

Exploring the Impact of a Grow Your Own Teachers Program

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Abstract

This study investigated the impact of a Grow-Your-Own (GYO) program on high school students' interests in teaching. Participants included 173 GYO students in a concurrent enrollment introductory education course. To explore the GYO's impact, survey results were compared to a sample of 297 traditional college students in a parallel curriculum. A two-way Analysis of Variance (ANOVA) showed GYO students' plans to pursue teaching were positively impacted, with participants citing altruistic motivators. The GYO program also enrolled higher percentages of students of color, indicating the potential for diversifying the profession.

Keywords: experiential learning, experiential education, transformative education, grow your own program, teacher pathways

Introduction

Teacher shortage continues to be a concern across the United States (American College Test [ACT], 2015; Podolsky et al., 2017). Data suggest that an estimated 7% of new teachers leave the field within the first three years (United States Department of Education [USDOE], 2019). Between 19%-30% of teachers leave the profession before their fifth year (Castro et al., 2018). In the state where this study was conducted, the percentage of teachers leaving the profession within the first five years of practice is closer to 35% (Pfeffer & White, 2016).

To address these trends, the state piloted a Grow-Your-Own (GYO) partnership in 2013-2014 with a few high schools and university partners. GYO programs offer an approach focused

on recruiting and retaining teachers from the local community. As the program grew and the curriculum evolved, in 2017 the state became an Educators Rising partner. The program was designed to promote education as a profession to high school students and provide a better transition into teacher preparation programs. Based on local context, this study investigated the impact of a GYO program on students' interests in the teaching profession.

States are exploring GYO models as a teacher recruitment option (Gist et al., 2019; Hunt et al., 2011; Rogers-Ard et al., 2019; Swanson, 2011; Valenzuela, 2017). GYO programs are designed to engage potential teachers (e.g., high school students, recent college graduates, paraprofessionals, community members) within local contexts, with many partnerships also focused on recruiting potential teachers of color to the profession. Rogers-Ard et al. (2019) noted, "the alignment of GYO programs and research on strategies to diversify the teacher workforce, increase retention, and improve the quality of preparation efforts through some combination of university, community college, community organization, and/or district partnerships" (p. 28).

GYO programs are increasing in popularity (Gist et al., 2019; Goings & Bianco, 2016; Valenzuela, 2017). This study investigated the impact of a Grow-Your-Own (GYO) program on high school students' interests in teaching and adds to the current body of research addressing an identified call for updated scholarship on GYO initiatives. Based on the most recent meta-analysis of GYO programs' designs and data findings from 1996 to 2016 (Gist et al., 2019), our research questions were:

1. In what ways does a GYO program impact high school students' interest in the teaching profession?
2. How do participants' experiences compare to a sample of college students enrolled in a corollary, traditional campus-based introduction to education course?

Context

The GYO program analyzed in this study provided interested high school students with experiences designed to attract them to the teaching profession. The state partnered with local universities and Educators Rising to offer resources, professional development, innovative curriculum, and partnership opportunities focused on encouraging high school students to explore the teaching profession. Specifically, this GYO program focused on increasing interest in the teaching profession and recruiting more students of color (Bianco et al., 2011; Gist et al.,

2019).

While any school in the state can participate in the GYO program, the state and the university partners involved with the initiative, have been purposeful about seeking out partnerships with highly diverse schools. Partner schools involved in the study have a higher enrollment of Black students (28.25%) than the state average (20%). Enrollment commensurate with state averages for other historically underrepresented populations includes Hispanic students (10.97% GYO; 13% state), English language learners (5.9% GYO; 8% state), and students in poverty (60% GYO; 63% state). Of the 77 school districts involved in the initiative, more than half have populations above the state average for Black student enrollment, and 31% have populations above the state average for Hispanic student enrollment.

Students in the program received concurrent credit for one class based on a prescribed curriculum. The course was designed for students to (1) explore teaching, (2) provide an overview of the structure of the American public school as an institution within itself and as an agency of society, (3) gain a sense of the changing nature of schooling, (4) understand the process of becoming a certified teacher, (5) explore culturally responsive teaching practices, and (6) engage in a structured educational field experience. An identified secondary teacher who meets the qualification to be an adjunct instructor at the university offered the concurrent credit course at the local high school with support from a university faculty assigned to the project. Beyond concurrent credit, students attended campus visits with their partner university and worked directly with a liaison from the teacher preparation program partner. Students also participated in professional development and regional and state conferences, emulating the Educators Rising conference model.

Literature Review

Despite increases in the number of students taking the ACT (college entrance exam used in the state), the number of students reporting an interest in becoming a teacher is low, with only 5% of ACT (2015) test takers reporting an interest in teaching. The number of high school students indicating an interest in teacher education decreased by 4%. Those interested in teaching specific subjects dropped by 15%. In addition to fewer students indicating an interest in education as a profession, continuing teacher demographics are leading state departments and teacher preparation programs to set explicit goals to recruit highly qualified teachers of color and to encourage candidates to teach in high needs districts and content areas.

