and community vitality.

4.2. Implications for Practice

Until our GYO efforts began in 2021, the university recruitment efforts focused on traditional pathways to teacher certification, including the high school to university pipeline, and community college transfer initiatives through 2 × 2 pathways. During the past four years, we've come to understand that there are also robust pipelines that exist within the school districts themselves. There are willing and able future teachers who already know the district, the curriculum, and the students they serve, but need willing employers and nimble IHEs (Institutions of Higher Education) who can meet their professional and personal needs. Our success, in part, has been in the collaborative approach we've taken to partner with districts to be present during their local events held at their local administrative offices after hours and during the weekends. Our administrative officers, including members from the Dean's office, School of Education, Program leaders in EC–3 and EC–6, and Certification offices, often attend initial conversations with potential students to show that we take a collaborative approach to their learning and that we have a team in place to help them from application through graduation.

The teacher candidates we serve in the GYO partnerships hold full time employment, enroll as full-time students, and often also are the sole providers for their households. While many of our other students face similar challenges, the GYO students are still learning about effective study habits, test preparation skills, and time management. Taking all these factors into account is important as IHEs design test preparation sessions. Approaches that have made a difference for students in this GYO pathway are holding Saturday virtual or face-to-face practice sessions for both content and supplemental exams. These sessions are designed and delivered by the faculty who oversee the courses that cover the certification content. The GYO districts have also reported that they hold internal study sessions for their students led by district experts in those content areas. These innovative approaches go beyond the typical online tools that students use to prepare; instead, these focused sessions allow students

to listen and learn from one another about what others are doing to master the content.

4.3. Implications for Institutions of Higher Education

Taken together, the documents portray IHEs not just as credentialing bodies but as co-designers of workforce pipelines, responsible for rapid iterative improvement based on candidate feedback and evaluation data. Sustainable partnerships require IHEs to balance academic rigor with responsiveness to local labor market demands, the realities of non-traditional learners, and the broader goal of diversifying the educator workforce. The use of university-wide, streamlined technology platforms can support continuous improvement by enabling more strategic data collection and analysis related to student progress/retention, admissions, financial aid, and advising, thereby facilitating more timely and informed decision-making and reducing institutional barriers. Finally, IHEs must engage in intentional planning for the complexities associated with launching and sustaining GYO initiatives, including explicit discussions of long-term sustainability beyond initial funding cycles and the continuation of wraparound supports. Addressing these challenges requires coordinated leadership and cross-unit collaboration across the university.

4.4. Implications for Educational Policy

In the context of persistent national teacher shortages and increasing momentum on alternative and apprenticeship-based EPP pathways, policymakers have begun to emphasize GYO initiatives, teacher apprenticeships, and partnerships between universities and school districts as strategies to stabilize the educator workforce. These initiatives require more than funding alone; they demand sustained policy attention to alignment, cross-agency coordination, and increased 'nimbleness' within higher education systems, all of which are critical to the long-term success of GYO and like pathways/programs. Moreover, reexamination of licensure as a gatekeeping mechanism, particularly for working adults and candidates from varied backgrounds are needed. Effective workforce policy must move beyond short-term solutions toward a more comprehensive, system-level approach that better aligns preparation, licensure, and employment skills/timelines.

5. Limitations and Future Research

Several limitations should be considered when interpreting the findings of this study. First, this research employed a qualitative self-study design, positioning the researchers and practitioners as both investigators and/or practitioners within the EPP. While this insider perspective afforded deep contextual knowledge and supported timely programmatic adaptation, it also introduces the potential for research bias, including selective interpretation or confirmation of program effectiveness. To mitigate this limitation, the researchers engaged in sustained reflexive practices, including analytic memoing, peer debriefing, consensus-based coding, and the incorporation of findings from an external independent evaluator, as described in the qualitative data analysis section. Nevertheless, readers should interpret the findings with an understanding of the inherent subjectivity associated with self-study methodologies.

