



Grow Your Own: An Umbrella Term for Very Different Localized Teacher Pipeline Programs

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Abstract

“Grow Your Own” (GYO) programs have recently emerged as a promising approach to expand teacher supply, address localized teacher shortages, and diversify the profession. However, little is known about the scale and design of GYO programs, which recruit and support individuals from the local community to become teachers. We conduct a quantitative content analysis to describe 94 GYO initiatives. We find that GYO is used broadly as an umbrella term to describe teacher pipeline programs with very different purposes, participants, and program features. Our results suggest that misalignment between some GYOs’ purposes and program features may inhibit their effectiveness. Finally, we propose a new typology to facilitate more precise discussions of GYO programs.

KEYWORDS: grow your own teacher; teacher pipeline programs; teacher supply

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Introduction

Schools and districts face multiple challenges recruiting a diverse and effective teacher workforce. The number of graduates from teacher preparation programs has fallen by one-third during the last decade, forcing districts to look for new sources of teachers to meet staffing needs (Kraft & Lyon, 2022). The highly localized nature of teacher labor markets has left communities that do not benefit from a large supply of college graduates at a substantial disadvantage for staffing K-12 schools because most teachers prefer to work close to their hometown (Boyd et al., 2005). Many schools struggle to recruit teachers of color, a critical resource for the academic success of students of color who make up over half of U.S. public school students (Dee, 2005; Egalite et al., 2015; Gershenson et al., 2022).

“Grow Your Own” (GYO) programs have emerged as a possible solution to the declining interest in the teaching profession, localized teacher shortages, and the lack of teacher diversity. These programs are designed to recruit and support individuals from the local community to enter the teaching profession (Gist, 2022). By recruiting locally, GYO programs aim to uncover new sources of teacher talent, increase the local teacher supply, and attract more teacher candidates that reflect the racial and ethnic diversity of the students they serve. Interest and investments in GYO programs have grown exponentially in recent years because of their potential to solve multiple challenges facing the teacher workforce and broad support from both conservative and liberal education policy circles (Bush, 2022; Welles, 2022). The U.S. Department of Education has established new funding opportunities for universities to establish GYO programs (U.S. Department of Education, 2022), with several states investing in GYO programs as well (Michigan Department of Education, 2023; Tennessee Department of Education, 2022; Texas Education Agency, 2023).

Despite growing interest and investments in GYO programs, little is known about the scale of GYO programs nationally or their common program features. Most research concerning GYO programs are single site case studies that describe the design elements and participant experiences of GYO programs that aim to diversify the teaching profession. For example, studies have examined programs that seek to increase high school student interest in teaching through teacher training courses (Gist et al., 2018; Hill & Gillette, 2005; Villagomez et al., 2016) or provide opportunities to earn an education degrees for parents (Skinner et al., 2011), paraprofessionals (Lau et al., 2007), community members (Irizarry, 2007; Jones et al., 2019), or existing college students (Flores et al., 2007). These studies highlight the importance of providing GYO participants with financial, academic, and social supports to enable their successful program completion and entry into teaching for GYO participants, especially among participants of color (Irizarry, 2007; Jones et al., 2019; Lau et al., 2007; Skinner et al., 2011). A handful of studies summarize the design and features of a subset of GYO programs with specific characteristics such as high school programs or programs that recruit teachers of color (Garcia, 2020; Gist et al., 2019; Toshalis, 2014).

We build on and extend this literature by conducting a systematic national collection and analysis of programs that self-describe as “GYO” rather than focusing on programs that meet a specific definition. This allows us to 1) illustrate how the term has been adopted by a wide range of programs, 2) to describe variation in their purposes, participants, requirements, and characteristics, and 3) to examine alignment between their purposes and program features across the full spectrum of GYO programs that exist. Our systematic web-search for GYO programs and analysis of website content in Spring 2022 uncovered 94 GYO initiatives including 20 statewide GYO grant competitions and 74 standalone GYO programs that together serve over

900 school districts. Using this snapshot of GYO initiatives, we provide policymakers with a better understanding of the landscape and inform ongoing program improvement efforts.

We find that GYO initiatives are prevalent throughout the U.S. with GYO programs operating in at least 40 states as of March 2022. The single, near universal feature of GYO initiatives is that they aim to increase teacher supply by targeting individuals who work in, live in, or attend schools near a specific district. Outside of this, GYO programs vary widely in their purposes, participants, and program features. In particular, only half of GYO initiatives explicitly assert that they aim to increase teacher diversity, in contrast with much of the research concerning GYO programs. The type of individuals targeted to become teachers also differs across GYO initiatives. The most common type of GYO initiative focuses on increasing interest in the teaching profession among high school students through coursework and extracurricular programs. Other initiatives provide various supports to adults, such as paraprofessionals, community members, and college students, to earn teacher certification.

We also find varying degrees of alignment between GYO program features and entry into the profession. Although prior research highlights that financial assistance is an important support for non-traditional entrants into the teaching profession (Irizarry, 2007; Skinner et al., 2011), just half of GYO initiatives in our sample provide scholarships for degree completion or certification with few covering all costs. Only 22 percent of initiatives we studied required participants to teach after program completion, a possibly important accountability mechanism that can ensure investments result in increased teacher supply. Program features aligned with entry into teaching, especially those that lower economic barriers to entry into the profession, are more prevalent in GYO initiatives targeting adult participants than high school GYO initiatives. Taken together, our results suggest that the implicit theory of action behind many GYO

initiatives, especially high school GYO programs, appears to be that participation in them, by itself, will lead to increased probability of entering the profession and returning to teach in local communities.