The Grow Your Own (GYO) model provided the theoretical framework underpinning this study. GYO programs are one venue being used to respond to current teacher data, to fill teacher pathways with qualified candidates from the local community, to encourage candidates to teach in hard to staff areas, and to enroll potential teachers of color (Bianco et al., 2011; Gist et al., 2019; Rogers-Ard et al., 2019). GYO programs present a practical method to recruit teacher candidates and promote a positive image of the education profession.

GYO programs commonly take the form of a high school introduction to education course, often run in collaboration with an educator preparation provider. Students in these courses may also earn concurrent college credit. In this year-long experience, high school students work through the content of an introductory education course including content focused on teaching as a profession; history of schools and education in the United States, teacher licensure; student diversity and advocacy; school law and governance in U.S. schools; ethical responsibilities and social issues; and teacher effectiveness. High school students also have structured, embedded field experiences, most often with elementary, special education, or middle school students (Gist et al., 2019; Hunt et al., 2011).

Some GYO programs intentionally recruit high school students by providing potential candidates with early coursework, practicum experiences, and mentorships. These early introductory education experiences are designed to impact students' decisions to persist toward a college degree in the education field. Through these programs, high school students explore teaching and related educational fields as a viable career choice through structured assignments, assigned teacher mentors, field experiences, and observations (Gist et al., 2018; Goings & Bianco, 2016; Hunt et al., 2011; Swanson, 2011; Valenzuela, 2017).

GYO programs strategically concentrate on recruiting students of color and men, who are significantly underrepresented in the field (Bianco et al., 2011; Gist et al., 2019; Gist et al., 2018; Goings & Bianco, 2016; Schmitz et al., 2012). These programs recruit students of color with the hopes of sparking interest in teaching and encouraging them to make a difference by going back to their communities to teach. Programs such as Educators Rising, Pathways2Teaching, Teacher Cadets, and Today's Students Tomorrow's Teachers (TSTT) show high school students how becoming a teacher has the power to change the injustices in their communities (Bianco et al., 2011; Gist et al., 2019; Gist et al., 2018; Goings & Bianco, 2016; Perkins, 2016).

More research is needed to analyze the impact of GYO programs on recruiting potential teacher candidates, specifically recruitment of students of color (Bianco et al., 2011; Goings & Bianco, 2016; Gist et al., 2019; Gist et al., 2018; Swanson, 2011). Early trends in program data have shown favorable outcomes (Bianco et al., 2011; Gist et al., 2019; Gist et al., 2018; Goings & Bianco, 2016; Hunt et al., 2011; Perkins, 2016; Swanson, 2011) associated with providing potential high school students with first-hand experiences in teaching and providing opportunities to explore the profession (e.g., mentorship, practicum, and partnerships with higher education institutions). With these initial findings, GYO programs have changed the current dialogue and have established a different approach toward teacher recruitment (Gist et al., 2019; Schmitz et al., 2012).

Methods

Research Design

This study used a descriptive, mixed-method research design based on a summative survey comparing GYO participants' responses to corollary data drawn from participants in a university introduction to education course. The study was structured to provide a comparison of participant responses to the introduction to education experiences for GYO participants and traditional, university based students. The curricula for both groups were similar; however, the GYO program provided more embedded field experiences. The university courses were unable to provide field opportunities due to demand for clinical experiences in advanced coursework.

Participants

Participants in the study included 173 GYO program candidates and 297 students enrolled in the traditional university course across two academic years. Participant demographics were compared to the national teacher population statistics (see Table 1) reported by the USDOE National Center for Education Statistics (USDOE, 2019). Participant demographics in both cohorts were closely aligned with the national statistics for gender and included even fewer males than the national trends. However, data indicated that the introductory university class and the GYO populations had more students of color than national norms. Both groups included more Black students, and the GYO program included more Hispanic students than the national trends.

Participants were recruited from the GYO program at an annual conference held for those students on the university campus. GYO participants were provided a link to a survey at the

closing session of the conference and invited to participate. The informed consent was embedded as the first block of the survey, and students had to indicate “I consent” to move forward with the survey. A follow-up email was sent to high school teachers in the GYO collaboration to share to students one week post-conference. Participants at the university level were provided the same survey link at the end of term. The researchers shared the survey link with the introductory course faculty to share with students inviting them to participate. The survey and all protocols were approved by the university’s institutional review board.

Table 1*Demographic Percentages of Participants*

| | GYO (n=173) | | University Course (n=297) | | National Trends (USDOE, 2019) |
|-----------------|----------------|-----------|------------------------------|-----------|----------------------------------|
| | 2016-2017 | 2017-2018 | 2016-2017 | 2017-2018 | |
| N | 69 | 104 | 56 | 241 | |
| % Female | 78.95 | 76.52 | 75.44 | 74.69 | 77 |
| % Male | 11.84 | 13.04 | 22.81 | 22.86 | 23 |
| % Not disclosed | 9.21 | 10.44 | 1.75 | 2.45 | |
| % White | 57.89 | 60.00 | 70.18 | 73.06 | 80 |
| % Black | 15.79 | 11.30 | 17.30 | 14.69 | 7 |
| % Hispanic | 11.84 | 14.78 | 1.45 | 3.27 | 9 |
| % Other | 6.58 | 3.48 | 9.53 | 6.53 | 4 |
| % Not Disclosed | 7.90 | 10.44 | 1.54 | 2.45 | |

Measures

Data sources for this study included quantitative and qualitative data from a survey designed to measure participants’ perceptions of their experiences in their relative course of study and their intention to enter the teaching profession. The survey included five multiple-answer/multiple-choice questions, two Likert-scale questions provided on a slider (1-100), six open-response questions, and a series of demographic questions (see Appendix A).

