

# University and School Districts Working Collaboratively to Develop a Grow Your Own Partnership

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The purpose of this article is to present a review of the literature and describe an initial process evaluation for the development and implementation of a Grow Your Own (GYO) partnership for training teachers. The United States (U.S.) is experiencing a severe teacher shortage and Arizona ranks first in terms of turnover rate of teachers (Carver-Thomas & Darling-Hammond, 2017). The lack of qualified teachers for open positions is a crucial issue impacting school effectiveness that school and district leaders are facing. In 2022, Northern Arizona University (NAU) created a GYO partnership, developed in part from similar GYO programs forming across the U.S. Specific elements leading to the initial success of the program are discussed and include offering a tuition-free option for students to complete a teacher certification program and flexible course offerings to meet the needs of a diverse student population. Based on an extensive literature review and reflection of the development and implementation of the GYO program, findings indicate a need to focus on recruitment strategies, develop strong partnerships with local school districts, and collaborate on funding distribution and sources.

*Keywords:* collaborate, diverse candidates, educational barriers, funding, grow your own, needs assessment, partnership, teacher certification, teacher preparation, recruitment, retention, state scholarship programs

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The United States (U.S.) is experiencing a severe teacher shortage with decreased enrollment in teacher preparation programs, high attrition rate among employed teachers, and a growing K-12 student population as significant factors impacting this critical demand. Since 2019-2020, the number of students leaving college with an education degree continues to decrease, down 19% since 2000-2001 (Schaeffer, 2022), while the K-12 student population is on an upward trend (Berry & Shields, 2017; Simon, 2021). The profession is also seeing significant growth in the number of teaching positions. In 1987-1988, there were roughly 2.5 million teachers, whereas by 2017-2018, there were just over 4 million teachers (Ingersoll et al., 2021). The lack of qualified teachers for open positions impacts school effectiveness and the work of school and district leaders as they seek strategies and initiatives to address this crucial issue.

The purpose of this article is to present a review of the literature conducted to gain a better understanding of what is known about Grow Your Own (GYO) strategies and the use of this approach in training future teachers. The purpose is also to describe an initial process evaluation for the development and implementation of a GYO partnership between a university and multiple school districts. The aim of the GYO partnership is to improve school effectiveness through development of sustained pipelines of diverse candidates interested in pursuing a teacher certification program as well as having the opportunity to be employed by one of the partner school districts. The guiding questions for this work included:

- What are effective approaches to developing a GYO partnership between a university and school districts?
- What recruitment strategies are effective for developing local, sustainable pipelines of prospective students for partner school districts?
- What specific needs of prospective students, including racially and ethnically diverse individuals, should be addressed to support admission and retention?

### **Literature Review**

Based on data reported through 2018, approximately 30% of beginning teachers leave the profession within 3 years (Ingersoll et al., 2022), and recent reports indicate the COVID-19 pandemic has made teacher working conditions even more challenging (Pressley, 2021; Rosenberg & Anderson, 2021). Specifically, hard to staff schools with minimal resources struggle to fill positions, and high poverty and high minority schools, often disproportionately staffed by teachers of color, experience the highest rates of attrition (Rogers-Ard et al., 2019; Sutch et al., 2016). Geographic location is another factor; rural, urban, and tribal communities are hit the hardest and often resort to hiring individuals without standard teacher certifications (Bouie, 2022; De Avila & Hobbs, 2017).

Like other states, Arizona is experiencing a severe teacher shortage and ranks first in the U.S. in terms of turnover rate of teachers (Carver-Thomas & Darling-Hammond, 2017). Based on U.S. Teacher Follow-up Survey and Arizona Department of Education data, Arizona's annual public school teacher attrition rate is over 22% for beginning teachers (Ingersoll et al., 2022). For the 2022-2023 school year, 26.6% of the Arizona teacher positions remained unfilled in September, and an additional 41.7% of these "vacancies were filled by teachers who do not meet the state's standard certification requirements" (Arizona School Personnel Administrators

Association, 2022, p. 2). Further, of the Arizona teachers that discontinued their employment, 65.2% held a standard teacher certificate.