We make three primary contributions with our analysis. First, we illustrate how “GYO” is often used imprecisely as an umbrella term to describe very different teacher pipeline programs. This implies that evidence concerning the effectiveness of one GYO initiative likely cannot be generalized to all GYO initiatives. Second, we highlight areas of misalignment between GYO programming and program goals, suggesting that some GYO programs may not achieve their intended outcomes. Third, we propose a new typology of GYO programs that classifies these programs by their participants and programming. We view this typology as providing much needed precision to the emerging discussion of the potential and evidence supporting the range of programs that self-describe as GYO. Moving forward, researchers and policymakers alike will be wise to pay close attention to the features of GYO programs when designing them and interpreting their effectiveness.

Theory of Action

GYO programs hold the potential to expand the pool of effective teachers, reduce teacher staffing challenges, and increase teacher retention by recruiting teachers from the surrounding community. We depict the variety of interrelated and mutually reinforcing pathways through which GYO programs may improve teacher outcomes in Figure 1. First, GYO programs may increase the supply of teachers in a particular school or district. By focusing teacher recruitment efforts locally, GYO programs aim to attract more teachers to local schools because teachers prefer to work close to home. Most teachers teach less than 50 miles from where they went to high school and are more likely to work near their hometown than other college graduates (Boyd

et al., 2005; Reininger, 2012). When GYO programs target schools and districts experiencing teacher staffing challenges, the increase in the local teacher supply from GYO programs may reduce teacher shortages due to the highly localized nature of teacher staffing challenges (Edwards et al., 2022). GYO programs may also be especially effective in alleviating teacher shortages in communities that do not already produce a large supply of college graduates that go on to become teachers such as low-income neighborhoods and rural areas (Economic Research Service, 2021; Wodtke et al., 2011).

By recruiting teachers from the local community, GYO programs also may improve exposure to effective teachers and reduce teacher turnover. Homegrown teachers, paraprofessionals (a profession targeted for participation in GYO programs), and teachers who complete residencies (a feature of some GYO programs) have larger contributions to student achievement and higher retention rates than other novice teachers (Clewell & Villegas, 2001; Fortner et al., 2015; Papay et al., 2012; Redding, 2022). Reductions in teacher attrition not only directly impact student achievement (Ronfeldt et al., 2013; Sorensen & Ladd, 2020), but likely reduce teacher staffing challenges because high rates of teacher turnover are a key driver of localized teacher shortages (Edwards et al., 2022).

Finally, GYO programs also have the potential to create a more diverse teacher workforce (Gist, 2022). GYO teacher candidates are more likely to reflect the populations they teach when candidates are recruited locally, especially from the pool of current high school students and paraprofessionals (Gist, 2019; Bisht et al., 2021). If GYO efforts are directed at communities of color, this may result in more teachers of color, an important resource for improving educational outcomes for students of color. Research shows that exposure to a same-race teacher results in higher achievement, reductions in disciplinary incidents, and an increased

likelihood of high school graduation, especially for students of color (Dee, 2005; Egalite et al., 2015; Gershenson et al., 2022; Lindsay & Hart, 2017). However, the current teacher workforce does not reflect the demographics of its students, leaving many students with little access to same-race teachers (Lindsay et al., 2017).

Data Collection and Policy Coding

Sample Creation

We identified the GYO initiatives in our sample through a systematic process of Google searches for *[state name]* “grow your own” teachers for each U.S. state and the District of Columbia (D.C.) in February and March 2022. For each state, we examined the first five pages of search results, approximately 50 webpages per state. We supplemented these searches with data contained in New America’s *Grow Your Own Teachers: A 50-State Scan of Policies and Programs* (Garcia, 2020). We used two primary inclusion criteria in this process: the initiative had to encourage people to become K-12 teachers and refer to itself as GYO on its website or through a program leader interview. We also excluded initiatives that did not originate within the boundaries of the state such as district chapters of *Educators Rising*, a national education and training career and technical education organization.

Throughout the paper, we refer to the programs and policies collected as “GYO initiatives” because the term “GYO program” may imply that all districts operate the same type of program. The initiatives we identified included grant competitions to start GYO programs, often with varying features, as well as stand-alone GYO programs, which sometimes operate in multiple districts. We note that our sample of GYO initiatives provides a survey and overview of established GYO programs with a web presence, but it is not exhaustive or fully representative of the population of GYO initiatives because our inclusion criteria required initiatives had to have a

strong online presence. Given our data collection approach, we interpret our results as a description of the landscape of GYO initiative types operating nationally rather a representative sample.

Coding Procedures

We developed our initial set of codes through a deductive process informed by prior research (e.g., Garcia, 2020; Gist et al., 2019) and our theory of action. We then tested our initial codes on a pilot sample of 10 initiatives and adjusted our codes to ensure they captured the major features of existing GYO initiatives. Our final coding scheme includes directory information, such as participating districts and universities, program purposes that align to the outcomes in our theory of action (e.g., diversify teacher workforce)¹, the groups targeted for recruitment (e.g., high school students), requirements for participation (e.g., work or live in district), program activities (e.g., teacher residency), and program funding (e.g., scholarships). Our codes also provide additional detail concerning certification requirements, teaching requirements, high school courses, and scholarships, such as length of requirement and scholarship amount, for GYO initiatives with these features. We provide a comprehensive list of our codes in Online Appendix Table A1.