The researchers designed the survey based on research on teacher motivation and included commonly cited reasons teachers enter the field as selection options (Anthony & Ord, 2008; Bunn & Wake, 2015). Concurrent validity of the survey was established through analysis

of survey questions compared to meta-review of existent teacher motivation research, focusing on reasons teachers give for entering the field (Hellsten & Prytula, 2011). Content validity was established with a novice teacher respondent pool yielding a Lawshe content validity ratio of .60, meeting the critical threshold given the number of participants evaluating the tool.

Data Analysis

Inferential statistics were used to analyze the quantitative data assuming unequal variance in the groups using SPSS software. Participants were asked to indicate their interest in the education profession before and after experiencing the curriculum intervention, based on a scale of 1 - 100. A two-way ANOVA was conducted to examine the impact of the independent variables, including differences in race/ethnicity and the curriculum intervention (GYO or on-campus course), on the dependent variable defined as interest level in teaching. The interest level in teaching was determined by mean change scores calculated from pre and post-test results. Participants were classified into GYO high school students ($n=173$) and university enrolled students ($n=297$). Descriptive statistics were used to analyze the remaining quantitative data and provide additional insight into participants' experiences and perceptions.

Assumption tests were run to test for outliers, normality, and homogeneity of variances. There were two outliers, as assessed, greater than three box lengths from the box plot. A two-way ANOVA was used, with and without the outliers included, to evaluate whether the two outliers had an appreciable effect on the analysis. Since the outliers did not affect the conclusion of the statistical analysis, the outliers were retained. Data were normally distributed, as assessed by the Shapiro-Wilk test ($p>.05$). As assessed by Levene's test for equality of variances, the assumption of homogeneity of variances was violated, $p=.012$. The group sample sizes were similar and large, and normality was confirmed (Jaccard, 1998).

The qualitative data in this study were generated from the responses to the open-ended questions on the survey. Coding was handled using the constant comparative method where patterns were identified in the data, and relationships were identified between ideas or concepts (Krueger & Casey, 2009; Saldaña, 2016). This process involves the constant comparison of data with emerging categories (Creswell, 2013).

Qualitative coding was conducted by both researchers coding independently to verify the patterns and themes that emerged and to establish inter-rater reliability. The researchers then conferred to reach agreement for each code, concept, and category using joint-probability of

agreement. The researchers analyzed the qualitative data using open, axial, and selective coding. Initial open codes were generated independently and secondarily grouped conceptually into categories.

Results

Interest in Teaching Profession

Participants indicated they had enrolled in the GYO program primarily based on an interest in becoming a teacher (73.63%) or were interested in education in general (16.79%). The remaining GYO participants reported that they enrolled in the course as it fit their schedule (6.95%), or their advisor picked the course for them (2.63%). University participants also indicated choosing the introductory class primarily based on an interest in becoming a teacher (96.61%) (see Table 2). These data make clear the students enrolled in the university based course had more intent to enter the profession than do the high school students as a motivator for enrolling in the course.

Table 2

Reason for Enrolling - Percentages

| | GYO (<i>n</i> = 173) | University Course (<i>n</i> = 297) |
|------------------------------------|--------------------------|--|
| Interested in becoming a teacher | 73.63 | 96.61 |
| Interested in education in general | 16.79 | 1.58 |
| Course fits schedule | 6.95 | 0.89 |
| Advisor picked course | 2.63 | 0.92 |

There was a statistically significant difference between the curriculum intervention group (GYO and university students) on level of interest in teaching, $F(1, 466) = 5.88, p = .012, \eta^2 = .012$. GYO mean change scores ($M = 12.13$) were significantly higher than on-campus students ($M = 6.20$). Both groups' standard deviation was high, indicating a great amount of variability in individual student responses (see Table 3).

The main effect of race/ethnicity (students of color and white) on level of interest in teaching was not statistically significant, $F(1, 466) = .860, p = .354, \eta^2 = .002$. Due to the lower number of students of color in the study, the researchers combined students of color as one group

to compare the level of interest in teaching to white students. Students of color mean change scores ($M = 7.54$) from both curriculum intervention groups were similar to whites ($M = 8.73$).

The interaction effect between race/ethnicity and curriculum intervention group on level of interest in teaching was not statistically significant, $F(1, 466) = .559, p = .455, \eta^2 = .001$. For both curriculum intervention groups, white students indicated a slightly higher interest level in teaching. Students of color enrolled in GYO ($M = 9.67$) had moderately higher interest than students of color enrolled on campus ($M = 5.90$). White students in GYO ($M = 13.43$) had moderately higher interest than white students enrolled in the traditional university course ($M = 6.30$) (see Table 3).