Grow Your Own (GYO) programs are being developed across the U.S. as one strategy to address the severe teacher shortage (Boswell, 2015; Jessen et al., 2020; Torres, 2023). GYO is a strategy for developing a pipeline of new, certified teachers for school districts with staffing challenges (Simon, 2021). The expanding body of literature indicates the value of recruiting prospective teacher candidates from school districts' paraprofessional staff and community members (Fallona & Johnson, 2019; Simicou et al., 2021). Partnerships are typically established between districts, and a university, college or other organization offering teacher certification programs. Another approach approved by the Arizona State Board of Education allows school districts to develop internal training opportunities that lead to teacher certification (Arizona Administrative Code, 2023).

GYO programs strive to meet the needs of prospective students by providing convenient class times and holding classes in local, easy to access locations. GYO programs also offer academic, financial, and social support (e.g., counseling and learning communities) to the students enrolled in the program (Motamedi et al., 2017). The GYO strategy is proving to be a means to attract candidates from diverse racial and ethnic backgrounds (Perona et al., 2015). However, there are challenges to implementing this strategy especially in relation to recruiting and retaining qualified students for the duration of the teacher preparation program. Simon (2021) discusses the need for research regarding the development and implementation of GYO models that incorporate different teaching modalities, support systems, and learning opportunities to address the needs of the individuals who are prospective students for GYOs.

### **Procedures**

As noted in the introduction, the literature review was conducted to gain a better understanding of what is known about GYO strategies for training future teachers. A librarian was consulted to determine which databases should be searched and the keywords to use for the search (see Table 1). The five databases that were searched included EBSCO host, ProQuest, Sage Journals, Science Direct, and Scopus. Additionally, eligibility criteria listed in Table 2 were applied when conducting the search.

**Table 1***Literature Review Search Terms*

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Keywords

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- Retention
  - Teacher shortages
  - Diversify
  - Diversity
  - Grow Your Own
  - Underprivileged schools
  - Teacher candidates
  - Teachers of color
  - Minority teachers
  - Underserved communities
  - Minority students
  - Students of color
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**Table 2***Eligibility Criteria for Literature Review Search*

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Eligibility Criteria	Description
Year of Publication	Publications issued in 2005 or later were eligible. This 17-year period was chosen based on the first implementation of a GYO program in Illinois in 2005.
Type of Publications	To conduct this literature review related to teacher preparation GYO partnerships, the research team included journal articles, reports, instructional resources, book chapters, and/or dissertations that were published in English.
Study Sample	The publications had to involve PK-12 schools or school districts.
Topics	The publication had to examine the following: teacher preparation GYO partnerships in relation to the teacher shortage, attracting ethnically and racially diverse candidates, and/or retention of graduates from GYO teacher preparation programs.

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In addition to conducting the database search, the research team also reviewed references in the publications located for additional sources. Through these procedures, 24 publications were identified through the database search and 13 through the references from the database search publications. A summary is presented in the Literature Review section.

An initial process evaluation for the development and implementation of a GYO partnership between a university and multiple school districts was also conducted. Steps for conducting the process evaluation were adapted from *Types of Evaluation* (Centers for Disease Control and Prevention, 2014). The results of a process evaluation “strengthen your ability to report on your program and use information to improve future activities” (p. 1). Process evaluation can be implemented at the start of a program as well as throughout the implementation of the program. The results can illustrate “how well the program is working” and “the extent to which the program is being implemented as designed” (p. 2). It provides a mechanism for documenting features that are working as well as program changes that are needed.