Research assistants, working closely under our supervision, coded the content of the GYO initiative webpages. The research team engaged in a collective pilot coding process to establish coding norms and ensure that the coded data were reliable. The research assistants coded a common set of 10 initiatives. After the initial coding, the percent agreement across the 530 coded items in the pilot sample was 73 percent (Cohen's kappa 0.49). Coders then met and reconciled the conflicting codes through discussion and code revision. The percent agreement was 99 percent after the reconciliation process.

Finally, we organized the program activities, requirements, and funding codes by actions that prior research, outlined in our Theory of Action section above, suggests are associated with intended outcomes of GYO programs. This categorization, displayed in Table 1, allows us to examine the alignment between the design of current GYO programs and their ability to achieve their theorized outcomes.² For more details about our data collection, coding, and analysis processes, please see the Online Appendix.

Results

GYO initiatives are prevalent throughout the U.S.

We identified 94 GYO initiatives comprised of 20 statewide GYO grant competitions and 74 standalone GYO programs through our data collection process. Although many GYO initiative webpages did not state which or how many districts and educator preparation programs participated in them, we identified at least 900 districts and 200 institutions of higher education operating or participating in GYO initiatives as of Spring 2022. These GYO initiatives reported receiving financial support from a range of government and private sources including the U.S. Department of Education, state departments of education, both major teachers' unions (the National Education Association and the American Federation of Teachers), the National Science Foundation, the Gates Foundation, and at least three local foundations. Many of the programs we identified were relatively new. Over half of the initiatives that reported start dates did not exist prior to 2018.

We map the range of GYO programs and GYO grant competitions we identified across states in Figure 2. At the time of collection, at least 40 states and D.C. had a GYO program operating within their boundaries. Nineteen states and D.C. also had grant competitions for districts and other entities to establish GYO programs. Districts that participate in the GYO

initiatives in our sample range from some of the largest urban districts in the country such as Houston Independent School District to rural districts such as Kingdom East Schools in northeast Vermont, which serves less than 2,000 students.

GYO initiatives aim to expand the teacher pipeline but vary widely in their other stated purposes.

We present the percent of GYO initiatives with each purpose, participant group, requirement, and program characteristic we examined in Table 2. We display this for the full sample as well as separately for GYO grant competitions and standalone GYO programs. In terms of their stated purposes, 95 percent of GYO initiatives state that they intend to help expand the teacher pipeline. Outside of expanding the teacher pipeline, GYO initiatives do not share a common purpose. Six out of ten initiatives state that one of their purposes is to alleviate local teacher shortages, while a quarter of GYO initiatives focus on reducing subject specific shortages. Fewer initiatives state that they intend to improve teacher quality for disadvantaged students (47%) or reduce teacher turnover (27%). Only half of the GYO initiatives in our sample articulated a focus on increasing the diversity of the teacher workforce. A higher percentage of competitive grant programs state increasing teacher diversity as a purpose than standalone GYO programs (70% vs. 44%).

These analyses illustrate that, outside of expanding the teacher pipeline, GYO initiatives do not share a common set of purposes. This diverse collection of initiatives does, however, share one common feature that distinguishes them from other teacher pipeline programs. GYO initiatives recruit local individuals to teach in local schools and districts. Eighty-eight percent of standalone GYO programs in our sample require participants to meet one of the following requirements: work in the district, live in the community the district serves, or attend a school in the district.

GYO initiatives target a variety of populations for participation with most GYO initiatives encouraging high school students to become teachers.

We also examine variation in the groups targeted for participation in Table 2. In this analysis, we use a non-mutually exclusive list of target populations. Most GYO initiatives (61%) target high school students as potential future teachers with 85 percent of GYO grant competitions encouraging the creation of high school GYO programs. One in five GYO initiatives allow college students to participate. Forty percent of GYO initiatives encourage paraprofessionals to become teachers. Another 20 percent of GYO initiatives target community members as potential teacher candidates.

Adult GYO initiatives have program features that are more aligned with increasing teacher supply than high school GYO initiatives.

We next examine the extent to which GYO program features are aligned with each of the outcomes our theory of action. We first focus on the programming features listed in Table 1 that are aligned with increasing the teacher supply because nearly all GYO initiatives in our sample state this as a purpose. We also explore this separately for high school and adult GYO initiatives because prior research has classified GYO programs by the populations they target as well as the prevalence of GYO initiatives targeting high school students in our sample.

As shown in Table 2, the most prevalent programming feature of high school (HS) GYO initiatives is a high school teaching experience, such as a course or extra-curricular program.³ Three-quarters of HS GYO initiatives include a high school teaching experience with 59 percent of HS GYO initiatives (28 percent of all GYO initiatives) solely being high school teaching experiences. Other HS GYO initiatives are scholarships for high school seniors to earn bachelor's degrees in education and/or teacher certification. However, less than one-third of HS GYO initiatives include financial support to earn teacher certification. Taken together, these

findings imply that many high school programs rely on increasing interest in teaching without removing financial barriers to entry, an important feature for the success of GYO programs aiming to expand the teacher supply according to prior research.

In contrast with HS GYO initiatives, adult GYO initiatives have more program features associated with removing barriers to entry. Most adult GYO initiatives (93%) include participation in a teacher certification program. Nearly three-quarters (71%) offer participants a scholarship to complete their certification or education degree. Still, the amount of financial support may not be enough to ensure program completion and entry into the profession. Scholarship amounts vary widely, ranging from \$1,000 to full costs of tuition, and just over a quarter (28%) of adult GYO initiatives include a living stipend, which may be necessary to compensate for wages lost due to time spent earning certification, especially for low-income individuals and career switchers (Skinner et al., 2011).