Table 3

Interest in the Teaching Profession - Mean Change & Standard Deviations for All Groups by Race

| | GYO | | University | | | Total |
|-------------------|----------|---------------|------------|---------------|----------|---------------|
| | <i>n</i> | <i>M (SD)</i> | <i>n</i> | <i>M (SD)</i> | <i>n</i> | <i>M (SD)</i> |
| Students of color | 60 | 9.67 (20.52) | 78 | 5.9 (21.41) | 138 | 7.53 (21.03) |
| White | 113 | 13.44 (26.22) | 219 | 6.3 (19.45) | 332 | 8.73 (22.21) |
| Total | 173 | 12.13 (24.40) | 297 | 6.2 (19.95) | 470 | 8.38 (21.86) |

At the end of the experience, 64.69% of GYO participants indicated they planned to attend college and pursue a teaching degree. Another 19.77% indicated plans to go to college but not to pursue a teaching degree. In contrast, 83.30% of university enrolled participants intended to continue pursuing a degree in teacher education. Another 6.7% reported being uninterested at the beginning of the experience but changing their minds due to the class intent to pursue an education major.

Primary Motivators for Teaching

Participants who indicated their intent to pursue education as a major were asked to report their primary motivators for entering the profession. Altruistic reasons dominated the response options across both treatment groups (e.g., desire to work with kids, desire to make a difference for kids, desire to make a difference in the community), followed by a love of content and the influence of a teacher in their lived school experiences. Data were further disaggregated

based on participant self-reported demographics for race/ethnicity with no significance found for the responses given by students of color (SOC) compared to their white peers (see Table 4).

Table 4*Primary Motivators for Teaching*

| | GYO | | | University Course | | |
|--|-----------------|-----------------|---------------|-------------------|------------------|---------------|
| | Total (n=82) | White (n=25) | SOC (n=57) | Total (n=236) | White (n=171) | SOC (n=65) |
| Desire to work with children | 20.11 | 19.51 | 21.57 | 19.42 | 18.76 | 21.52 |
| Desire to make a difference for children | 21.26 | 20.73 | 22.55 | 22.85 | 22.85 | 22.87 |
| Love of content | 8.33 | 8.54 | 7.84 | 10.19 | 10.72 | 8.52 |
| Influence of a teacher | 15.52 | 15.85 | 14.71 | 14.70 | 14.53 | 15.25 |
| Make a difference | 15.52 | 16.26 | 13.73 | 13.09 | 13.68 | 11.21 |
| Family of educators | 4.31 | 3.66 | 5.88 | 6.44 | 6.35 | 6.73 |
| Fix system | 6.90 | 7.72 | 4.90 | 5.69 | 5.36 | 6.73 |
| Good job/Good benefits | 5.46 | 4.88 | 6.86 | 7.19 | 7.33 | 6.73 |
| Desire to coach | 2.59 | 2.85 | 1.96 | 0.43 | 0.42 | 0.45 |

For those not interested in pursuing teacher education, participants reported they were influenced by concerns about teacher pay and felt that teaching was not a good fit for them personally. Other strong responses included participant concerns about family objections and a lack of enjoyment in school as a student (see Table 5). While GYO participants were initially not as committed to the idea of entering the profession, they were less likely to cite teacher pay as a demotivator. GYO participants were more likely to indicate a feeling that kids are too disruptive, that teaching was not well respected, and to cite family objections.

Table 5

Percentage Participants' Reasons for Not Entering the Teaching Profession

| | GYO | | | University Course | | |
|-----------------------------------|-----------------|-----------------|---------------|-------------------|-----------------|--------------|
| | Total (n=22) | White (n=12) | SOC (n=10) | Total (n=47) | White (n=38) | SOC (n=9) |
| Never planned to be a teacher | 21.05 | 23.53 | 19.05 | 4.35 | 3.03 | 7.69 |
| Teachers do not make enough money | 13.16 | 11.76 | 14.29 | 19.57 | 18.18 | 23.08 |
| Teaching just is not for me | 21.05 | 23.53 | 19.05 | 23.91 | 33.33 | 0.00 |
| Kids are too disruptive | 7.89 | 11.76 | 4.76 | 4.35 | 6.06 | 0.00 |
| Teaching is too hard | 5.26 | 0.00 | 9.52 | 4.35 | 3.03 | 7.69 |

| | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|
| Teaching is not well respected | 5.26 | 0.00 | 9.52 | 2.17 | 0.00 | 7.69 |
| Do not enjoy schools | 7.89 | 0.00 | 14.29 | 8.70 | 0.00 | 30.77 |
| Family objections | 10.53 | 17.56 | 4.76 | 4.35 | 6.06 | 0.00 |
| Teaching is too stressful | 7.89 | 11.76 | 4.76 | 15.22 | 15.15 | 15.38 |

When the data were disaggregated, some notable differences in responses between students of color and their white peers were evident across both groups. In both peer groups, SOC were more likely than their white peers to cite teacher pay as a demotivator and a feeling that teaching was too hard, teaching was not respected, and that they did not enjoy their own K-12 school experiences. In contrast, SOC across both populations were less likely than their white peers to indicate that teaching just "wasn't for me", were less likely to report feelings that kids were too disruptive, and were less likely to cite family objections as a reason not to enter the profession. The GYO SOC were also less likely than their white peers to feel that teaching was too stressful. In contrast, SOC enrolled in the university course indicated similar feelings as their white peers that teaching was a stressful occupation.