The four basic stages of action research, planning, acting (or implementing), observing, and reflecting were utilized as the procedures for the process evaluation (Dickens & Watkins, 1999). The action research process is iterative, and this approach was utilized throughout the development and implementation of the GYO partnership. Changes were made based on input from stakeholders, and observations and reflections made by university faculty and staff directing and supporting the initiative. The documented program changes as well as documentation that were developed through the planning and implementation process were analyzed. The results of the analysis of the initial implementation of the GYO are described in the Reflections section.

### **Program Participants**

In 2022, Northern Arizona University (NAU) in conjunction with partner school districts in the Phoenix West Valley, began development of a new GYO partnership. A variety of circumstances led NAU to seek out school districts to form a new GYO partnership including:

- requests from school districts facing severe teacher shortage that are interested in directing efforts and funding towards innovative strategies for recruitment, preparation, and retention of new teachers;
- school districts’ consideration of Arizona State Board of Education approval for school districts to form training programs that lead to state certification;
- funding to support efforts to develop and study the development of GYO partnerships; and
- with state approval for community colleges to offer bachelor’s teacher certification programs, NAU sought out new opportunities to attract prospective students and support school districts in addressing the significant number of teacher vacancies.

The initiative began with two neighboring school districts, (i.e., Tolleson Elementary School District and Littleton Elementary School District) and within the first year grew to a partnership that includes six area school districts (i.e., Buckeye, Pendergast, and Union Elementary School Districts, and Saddle Mountain Unified School Districts). The student enrollment of these districts varies. The following enrollments are estimates based on Arizona Department of Education data from the 2021-2022 school year. One school district serves 1,700 students, two serve 2,800 students, two serve 5,600 students, and one serves 8,000 students. These districts are identified as high need and/or hard to staff school districts. They serve a student population that is racially and ethnically diverse, ranging from 65% to 96% students of

color, with 57% to 82% identifying as Hispanic and Latino/a. The following section describes reflections from the initial development and implementation of forming a GYO.

## **Reflections**

### **Reflections from GYO Initiative**

Work to develop the GYO partnership began in Spring 2022 and the first cohort of students started in January 2023. The initial school district was identified by one of NAU College of Education's centers. The process of forming the partnership was accelerated based on the relationship that existed between NAU's established center and the school district. Another school district near the first partner school district simultaneously was considering ways to establish a GYO program and reached out to explore possible external opportunities before pursuing the development of an internal program.

NAU College of Education has extensive experience delivering nationally accredited, state approved programs at state-wide sites through transfer pathways from community colleges. The plan was to offer undergraduate junior and senior level coursework locally, in-person. However, as recruitment efforts progressed, the partners recognized the prospective undergraduate students needed options for completing general studies and teacher preparation prerequisite coursework also. Lessons learned to date regarding constructing a mutually beneficial GYO partnership, recruiting strategies, and supporting access and alleviating education barriers for students are discussed next.

### ***Co-Construction of Partnership, Vision, and Outcomes***

Co-construction of a mutually beneficial partnership that meets the needs of school districts and aligns with NAU program requirements and policies remains a significant focus. School district leadership, including the Superintendent, Human Resources (HR) Director, and other district personnel, need to be active contributors to the development of the GYO initiative. Outlining the vision and outcomes for the partnership is critical. NAU West Valley GYO Steering Committee (2022) partners articulated the following vision:

- Seek ways to tap into local residents to help address the significant teacher shortage the school districts are facing; school district employees are invested in staying in the community and may not have been able to go away for college to complete a degree.
- Recognize that prospective students do not want to or are not able to take on debt to complete a degree program leading to teacher certification and provide a tuition and fee free opportunity to complete the degree program.
- Offer the opportunity to pursue a degree leading to teacher certification locally so school district HR departments can develop career track opportunities for employees hired into entry level or non-certified positions to earn credentials for certified teaching positions.