Notably, only one in four adult GYO initiatives require any type of teaching commitment. Even fewer HS GYO initiatives require participants to teach (19%). Many GYO initiatives, especially HS GYO initiatives, may not have teaching commitments because they do not offer any financial support, a mechanism that allows for the enforcement of teaching commitments. All GYO initiatives with teaching commitments in our sample provide some financial support to participants.

Few GYO initiatives have program features aligned with increasing teacher diversity, reducing teacher shortages, improving teacher quality, or boosting teacher retention.

Beyond a common commitment to increasing the teacher supply, less than half of the GYO initiatives in our sample have programming features associated with increasing diversity, reducing teacher shortages, improving teacher quality, or boosting teacher retention. Only 23 percent of GYO initiatives explicitly state that they target recruitment efforts towards

underrepresented populations and only 21 percent target people of color. That said, 76 percent of adult GYO initiatives target paraprofessionals, a high percentage (40% nationally) of which are people of color (Bisht et al., 2021).

Many GYO initiatives aim to contribute to the alleviation of localized teacher shortages by recruiting participants locally. However, simply increasing teacher supply does not guarantee a corresponding reduction in teacher shortages because shortages are localized. GYO participants may choose to pursue jobs in districts that already benefit from a sufficient supply of job candidates. Only 13 of the 18 (72%) GYO initiatives in our sample that have teaching commitments required participants to teach in the district that sponsored them. Additionally, GYO initiatives may not be successful at reducing teacher shortages if they do not produce teachers for hard-to-staff subject areas. Prior research has shown that teacher shortages are concentrated in subjects such as science, math, special education, and English as a Second Language (Edwards et al., 2022). However, only 36 percent of GYO initiatives aim to alleviate subject-area shortages and 30 percent require participants to get certified in a specific subject area. Finally, only 33 percent of GYO initiatives include a teacher residency program which have been shown to increase teacher retention (Papay et al., 2012).

Discussion and Conclusion

Over the last five years, GYO programs have proliferated across the U.S. As of March 2022, they were present in about one tenth of U.S. public school districts and in four out of five states. Rather than sharing a common set of program characteristics, our findings show that the term “GYO” is being adopted broadly to describe teacher pipeline programs with very different purposes and practices. This somewhat vague label can be applied to almost any effort to increase the number or diversity of educators in the teaching profession so long as they recruit

from local schools and communities. Many high school education courses, teaching scholarships, teacher residencies, and alternative certification programs refer to themselves as a GYO program because they focus recruitment on local students, paraprofessionals, or community members.

As GYO programs continue to proliferate and researchers start evaluating them, this broad label may cause confusion and inhibit informed discussions about which program types and program features are effective. High school teacher training courses that aim to increase interest in the profession are likely to have very different effects than a scholarship for paraprofessionals to earn their teacher certification. For this reason, we propose that researchers view GYO as a macro-category that describes a diverse class of teacher pipeline programs rather than using the term to characterize a singular program type. Further, we recommend that researchers and program leaders refine their descriptions to include references to two key distinguishing elements: target populations and programming (e.g., a GYO high school teacher training course; a GYO paraprofessional teacher residency program) rather than solely as a “GYO” program to clarify and emphasize the differences between GYO program types.

We present a typology of GYO programs in Figure 3 to help facilitate a common and more precise set of program descriptors. In accordance with our theory of action, we only consider a teacher pipeline program a GYO program if it focuses or limits its recruitment to individuals that work, live in, or attend school in the community. This definition excludes programs, including some in our sample that self-identified as “GYO”, that encourage or allow individuals from outside the community to teach in a specific district or community such as more general place-based teacher residencies (e.g., Boston Teacher Residency) and alternative certification pathways (e.g., NYC Teaching Fellows).

We separate GYO programs by how they theorize that they increase the teacher supply. Our analysis revealed two predominant types of GYO initiatives: high school teaching experiences, which made up over one-third of our sample, and programs that provide direct certification support through financial assistance or participation in a certification pathway. High school teaching experiences provide participants information about their own teaching abilities and expectations of a teaching career, hopefully leading to increased interest in teaching and entry into the profession (Lent et al., 1994) whereas GYO programs that provide certification support remove barriers to entry into the profession for those already interested in teaching. We note, in some cases, GYO programs may include both high school teaching experiences and certification support such as a teacher cadet program with a scholarship for participants who plan to major in education.

Given the variety of individuals targeted for participation by GYO programs that provide certification support, we further classify them by their participants and programming. These GYO programs can target school support staff, community members, local college students, and college graduates. Programming can include scholarships to earn bachelor's degrees, scholarships to earn a traditional or alternative teacher certification, other financial, academic, and social supports, accelerated or specialized certification programs, alternate pathways to enrollment in a traditional or alternative certification program, teacher residencies, or registered teaching apprenticeships. Since the beginning of our data collection, registered teaching apprenticeships have emerged as a new and specific type of GYO program. Registered teaching apprenticeships are approved and validated by the U.S. Department of Labor, include paid on-the-job work experience such as employment as a teacher's aide, relevant job training (e.g., enrollment in an educator preparation program), and mentorship. Apprenticeship programs

ultimately lead to teacher certification (Walsh & Cardona, 2023). As of December 2023, 28 states have a registered teacher apprenticeship program (Garcia, 2023).