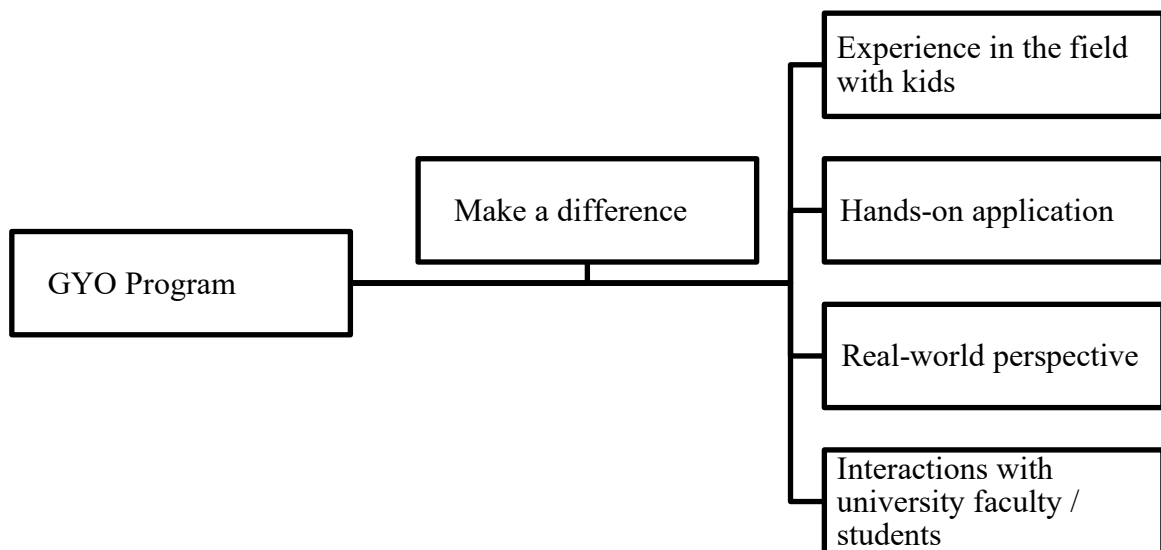
Qualitative Indications

Notable in the qualitative findings was the discovery that strengths in the GYO program qualitative data mirror the critiques posed by university-sponsored introductory course participants. GYO participants responded positively to their experiences in the open-ended survey questions. Several commented that their view of teachers' work would allow them to make a difference in their community and with kids (see Figure 1). This theme was the most robust in the codes and ties to the research in the field about altruistic motivations to teach (Author, 2015; Han et al., 2018). Students in the GYO program also noted their appreciation for real-world perspectives gained in the class and the hands-on application of content when asked to move from theory to practice. They stressed their experiences with kids in the field as a strength

of the program. They indicated they saw themselves as student teachers. Finally, they felt their interactions with university faculty and students were valuable in moving to the next level of their education.

Figure 1

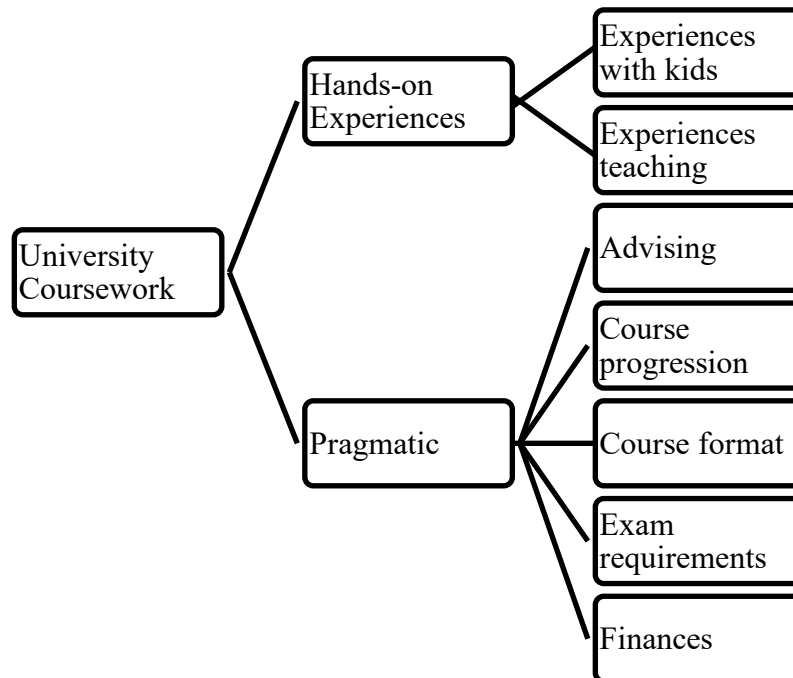
Strengths Cited by GYO Participants' Qualitative Codes



Participants' enrolled in the on-campus introductory course also provided comments that included more neutral and more critical comments (see Figure 2). These comments were staged more frequently as recommendations or suggestions and less so as commendations. For university based participants, the largest category of codes fell under requests students made for more hands-on experiences, specifically experiences with K-12 students in the field. University-sponsored classes did not provide opportunities for students to work with K12 students due to logistics and fear of over-saturating local districts with requests given the clinical demands for advanced coursework. University based participants also made multiple comments that were viewed as highly pragmatic. They included requests for better advising, additional support in course progression, assistance in exam preparation, help with financial concerns, and suggestions that more coursework is available online. These codes were consistent in the data across course sections, program enrollment, and participant demographics.