Creating local access to higher education degree programs provides a long-term solution for addressing the critical teacher shortage within school districts. It also supports the economic development of individuals within the GYO communities, many who are racially and ethnically

diverse. Leadership discussed the steady employment opportunities for certified teachers within their school districts (NAU West Valley GYO Steering Committee, 2022). Certified teaching positions provide higher salaries than non-certified staff positions and offer individuals pathways to other advanced education and career opportunities.

School district leadership knows their hiring needs, the staff who may be interested and well suited for pursuing a teacher certification degree program, and potential supports that should be addressed to help retain students in the degree program. Other aspects that should be determined in conjunction with partners include which degree programs (e.g., undergraduate and/or graduate as well as certification areas) are most needed and should be offered; when classes should be scheduled, especially in relation to available childcare; and strategies for communicating with and recruiting prospective students.

### ***Recruitment Strategies and Implications***

The goal is to create a sustainable pipeline of prospective students who meet university and program entry requirements. Outreach to prospective students along the continuum from high school graduates to individuals with a completed Associate degree or higher is needed. All partners must be committed to implementing systematic recruitment strategies aligned to term start dates.

**Outreach and Marketing Strategies.** Since the start of the initiative, NAU and the partner school districts have worked consistently and collaboratively to identify outreach and marketing strategies to inform staff, parents, and community members of this local opportunity to pursue a degree leading to teacher certification. A variety of strategies have been tried including:

- Host virtual information sessions (see <https://docs.google.com/presentation/d/1oIDuWKxP3ECbFcFeqhaRuSjDFkJWqwoT7o06MnyJ180/edit#slide=id.p1>).
- Contribute articles to school district newsletters emailed to families and community members.
- Submit press releases from NAU and partner school districts to local media outlets.
- Table at school district staff events.
- Coordinate specific recruitment events that included NAU Enrollment Management staff and Academic Advisors to work with prospective students on admission applications and evaluation of transcripts.
- Ask for principals' help in identifying staff who demonstrate interest and potential for becoming effective teachers and host information sessions at school sites.
- Create announcements for digital marquees maintained by the school districts.
- Develop video messages from school district leadership (see <https://drive.google.com/file/d/1i3evRZ4npNv780oWubwOIJMdhbGbiUni/view>) delivered through email campaigns to non-certified staff members and other individuals expressing an interest in the program.
- Promote GYO program as a career track for existing and new hires employed in non-certified positions such as paraprofessionals to progress towards a certified teaching position.

**Enrollment and Attrition.** Recruiting more candidates than needed to meet enrollment minimums is important to maintain the health of the program. Based on findings reported in the literature, programs can experience enrollment losses of approximately 50% (Perona et al., 2015). One method is inviting multiple school districts in a specific region to join the partnership. NAU projected approximately five to six school districts are needed to develop a sustained pipeline of new students. To provide a size comparison, the partner school districts in total serve approximately 26,600 K-12 students.

Additionally, establishing relationships with high school districts who are offering or could offer Educators Rising programming (e.g., classes, sponsor a student club) to introduce middle and/or high school students to the education profession can be a useful recruitment strategy. GYO partners can provide educational experiences regarding the teaching profession for students involved in the Educators Rising program. These programs also offer an opportunity for school districts to promote non-certified positions to students and upcoming graduates as well as opportunities to pursue teacher certification programs through established GYO partnerships.

### ***Highlight Financial Support***

NAU has the privilege of offering the Arizona Teachers Academy (ATA; see <https://arizonateachersacademy.com/>), a state scholarship program covering tuition and fees for students pursuing eligible teacher certification degree programs. School district leadership recommended and helped create marketing materials focused on the availability of this state scholarship program and the benefit it provides. Leveraging and promoting national (e.g., TEACH Grant), state, university, and/or school district support for tuition, fees, or other educational expenses is key. Providing information about financial support for childcare for enrolled students was also requested by prospective students (e.g., <https://in.nau.edu/dean-of-students/higher-education-child-care-project/>).