Policy Implications and Future Research

GYO programs may need to shift their focus from increasing interest in the profession to removing barriers to entry if they are going to increase the teacher supply. Prior research suggests that financial and academic supports are needed for GYO participants to enter the teaching profession (Irizarry, 2007; Jones et al., 2019; Skinner et al., 2011). However, nearly one-third of GYO initiatives in our sample attempt to increase interest in the teaching profession through high school teaching experiences without providing any support to earn certification, and only half of GYO initiatives in our sample provide any type of scholarship or stipend with few programs covering the full costs of teacher certification. Future GYO programs, especially those targeting high school students, may need to increase financial and academic assistance to ensure participants become teachers.

Districts might also consider adding requirements that graduates of GYO programs teach in their district. Although districts may not want to hire every GYO candidate or saddle those who did not complete the program with student debt, this accountability mechanism may be more effective at reducing localized teacher shortages and improving teacher retention than relying solely on teachers' general interest to work close to where they grew up. Without these commitments, GYO participants may opt to work in surrounding schools and districts with less challenging working conditions than those that GYO programs aim to serve.

More GYO programs will likely need to center people of color in their recruitment strategies and programming if they are to influence the diversity of the teacher workforce at scale. Although much of the research and policy conversation concerning GYO programs has

been on their ability to increase the number of teachers of color, only half of the GYO initiatives even mention diversity as a goal on their websites. We recognize that it is likely that many of the GYO initiatives in our sample may not be able to explicitly state that they target diverse populations or aim to increase the diversity of the teacher workforce even if they implicitly focus on it due to the current political climate. However, prior research suggests that GYO programs likely need to explicitly implement recruitment strategies and community partnerships that value the backgrounds of people of color, in addition to culturally responsive teacher training practices, to recruit and retain teachers of color instead of approaching participant recruitment and training in a race-neutral way (Gist et al., 2019).

Given the popularity of GYO initiatives, it is imperative that researchers partner with existing programs to study their causal impact on a range of teacher outcomes such as teacher shortages, teacher diversity, teacher retention, and teacher effectiveness. Currently, there is very little evidence concerning the effectiveness of any type of GYO program. At the same time, we caution against generalizing the findings of any one GYO impact evaluation to all GYO programs because of the wide variation in GYO purposes and practices. Rather, we will need studies on a broad range of GYO types to better understand which GYO programs and strategies are effective at improving teacher outcomes.

Finally, both education leaders directing GYO programs and researchers studying them need to pay careful attention to the specific type and number of goals assigned to GYO programs. Although GYO programs can have many purposes, expecting one program to solve multiple problems associated with recruiting effective teachers runs the risk of diluting their ability to strongly impact any one outcome. For this reason, GYO program leaders should design and implement their individual programs to meet their most pressing staffing needs rather than

treating it as a silver bullet to solve all teacher recruitment challenges. Researchers would also be wise to focus on the intended outcomes of a particular program when evaluating its effectiveness and not be quick to judge if an individual program does not improve all goal ascribed to GYO initiatives more broadly.

Endnotes

1. Appendix Table A2 lists the program purpose codes that align with each outcome from the theory of action.
2. Table 1 lists the actions and program features that are associated with each of the outcomes in the theory of action. We display each of the codes that aligns with each program feature/action in Appendix Table A3.
3. To create mutually exclusive groups, we consider a GYO initiative to be a high school GYO initiative if it served high school students and did not serve paraprofessionals or community members. We allow high school GYO initiatives to serve college students in addition to high school students because it may be a continuation of the same HS GYO initiative. All other GYO initiatives are considered adult GYO initiatives.

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Figure 1. Grow Your Own (GYO) Theory of Action