Figure 2

Strengths Cited by University Participants' Qualitative Codes



Discussion

Comparative data allowed the researchers to validate the GYO model as an effective alternative to the traditional university based model. The curricula for both groups were parallel except for one component: the GYO program provided more opportunity for embedded field experiences with younger K-12 students, field trips, and offered the course in the local school context. Based on this structure, the study yielded results in support of the GYO model to be discussed below.

Encouraging in the participant demographics were the higher rates of students of color involved in both the high school and university programs compared to national trends. Both programs had higher rates of Black students potentially interested in the teaching profession across both years of the study. The GYO participants included 15.79% and 11.30% enrollment of Black students, and the university course touted 17.30% and 14.69% Black student enrollment. In contrast, national teacher trends report 7% of teachers of color nationally (USDOE, 2019). Similarly, the ACT (2015) reports only 10% of high school students potentially interested in pursuing a degree in education were Black.

The enrollment trends for Hispanic students were also striking. The GYO program had notably more Hispanic students enrolled across both years of the study (11.84% and 14.78%) than university based courses (1.75% and 3.27%) and the national teacher norms (9%) (USDOE, 2019). The GYO enrollment is more reflective of the ACT (2015) data, which reports that 13% of high school students potentially interested in pursuing a degree in education were Hispanic.

Given the need to increase the number of teachers of color to better reflect the K-12 student populations, the GYO program appeared to appeal to a broader range of participants more closely reflective of the local school contexts. This points to the program's benefit and aligns with one of the goals of GYO programs (Bianco et al., 2011; Schmitz et al., 2012). These enrollment trends indicate that the initiative could serve as a vital recruiting tool for students of color, particularly Hispanic students, to connect them to university coursework and experiences and a potential bridge between college and education programs. The intentions of the state and university partners in identifying and working with schools with high levels of diversity tap into a previously untapped pool of students who may have never considered education as a profession with the GYO experience. These students represent a unique pool of potential applicants to the profession.

Interest in the Teaching Profession

The first finding focused on participants' degree of interest in the teaching profession. Comparing the GYO and university enrolled respondents' level of reported interest in the education profession indicated that students in the university course had a more substantial interest in the profession before enrollment in the program. While GYO responses were still primarily positive, this population included members who were less inclined initially to enter the teaching profession, citing a general interest in education or a selection of the course for convenience reasons. This finding mirrors the decline noted by ACT in high school seniors, indicating their interest in becoming a teacher (2015).

Students in both groups reported an increase in interest in entering the teaching profession. The two-way ANOVA indicated that the GYO mean change ($M = 12.13$) was statistically different ($p = .016$) when compared to their university counterparts ($M = 6.2$). The GYO program's mean change was almost double the rate of their university counterparts. The more substantial gain in points may indicate that the GYO curriculum had a more considerable impact than the traditional university curriculum.

The standard deviations for both groups were notably high, reflecting a great deal of variability among group members. This variability in the GYO data is logical given the age of students involved and their goal of investigating potential life choices. The variability in the university based courses was surprising as this group appeared more committed initially with smaller mean change results. Yet, this variability indicates that individual members in this group might be less assured of their chosen career path than was immediately evident in the data analysis. Again, the statistically positive change for the GYO participants speaks directly to the impact of the GYO initiative in recruiting a pool of potential students who otherwise may have never considered education as a profession.

Although the two-way ANOVA analysis did not yield significant differences between students of color compared to their white counterparts based on the intervention, the mean change scores for students of color ($M = 9.67$) and white students ($M = 13.44$) enrolled in the GYO program were moderately higher than university counterparts, students of color ($M = 5.9$) and white ($M = 6.3$). These data indicate that the GYO experience appeared to have a more positive impact on students of color when compared to the university experience. The larger relative enrollment of students of color in the GYO program also indicates a strong alignment with community or local-based contexts and practices in recruiting students of color to return to their communities in a professional role potentially.

Primary Motivators for Teaching

The second finding explored participants' primary motivators for considering the education profession, including making a difference for kids/community, inspired by a teacher, and love of content. In examining the reasons students gave for entering the teaching profession in response to the second research question, factors that influenced students to consider a career in teaching focus on altruistic drivers for entering the profession. In line with this research base (Bunn & Wake, 2015; Han et al., 2018; Hellsten & Prytula, 2011), participants in this study cited the same reasons across both treatment groups (e.g., desire to work with kids, desire to make a difference for kids, desire to make a difference in the community). Many GYO students also noted the influence of a strong teacher on their own decision to consider teaching as a profession, which is aligned with the research base (Watt & Richardson, 2012).