The ATA Scholarship was not previously available for NAU transfer students while they were completing their prerequisite coursework at a community college. The GYO model, offering students a pathway to start with NAU right away and complete all four years of the degree program, opened the ATA Scholarship to these students. The funding awarded for the initiative is offering additional financial support to cover the costs of books, computers, transportation, housing, etc. Although financial aid is not typically awarded to students enrolled part-time, the ATA Scholarship program allows for part-time enrollment and the guidelines for the additional scholarship being awarded were also developed to allow students to qualify even if enrolled part-time.

### ***Increasing Access through Eliminating Barriers***

**Multiple Pathways Needed.** We are finding that prospective undergraduate students need to be met wherever they are in terms of completed prerequisite coursework. Some students need the option to complete a few more courses whereas others need to complete the entire first two years.

By creating the option for students to complete the first two years of coursework through NAU rather than a community college, GYO students can take one, four-unit English course rather



than two, three-unit courses, reducing the time needed for completing courses. NAU also launched the delivery of online synchronous sections for the two required Principles of Mathematics courses for Elementary Education majors. Similar courses at community colleges require a higher-level prerequisite Math course than NAU's course. By offering options to take all prerequisite coursework for NAU's undergraduate Elementary and Special and Elementary degree programs, GYO students are meeting the same requirements, rather than completing more courses or higher-level courses, as students enrolled at NAU's main campus in Flagstaff.

**Part-time Enrollment Options Pursued.** NAU's published degree program progression plans presume full-time enrollment as does the schedule of course offerings. Enrollment for students meeting NAU admission requirements and joining the West Valley Pathways to Teaching cohort ranged from part-time to full-time. Using summer course offerings and other courses consistently available online or synchronously online, academic advising staff are working to meet the enrollment needs of each student.

### Discussion

In a nation where school districts lack a healthy pool of qualified applicants to hire for open teaching positions, it is essential that we envision and explore equitable solutions to address this monumental crisis. Initiatives aimed at establishing programs that prepare great teachers and create a more racially diverse workforce is critical to ensuring a quality education for every child (Center for American Progress, 2021). Taking shortcuts, reducing training requirements, and creating weak teacher preparation programs are not the way to solve teacher attrition and shortages (Center for American Progress, 2021). To meet this crisis head-on, it is important to implement evidence-based programs that are known to help in the long-term. GYO programs are one such alternative for hard to staff school districts. By recruiting and training individuals to become certified teachers, GYO partnerships have been shown to address many of the challenges facing the teaching profession including attracting racially and ethnically diverse individuals who represent the students they teach. GYO programs can also address teacher shortages experienced by hard to staff school districts in urban, rural, and tribal communities as well as certain specialty areas (e.g., STEM, special education) that are chronically understaffed.

The NAU West Valley GYO program offers a viable, long-term solution for the partner school districts which are facing critical shortages. Through envisioning a program co-constructed with district leadership, it is possible to create a flexible program that brings high-quality academic programs to students who might not otherwise have chosen a path to earn a college degree. The program also is an excellent example of valuing and nurturing "intersectional ethnoracial diversity" (Gist, 2022, p. 53). There is much research that points to the fact that teachers of color are better prepared to teach students of color as compared to white teachers because they can better understand their pupils' backgrounds, experiences, and culturally unique aspects of their lives (Bouie, 2022; Villegas et al., 2012). Students who work with teachers who have these complex sets of identities benefit because it signals that these aspects of diversity that the teachers bring with them are valued and promoted. Students also taught by teachers that mirror their own backgrounds often experience improved achievement test scores, high school graduation rates and a desire to seek a four-year degree (Carver-Thomas, 2018).