Second, the findings are derived from a single EPP situated in the southern region of the United States, which limits the generalizability of the results. State-specific certification requirements, funding mechanisms, institutional governance structures, and labor market conditions vary considerably across regions, particularly between southern, rural, and non-southern contexts. As such, the strategies and adaptations described here may not transfer directly to rural districts, states with different licensure systems, or regions with distinct demographic and workforce characteristics. Rather than offering broadly generalizable conclusions, this study provides contextually grounded insights into the processes by which GYO pathways can reduce barriers and support teacher candidate persistence. Readers are encouraged to assess the transferability of findings in relation to their own institutional, regional, and/or policy contexts.

Third, although the longitudinal design strengthens the study's ability to capture programmatic change over time, the relatively early stage of implementation for some partnerships limits conclusions regarding long-term outcomes, such as sustained teacher retention, career advancement, or district-level workforce stability. Early successes in certification and placement should therefore be interpreted as promising indicators rather than definitive evidence of long-

term impact.

Future research could address these limitations through comparative and multi-site studies that examine GYO implementation across diverse geographic regions, including rural and non-southern contexts. Cross-state analyses may be particularly valuable in understanding how differences in certification policies, funding structures, and labor market conditions shape program effectiveness. Additionally, longitudinal students who follow GYO participants beyond initial certification into their early teaching careers would provide critical insight into retention, effectiveness, and leadership development over time. Such research would strengthen the evidence base for GYO pathways as a scalable strategy for addressing national teacher workforce shortages.

6. Conclusions

The current landscape of teacher recruitment, preparation, and retention underscores the urgent need for systemic, collaborative, and innovative approaches to sustaining the educator workforce. As the nation continues to confront chronic teacher shortages, particularly in high-need subject areas and special education, it has become increasingly clear that traditional pipelines alone are insufficient to meet the growing demand[6, 14]. As the landscape of educator preparation continues to evolve, addressing teacher shortages and the need for a more diverse workforce remains an urgent priority. Traditional EPPs have long served as the foundation for cultivating effective educators, yet they must increasingly adapt to meet the demands of a dynamic educational ecosystem. The emergence of GYO initiatives underscores the power of collaborative partnerships between school districts, higher education institutions, and community organizations to identify, prepare, and retain teachers who reflect the populations they serve[63]. These partnerships exemplify how innovation, when grounded in shared responsibility and contextual responsiveness, can strengthen the teaching pipeline and address systemic inequities in teacher recruitment and retention[5].

Future-focused educator preparation must embrace innovation, flexibility and inclusivity as core design principles. Traditional and alternative certification pathways each offer strengths, but both are limited when considered in isolation. The integration of innovative "on-ramps" such as Credit for Prior Learning (CPL) and Competency-Based Education (CBE) represents a promising evolution in this continuum[72, 74]. These models allow teacher candidates, particularly adult learners and paraprofessionals, to leverage prior experience and demonstrate mastery through authentic, practice-based measures. When embedded in GYO and residency frameworks, such approaches can make teacher preparation more accessible, personalized, and equitable without compromising rigor[69, 75] and allow for a preferred pathway of choice (i.e., in-person learning, hybrid learning, online learning) for students to complete and obtain their teaching degree. Ultimately, the future of teacher education depends on the capacity of EPPs and districts to act as co-architects of sustainable and inclusive systems. Research and policy must work in tandem to reimagine preparation models that not only respond to immediate workforce shortages but also promote long-term professional resilience and instructional quality. By aligning CPL and CBE approaches with district-university partnerships, states can create a more coherent and responsive teacher pipeline; one that values demonstrated competency, honors prior learning, and sustains educators across their careers. As schools strive to meet the complex needs of diverse learners, it is imperative that teacher preparation systems reflect the same adaptability, inclusivity, and commitment to lifelong learning that they seek to cultivate in classrooms. Ultimately, the sustainability of the teacher workforce depends on the strength of these interinstitutional partnerships and the degree to which they prioritize long-term teacher development, mentorship, and professional growth.

Author Contributions

Conceptualization, M.P.-A. and R.K.; methodology, M.P.-A. and J.A.; validation, J.F.; formal analysis, M.P.-A., J.A., and J.F.; data curation, J.A. and J.F.; writing—original draft preparation, M.P.-A., R.K., J.A., and J.F.; writing—review and editing, M.P.-A., R.K., and J.A. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest.

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