The data indicated that participants in both groups did not intend to enter the teaching profession. Across both groups, SOC cited multiple influences that would dissuade them from

entering the profession at a higher rate relative to their white peers. SOC cited “fit” with the profession (e.g., “teaching is not for me”) as a deterrent which aligns with the research base into lack of representation for TOC in K12 schools. Not seeing TOC is a deterrent for SOC considering the profession or seeing education as a viable professional option (Bianco et al., 2011; Gist et al., 2018; Goings & Bianco, 2016). On a related note, SOC were also more likely than their white peers to report that school was not enjoyable to them as a student. Negative K-12 experiences are cited as a dissuading influence faced by SOC in other studies and cited as a factor affecting potential SOC from considering education as a profession (Bianco et al., 2016).

Additionally, SOC in the GYO program were more inclined to report that teaching was not a respected profession and that teachers were not well paid. Negative messaging around the profession has become part of the narrative dissuading students of color from entering the profession. Bianco et al. (2011) found that students of color only heard about the negative aspects of teaching, including low pay. GYO SOC students also noted family objections to their becoming a teacher, albeit to a lesser degree than white students. Goings and Bianco (2016) discussed the influence of family on students of color as a negative influence where families discouraged students of color from entering the teaching in favor of more lucrative careers (e.g., medicine, law).

Strengths Cited by Participants

Participants were asked to provide insight about the strengths of the program in their qualitative responses deepening insight into the study results. The strengths highlighted in the GYO curriculum included participants’ abilities to work with K-12 students in authentic teaching situations (e.g., 1:1 tutoring, small group work, micro-teach experiences), allowing them to transition theory to practice and operationalize their inherent altruistic reasons for considering the profession in the first place (Han et al., 2018; Hunt et al., 2011; Swanson, 2011). Participants reported that their experiences were “hands-on” and “real-world” affording them perspectives and insights into the profession and its potential viability as a career choice.

This focus on early explorations in coursework and practicum experiences parallels effective teacher recruitment and retention models enacted in high-achieving countries (e.g., Finland, Singapore). These models draw on the altruistic and professional nature of education and position education as a respected profession. Countries employing these models report meager teacher attrition rates based partly on incentives that promote teaching as a desirable

career with competitive salaries, ongoing professional development, effective mentoring, and manageable teaching loads (Sutcher et al., 2016).

Interacting with university faculty and current university students also allowed GYO participants a feel for "real-world" perspectives as they considered their next moves in applying to college and teacher education programs. GYO students' recommendations reflected their commendations. Quite simply, they asked for "more" of the things they had already noted as a strength: field, real-world perspective, hands-on. These attributes may have positively contributed to the larger relative increase in GYO participants' interest in teaching notable in the data.

In their own words, these authentic attributes of the GYO curriculum allowed students to feel as if they could "make a difference." This attribute aligns with the research that the education profession is more likely to be seen as attractive to younger students in places where education has social utility and where teachers as professionals have responsibility important to overall societal health (Han et al., 2018).

Conversely, the university participants noted the lack of hands-on experiences couched in the field. They made specific critiques of their experiences for that reason as they sought to operationalize the hands-on nature of the profession and tap into their intrinsic motivations for enrolling in the class and considering the profession. Their suggestions overwhelmingly called for more field experiences working with kids in addition to the requests for more practical support navigating their college and teacher program expectations.

Conclusion and Implications

Limitations of this study included schools in only one state and the inability to determine why schools chose to implement the GYO program. Information on local motivation may have shed light on intentions and expectations at the school district level. Additionally, longitudinal data are currently not yet available to track participants to see if they followed their reported intent to pursue a degree in education. Although the state has put measures in place to track GYO candidates when applying for a teaching license, these systems are still nascent limiting analysis of the full impact of the GYO program.

This study yielded favorable outcomes for the success of GYO programs in many states (Gist et al., 2019; Gist et al., 2018; Goings & Bianco, 2016; Valenzuela, 2017). This study affirmed the research base in finding that GYO high school programs can positively impact

students' intent to enroll in teacher preparation programs and enter the profession, particularly students of color. Our findings suggest that high school students enrolled in the program were positively impacted by their experiences. Students of color enrolled in the GYO initiative reported a stronger response to their experiences than their peers enrolled in the university based course. Additionally, the data indicated that the GYO program have the potential to recruit more teachers of color than university based course, specifically more Hispanic teachers than university based course. However, additional scholarship and longitudinal data are needed to examine the program's total impact in recruiting diverse candidates to the teaching field.

Participants cited altruistic reasons for considering teaching as a profession. Since teacher recruitment and teacher shortage are ongoing concerns, understanding why different students choose teaching may support the development of targeted recruitment campaigns. Identifying high school students' perceptions of teaching as a profession is a step toward improving this understanding and tapping into the motivators that mean the most to students. In this vein, participants referenced hands-on clinical experiences as primary motivators. This finding supports the validity of the structure and focus of GYO programs. More emphasis on hands-on opportunities may help "potentially" interested students understand why teaching is a good fit for them. Specifically, since students cited altruistic reasons for considering teaching, more opportunities to engage with children/youth would offer them the chance to experience their passion. These findings provide a discussion springboard for innovative, recruitment-based efforts for teacher preparation programs and the state department of education.