Figure 2. Map of Grow Your Own (GYO) Initiatives

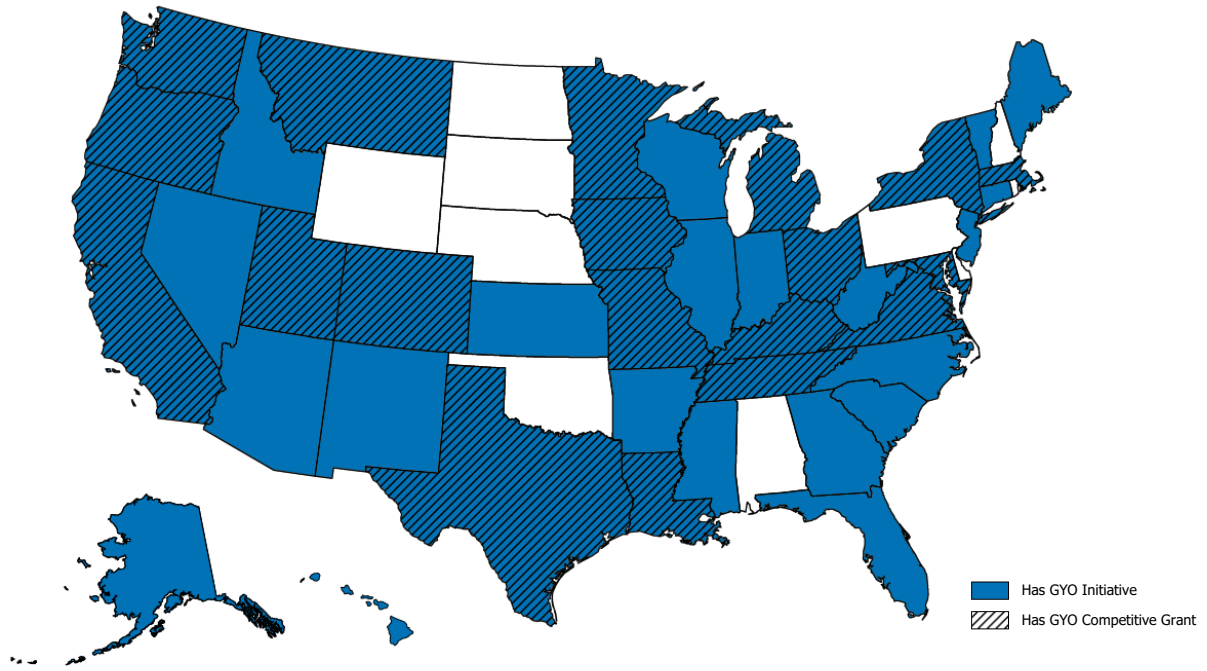


Figure 3. Grow Your Own Program Typology

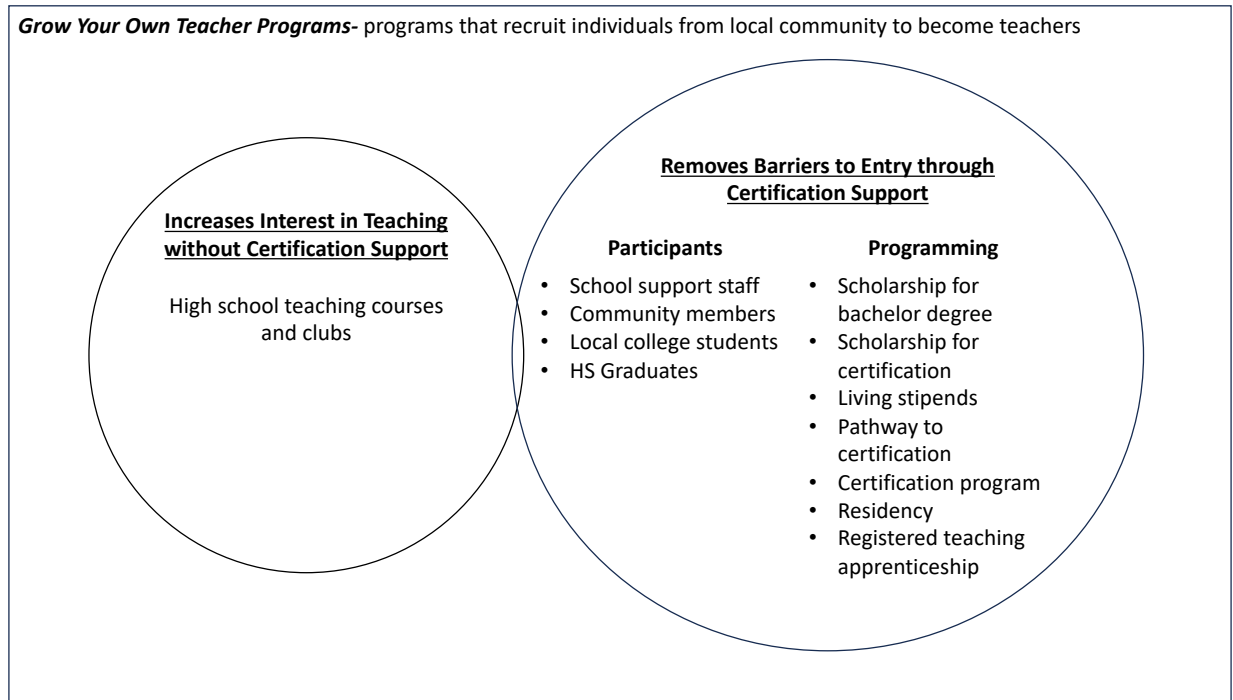


Table 1. Program Characteristics by Purpose

Increase teacher supply	Increase teacher diversity	Reduce teacher shortages	Improve teacher effectiveness	Improve teacher retention
<p>Increase interest</p> <ul style="list-style-type: none"> • High school teaching experience <p>Remove barriers to entry</p> <ul style="list-style-type: none"> • Provides cert. • Provides financial assistance • Increase pipeline retention • Teaching req. 	<p>Targets underrepresented populations</p> <ul style="list-style-type: none"> • People of color • Low-income • First generation • Disadvantaged • Paraprofessional <p>Removes barriers to entry</p> <ul style="list-style-type: none"> • Provides certification • Provides financial assistance 	<p>Recruit locally</p> <p>Stipulate local teaching req.</p> <p>Stipulate subject cert. req.</p>	<p>Target local teachers</p> <ul style="list-style-type: none"> • Recruit locally <p>Target paraprofessionals</p> <p>Target racially diverse populations</p> <p>Include teacher residencies</p>	<p>Stipulate multi-year teaching requirements</p> <p>Target local teachers</p> <ul style="list-style-type: none"> • Recruit locally • Local teaching req. <p>Include teacher residencies</p>