A key aspect to the success of GYO programs as illustrated in the NAU West Valley GYO

model is the ability to provide financial support to the students interested in pursuing this option. Our model is especially fortunate to have access to a state or university scholarship as well as support from a generous donor. Options available to help fund college expenses for students seeking teacher education programs including the federal TEACH Grant, PELL grants, and scholarships offered by the state, university/college, and private scholarship opportunities. It is critical to have support from the Financial Aid division of a university to provide prospective students with needed information as they navigate these waters which are murky at best to the savviest consumer. Another point of consideration is the ability to work closely with partners to design programs that align with school and district structures. Finally, having full university buy-in is a necessary ingredient if the program is to survive through initial stages necessary to build the pipeline as well as leadership changes.

### **Implications for Practice**

GYO programs show promise as a strategy for preparing effective, certified teachers. These initiatives take leadership and dedicated staff time from the school district partner(s) and university or college to design, launch, and sustain. To get started, prospective affiliates can explore partnership opportunities with university, college, or other organizations with state approved and/or nationally accredited teacher certification programs. To determine appropriate degree program offerings as well as potential barriers and supports that may be needed, it is critical to learn more about the prospective students and their willingness to commit to pursuing a teacher certification program. To develop the initiative, it is critical to seek internal and/or external funding to support the work.

Explore options for developing a partnership with a university, college, or other organization with state approved and/or nationally accredited programs. GYO programs create opportunities for local residents to earn a college degree, an option that may have been previously out of reach. Approved and accredited programs offered by institutions of higher education or other organizations provide value and a vehicle for economic mobility to graduates. Conducting a needs assessment can help determine interest of staff, parents, and community members for a locally delivered teacher certification program. The purpose of the needs assessment will be to estimate the number of prospective students, ask about college credits completed or degrees already obtained to determine type of program(s) that are needed or would be most appropriate to offer, determine current employment of prospective students, request preferences for full-time vs. part-time pathways, inquire about childcare needs, and ask about preferred times, locations, and delivery formats for offering courses. It would be helpful to also ask about any barriers that would prevent the individual from pursuing a teacher certificate program. The results can support decisions regarding the number of school districts in the area/region needed to build and sustain a GYO program, the level of program(s) to offer (i.e., all four years of an undergraduate program, final two years of an undergraduate program, post-baccalaureate program, graduate level program, and/or other program leading to teacher certification), and the need for building flexible options for completing practicum experiences in conjunction with school positions as well as outside of typical school work hours. Through this needs assessment process, school district partners should also be prepared to share data on their greatest needs in terms of teaching positions. These data will aid discussion with institutions of

higher education or other possible partners to ensure a program provider is able to offer the programs leading the teacher certification that are most needed.

Seek grants or other sources of internal or external funding to support development of the GYO initiative. NAU and the school districts are developing a shared funding model for needed positions such as an on-site anchor faculty and program coordinator positions to support recruitment efforts, mentor students, teach classes, and coordinate other efforts to develop the GYO program and partnership. The generous foundation gift NAU received included funding for student scholarships, research efforts, marketing materials, and professional development materials and instruction. Leveraging the Arizona Teachers Academy state scholarship program that covers tuition and mandatory fees in exchange for a teaching service commitment at an Arizona public school has also been critical to the success of the initiative. Identifying state department of education scholarship opportunities, university or college scholarship options, or school district funds that can be used to cover tuition and fees will be critical information to provide to prospective students. This information will impact their decision process as they determine if they can commit to participating in the program and pursuing the requirements for teacher certification.

### **Recommendations for Future Research**

Based on the initial observations and findings, we recommend the following areas for future research: (a) identifying effective, collaborative strategies to increase enrollment and retention of college students in GYO degree programs leading to teacher certification and (b) identifying strategies to support enrollment and retention of college students from racially and ethnically diverse backgrounds. Developing a GYO is a long-term strategy. It does not provide an automatic fix for the lack of certified teachers applying for open positions. The first steps in developing strong and sustainable pipelines for GYO programs is understanding who in the community might be attracted to pursuing a locally offered teacher certification degree program, how to connect with these prospective students, and what supports may be needed to assist with admission processes and retention in the program.

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