Implications for teacher preparation programs, the education profession, and teacher educators are significant in guiding work to recruit, prepare, support, and retain candidates. In particular, teacher preparation programs continue to struggle with attracting candidates of color. This high school GYO program did provide options for reaching more students of color for possible recruitment. To impact the teacher shortage problem in general and recruit more teachers of color specifically, it is crucial that aspiring candidates are recruited early and that efforts are made to understand how these teachers are retained and supported in their continued work in the profession (Gist et al., 2019). Partnerships between universities and high schools are one method to recruit prospective teachers, expanding existing teacher recruitment pathways and potentially attracting more candidates. These partnerships can also provide students with early depictions of school culture, affirming the altruistic benefits of the profession while at the same

time preparing them for anticipated challenges and strategies of how to overcome them. Areas for future research include capturing comprehensive data on the long-term impact of GYO programs as these students move through teacher education programs and into the profession (Gist et al., 2019).

Although the spotlight on the positives of the profession is a central focus in most introductory teacher preparation courses, a collaborative effort with state and federal governments to address the concerns (e.g., low salaries, dissatisfaction with job, lack of support) needs specific attention (Podolsky et al., 2017). With over a third of teachers leaving the profession within their first five years where this study was conducted (Pfeffer & White, 2016), this conversation is even more urgent. The adoption of GYO programs as a means of recruitment at the state level (Hunt et al., 2011; Swanson, 2011; Skinner et al., 2011; Valenzuela, 2017) may be beneficial; however, a systematic focus in recruiting, preparing, and retaining teachers is needed across the entire U.S. (Sutcher et al., 2016; Podolsky et al., 2017). A sole focus on recruitment alone will not eliminate the deficit of candidates in pathways to become teachers nor rectify many issues tied to teacher attrition. Still, GYO programs are a promising practice the profession should continue to invest in and explore.

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Author Biographies

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Donna Wake currently serves as a Professor for the University of Central Arkansas College of Education. Her research interests include diversity, equity, inclusion; critical literacy, teacher education reform; and technology in education. She holds degrees from Temple University, La Salle University, and Hendrix College.

Appendix A

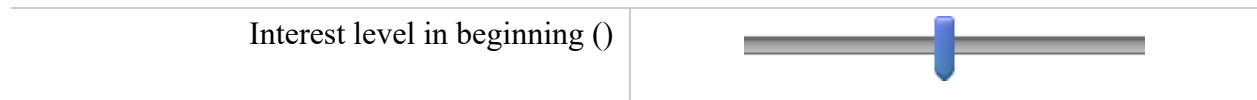
Q2 I took the Orientation to Teaching class or the GYO program because... (check all that apply)

- I was interested in becoming a teacher (1)
- I was not interested in becoming a teacher but was interested in education in general (2)
- The course fit my schedule (3)
- My advisor picked this class for me (4)
- I wanted college credit (6)
- Other (5) _____

Q3 When I started this class, my interest in being a teacher was ...

None at All A little A lot Definitely

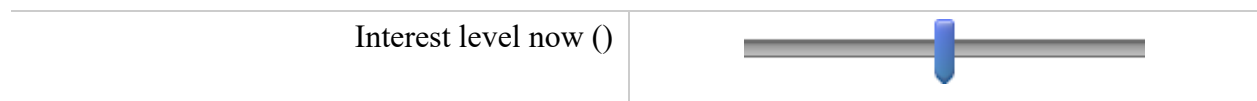
0 1 2 3 4 5 6 7 8 9 10



Q4 My interest in being a teacher now is...

None at All A little A lot Definitely

0 10 20 30 40 50 60 70 80 90 100



Q5 My plans for the future include...

- I plan to go to college to become a teacher (1)
- I plan to go to college but not to become a teacher (3)
- I do not plan on going to college (6)

Q6 If you plan on attending college or trade school, where do you plan to go? (this question is optional)

Q7 If you want to be a teacher, what reasons influence you? (check all that apply)

- I love working with kids (1)
- I love my content area (2)
- I want to make a difference for kids (3)
- A teacher influenced me (4)
- I want to make a difference in my community (5)
- My family are educators (6)
- I want to fix the system (7)
- Good job and good benefits (8)
- I want to coach (10)

Q8 If you do not want to be a teacher, what reasons influence you? (check all that apply)

- I never planned to be a teacher (1)
- Teachers don't make enough money (2)
- Teaching just isn't for me (3)
- Kids today are too disruptive (4)
- Teaching is too hard (5)
- Teaching is not a well-respected profession (6)
- I didn't enjoy my time in school (7)
- My family does not want me to be a teacher (8)

- Teaching is too stressful (9)

Q9 If you don't want to be a teacher, what do you want to do? (this question is optional)

Q10 What did you like about the Orientation to Teaching (or GYO) class? (this question is optional)

Q11 What recommendations could you give the Orientation to Teaching (or GYO) class to make it better? (this question is optional)

Q12 Your Gender

- Female (1)
- Male (2)
- I don't wish to respond (5)
- Other (3)

Q13 Your Race

- Asian (1)

- Black or African American (2)
- Hispanic (3)
- American Indian or Alaskan Native (4)
- White (5)
- Non-resident undocumented (6)
- Native Hawaiian or Other Pacific Islander (7)
- Two or more races (8)
- Unknown (9)
- I don't wish to respond (10)

Q14 Your Current Grade Level

- 11th Grade (1)
- 12th Grade (2)

Q15 What high school do you currently attend?