Table 2. GYO Initiative Purposes, Participants, Programming and Requirements

	Full Sample		Standalone GYO Program		Competitive Grant		HS GYO Initiative		Adult GYO Initiative	
	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N
What is the program's stated purpose?										
Expanding future teacher pipeline	95%	94	93%	74	100%	20	98%	44	92%	50
Increasing teacher workforce diversity	50%	92	44%	72	70%	20	52%	44	48%	48
Alleviating local or district shortages	59%	91	62%	71	50%	20	67%	43	52%	48
Alleviating subject area shortages	36%	92	39%	72	25%	20	21%	43	49%	49
Increasing teacher quality for disadv. students	47%	91	45%	71	55%	20	35%	43	58%	48
Reducing teacher turnover	27%	90	26%	70	30%	20	24%	42	29%	48
Who is encouraged to become teachers?										
High school students	61%	94	54%	74	85%	20	100%	44	26%	50
College students	20%	94	16%	74	35%	20	9%	44	30%	50
Paraprofessionals/non-certified staff	40%	94	34%	74	65%	20	0%	44	76%	50
Local community members	20%	94	16%	74	35%	20	0%	44	38%	50
Programming										
Includes a high school course or E.C.	41%	94	38%	74	55%	20	75%	44	12%	50
Includes teacher certification	68%	80	68%	65	67%	15	41%	39	93%	41
Includes a teacher residency	33%	84	30%	67	47%	17	20%	41	47%	43
Provides a scholarship or loan	50%	84	48%	69	60%	15	30%	43	71%	41
Provides a living stipend	16%	86	13%	70	31%	16	5%	43	28%	43
Participation Requirements										
Member of underrepresented pop.	23%	94	22%	74	30%	20	30%	44	18%	50
Person of Color	21%	91	19%	73	28%	18	27%	44	15%	47
Live, work, or attend school in district	81%	94	88%	74	55%	20	98%	44	66%	50
Commitment to teach	22%	82	25%	68	7%	14	19%	43	26%	39
Commitment to teach in district	15%	94	19%	74	0%	20	18%	44	12%	50
Hold/get certified in a subject area	30%	91	32%	73	22%	18	14%	44	45%	47

Note. When an item was unable to be determined for a GYO initiative it was excluded from the analysis for that item. E.C.=Extracurricular. GYO=Grown Your Own. HS=High School.

Online Appendix: National GYO Initiative Search and Coding Protocol

We conducted Google searches for [state name] “grow your own” teachers for each U.S. state and the District of Columbia in February and March 2022. Our choice of search term was informed by the search term used for New America’s *Grow Your Own Teachers: A 50-State Scan of Policies and Programs* (Garcia, 2020). We refined the search term through test searches prior to the pilot search process. For each state, we examined the first five pages of search results. After five pages of search results, no new programs were found, and most search results were not relevant to the study in initial test searches. If we did not find any GYO initiatives in a state through our Google searches, we examined any webpages listed in New America’s *Grow Your Own Teachers: A 50-State Scan of Policies and Programs* for GYO initiatives in that state (Garcia, 2020). We visited the webpage for each search result and determined that the initiative described on the webpage was a GYO initiative if it met all the following criteria:

1. The initiative calls itself “Grow your own” either in the title or its description (anywhere on the web page including videos or PDFs)
2. The initiative encourages people to become teachers
3. The initiative has been enacted (not just a proposal)
4. The initiative is in the state that is currently being searched
5. If the initiative is a part of a larger GYO program, only list the larger initiative

We developed our initial set of codes through a deductive process informed by prior research that examined multiple GYO programs (e.g., Garcia, 2020; Gist et al., 2019) and our theory of action. We coded each initiative identified as GYO through the search process using the items in the Table A1. Table A2 lists the program purpose codes that align with each outcome from the theory of action. We used information from multiple webpages and websites describing the initiative to determine each code. If we were unable to determine the code for a particular item for an initiative we left it as missing. Multiple researchers coded 10 initiatives to ensure interrater reliability before the full coding process. Coders agreed for 73 percent of codes (Cohen’s kappa: 0.49). Coders then met and reconciled the conflicting codes through discussion and code revision. After the reconciliation process, coders agreed for 99 percent of codes.

We organized our program activities, requirements, and funding codes by actions that prior research suggests are associated with each program purpose/outcome in the theory of action. We display each of our codes and its associated actions and purposes in Table A3.

Table A1. Coding Scheme

BACKGROUND INFORMATION
Source (Link)
State (Two letter abbreviation)
Does the program call itself grow your own? (1 if yes, 0 if no)
Does the program encourage people to become PK-12 Teachers? (1 if yes, 0 if no)
Has the program been enacted? (1 if yes, 0 if no)
Does the program have a webpage on a state, district, school or university website? (1 if yes, 0 if no)
Is this program a part of a larger Grow Your Own program? (1 if yes, 0 if no)
Participating District(s) (if greater than 5 put number of districts)
Participating Educator Preparation Program(s) (if greater than 2 put number of EPPs)
Other organizations participating (if greater than 2 put number other orgs)
Year program or policy started (YYYY)

PROGRAM PURPOSE
<i>What is the program's stated purpose?</i>
Expanding the pipeline of future teachers (1 if yes, 0 if no)
Increasing the diversity of the teacher workforce (1 if yes, 0 if no)
Alleviating local or district teacher shortages/return to local district (1 if yes, 0 if no)
Alleviating subject area shortages (1 if yes, 0 if no)
Increasing teacher quality for disadvantaged students (1 if yes, 0 if no)
Reducing teacher turnover (1 if yes, 0 if no)
Other: (Open Response)
<i>What groups are encouraged to become teachers in this policy/program?</i>
High school students (1 if yes, 0 if no)
Paraprofessionals/non-certified staff (1 if yes, 0 if no)
Community college students (1 if yes, 0 if no)
Teacher candidates enrolled in educator preparation programs (1 if yes, 0 if no)
Other College students (1 if yes, 0 if no)
Local community members (1 if yes, 0 if no)
Other: (Open Response)
<i>What are the requirements for participation?</i>
Hold a bachelor's degree before program begins (1 if yes, 0 if no)
Work in the district before the program begins (1 if yes, 0 if no)
Live in/Attended the district/local community (1 if yes, 0 if no)
Come from a disadvantaged background (1 if yes, 0 if no)
Person of color (1 if yes, 0 if no)
Low-income (1 if yes, 0 if no)
First-generation college student (1 if yes, 0 if no)
Hold/get certified in a specific subject area (1 if yes, 0 if no)
Other: (Open Response)

PROGRAM CHARACTERISTICS

Is this a competitive grant program for districts, EPPs, and other orgs to start/fund a GYO program? (1 if yes, 0 if no)

Does the program allow participants to complete a bachelor's degree if needed? (1 if yes, 0 if no)

Do participants have to complete a teacher certification? (1 if yes, 0 if no)

Does the program provide a scholarship/loan for tuition? (1 if yes, 0 if no)

Does the program cover all costs related to becoming a teacher (no-cost program)? (1 if yes, 0 if no)

Does the program provide a stipend for participants? (1 if yes, 0 if no)

Does the program include a teacher residency? (1 if yes, 0 if no)

Does the program include high school courses in education? (1 if yes, 0 if no)

Does the program require/include that high school students participate in an extracurricular group/program about teaching? (1 if yes, 0 if no)

Is this program a Teacher Cadet program? (1 if yes, 0 if no)

Is this program a 2+2 program (community college students can complete their teacher cert in 2 yrs.) (1 if yes, 0 if no)

Does the program require a teaching commitment from participants? (1 if yes, 0 if no)

APPENDIX

TEACHER CERTIFICATION (Fill out if line participants have to complete a teacher certification)

Do participants have to attend a specific educator preparation program? (1 if yes, 0 if no)

Can participants receive an alternative certification? (1 if yes, 0 if no)

HIGH SCHOOL COURSES (Fill out if program includes high school education courses)

Are these courses apart of career and technical education? (1 if yes, 0 if no)

Are these courses apart of dual enrollment? (1 if yes, 0 if no)

Can participants receive paraprofessional or teacher aide certification through the program? (1 if yes, 0 if no)

Is student teaching required? (1 if yes, 0 if no)

Do instructors get an extra stipend for teaching courses associate with GYO? (1 if yes, 0 if no)

TEACHING REQUIREMENTS (Fill out if program offers a teaching commitment)

For how many years is the teacher required to teach? (Number)

Does the teacher have to teach in the same school? (1 if yes, 0 if no)

Does the teacher have to teach in the same district? (1 if yes, 0 if no)

SCHOLARSHIP/STIPEND (Fill out if program offers a scholarship or stipend)

How much do participants receive? (Number if possible)

Is this a loan? (1 if yes, 0 if no)

NOTES

Table A2. Purpose Codes.

Outcome from Theory of Action	Program Purpose Code
Increase teacher supply	<ul style="list-style-type: none"> • Expanding the pipeline of future teachers
Increase teacher diversity	<ul style="list-style-type: none"> • Increasing the diversity of the teacher workforce
Reduce teacher shortages (geographic and subject)	<ul style="list-style-type: none"> • Alleviating local or district teacher shortages/return to local district • Alleviating subject area shortages
Improve teacher effectiveness	<ul style="list-style-type: none"> • Increasing teacher quality for disadvantaged students
Improve teacher retention	<ul style="list-style-type: none"> • Reducing teacher turnover

Table A3. Program Codes by Purpose

Purpose/Outcome			Code
Increase Teacher Supply	Increase Interest	High School Courses, Clubs, etc.	<i>Does the program include high school courses in education?</i>
			<i>Does the program require/include that high school students participate in an extracurricular group/program about teaching?</i>
			<i>Is this program a Teacher Cadet program?</i>
	Remove barrier to entry	Provide Certification	<i>Do participants have to complete a teacher certification?</i>
		Provide financial assistance	<i>Does the program provide a scholarship/loan for tuition?</i> <i>Does the program provide a stipend for participants?</i>
	Increase pipeline retention	Teaching Requirement	<i>Does the program require a teaching commitment from participants?</i>
Increase Teacher Diversity	Target Underrepresented Populations	Come from a historically underrepresented background	<i>Come from a disadvantaged background</i>
			<i>Person of color</i>
			<i>Low-income</i>
			<i>First-generation college student</i>
	Remove barrier to entry	Paraprofessional	<i>What groups are encouraged to become teachers in this policy/program? Paraprofessional</i>
		Provide Certification	<i>Do participants have to complete a teacher certification?</i>
	Provide financial assistance	<i>Does the program provide a scholarship/loan for tuition?</i>	
		<i>Does the program provide a stipend for participants?</i>	
Reduce Teacher Shortages	Geographic	Recruit locally	<i>Live in/Attended the district/local community</i> <i>Work in the district before the program begins</i>
		Local teaching requirement	<i>Does the teacher have to teach in the same district?</i>
	Subject	Subject certification requirement	<i>Hold/get certified in a specific subject area</i>
Improve teacher effectiveness	Recruit locally		<i>Live in/Attended the district/local community</i> <i>Work in the district before the program begins</i>
	Paraprofessionals		<i>What groups are encouraged to become teachers in this policy/program? Paraprofessional</i>
	Target racially diverse populations		<i>Person of color</i>
	Teacher residencies		<i>Does the program include a teacher residency?</i>
Improve teacher retention	Multiple year teaching commitment		<i>For how many years is the teacher required to teach?</i>
	Local teachers	Recruit locally	<i>Live in/Attended the district/local community</i> <i>Work in the district before the program begins</i>
		Local teaching requirement	<i>Does the teacher have to teach in the same district?</i>
	Teacher residencies		<i>Does the program include a teacher residency?</i>