Summer 6-25-2020

Grow Your Own Teacher Programs: A Qualitative Study of Best Practices to Address the Teacher Shortage

Jack August Harris
Lindenwood University

Grow Your Own Teacher Programs: A Qualitative Study of Best Practices to Address the Teacher Shortage

by

Jack August Harris

June 25, 2020

A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

Grow Your Own Teacher Programs: A Qualitative Study of Best Practices to Address the Teacher Shortage

by

Jack August Harris

This Dissertation has been approved as partial fulfillment of the requirements for the degree of Doctor of Education Lindenwood University, School of Education

Shelly Fransen — Dr. Shelly Fransen, Dissertation Chair — 6/25/2020 — Date

Sherry DeVore — Dr. Sherry DeVore, Committee Member — 6/25/2020 — Date

Amy Viets-Cooper — Dr. Amy Viets-Cooper, Committee Member — 6/25/2020 — Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

Full Legal Name: Jack August Harris

Signature: Jack August Harris Date: 6/25/2020

Acknowledgements

First, I must thank my dissertation chair and advisor, Dr. Shelly Fransen, for her guidance and support throughout this process. Her continuous motivation, understanding, and encouragement made this research possible. Thanks as well to Dr. Sherry DeVore and Dr. Amy Viets-Cooper for their mentorship, advice, and suggestions in completing this study. A sincere note of appreciation goes out to the districts that not only allowed research but were a source of encouragement and support as well. I would also like to thank my friends and colleagues at Branson Public Schools for their support of "homegrown teachers" and for believing that it is "people, not programs, that make the difference."

I also must thank my wife and fellow educator, Missy, for all the support, love, and encouragement she has provided along the way. Her dedication to our family has allowed me the opportunity to provide leadership and the completion of this dissertation. Finally, I thank my children, Landon and Virginia, for their love, laughter, and support. They have been so understanding as I have juggled the principalship and a doctoral program.

Abstract

Teacher shortages have motivated school districts and state educational agencies to focus on targeted teacher recruitment strategies as a means to mitigate the crisis (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). One specific strategy, Grow Your Own Teacher programs, involves recruiting and developing future teachers from within the local community (MODESE, 2019). While a significant body of research exists about this topic, many districts and state organizations are left to determine what specific program practices best meet their needs. This qualitative study included an analysis of the perceptions of participants and key personnel of Grow Your Own Teacher programs to determine best practices for rural, suburban, and urban districts. Upon completion of focus groups with participants and interviews with key personnel, several themes were developed in regard to perceived best practice. District key personnel must look to intentional mentorship programs and provide preservice teachers with early relational capital. A combination of financial incentives and university partnerships must be developed to open pathways for future teachers. Finally, the more preservice teachers are provided with hands-on classroom experience, the greater the odds future teachers will persist unto the profession. The conclusions drawn from this study can assist Grow Your Own Teacher program personnel with specific best practices regardless of geographic location.

Table of Contents

List of Tables

List of Figures

Chapter One: Introduction

Teacher shortages in America have led state education departments and local districts to develop pragmatic solutions for this specific but widespread issue (Cowan, Goldhaber, Hayes, & Theobald, 2016). Grow Your Own Teacher programs have proven to be a valid means of combating the teacher shortage and can also enhance the level of teacher diversity (Espinoza, Saunders, Kini, & Darling-Hammond, 2018). Each program has its individual components and features that vary greatly depending on the unique needs of the state or district. Valenzuela (2017) indicated, "Grow Your Own programs come in many shapes and sizes in terms of recruitment, financial assistance, curriculum, and support" (p. 1). Education professionals are looking to remove barriers to tap into this local, community resource (Bianco & Marin-Paris, 2019; Bland, Church, & Luo, 2016: Cowan et al., 2016; Espinoza et al., 2018).

An important outcome for many Grow Your Own Teacher programs is to more closely align the teacher workforce to the demographics of the local community and student population (Goings & Bianco, 2016). A large body of research exists that demonstrates the benefits of a well-developed program to ensure teacher diversity and to create more opportunities for teachers of color (Andrews et al., 2019; Gist, White, & Bianco, 2018; Goings & Bianco, 2016; Haddix, 2017; Partelow, Spong, Brown, & Johnson, 2017; Sleeter, 2017; Warner & Duncan, 2019). Studying the perceptions of teachers, preservice teachers, and key personnel involved in these initiatives will allow

for more informed decision-making as to the future of Grow Your Own Teacher programs.

In this chapter, the historical perspective of Grow Your Own Teacher programs at the state and local levels is presented. The conceptual framework, a statement of the problem, and the purpose of the study are included. Also stated in Chapter One are the research questions and significance of the study. Chapter One concludes with a definition of key terms and a list of delimitations, limitations, and assumptions of the study.

Background of the Study

It has long been noted that teachers are the greatest influencers of student learning in the classroom and account for the greatest controllable variance of student achievement (Hattie, 2003). As national attention was drawn to teacher quality by the 2002 reauthorization of the Elementary and Secondary Education Act, known as No Child Left Behind, state education departments and districts began an intense focus on teacher quality (Fennel, 2016). Teacher quality under No Child Left Behind was defined through highly qualified teacher requirements, which outlined the specific degrees, certifications, and licensures that demonstrated competence (United States Department of Education [USDOE], 2001).

In 2016, Congress signed the reauthorization of the Elementary and Secondary Education Act, now known as the Every Student Succeeds Act (Fennel, 2016). This new legislation eliminated highly qualified teacher requirements and gave local districts the ability to define teacher quality with their measures of teacher performance (Saultz, White, McEachin, Fusarelli, & Fusarelli, 2017). The idea that all students deserve access

to highly qualified, excellent educators remains despite the changes to federal law (Missouri Department of Elementary and Secondary Education [MODESE], 2017). Providing students with excellent educators has become more difficult in light of teacher shortages (MODESE, 2017).

Supply and demand factors are the two greatest indicators of a teacher shortage on the national scale (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). The only factors that contribute to overall teacher supply are new entrants and re-entrants to the teaching field (Sutcher et al., 2016). An Education Commission of the States report on teacher shortages included statistical data on the decline of enrollment in teacher preparation programs (Aragon, 2016). There were 725,518 enrolled preservice teachers in 2009-2010 compared to only 465,536 in 2013-2014 (Aragon, 2016, p. 2). Teacher supply is not keeping up with the demand for new teachers, as indicated by student enrollment and teacher-pupil ratio projections that continue to increase demand (Sutcher et al., 2016). Sutcher et al. (2016) projected a large-scale teacher shortage in the United States (see Figure 1).

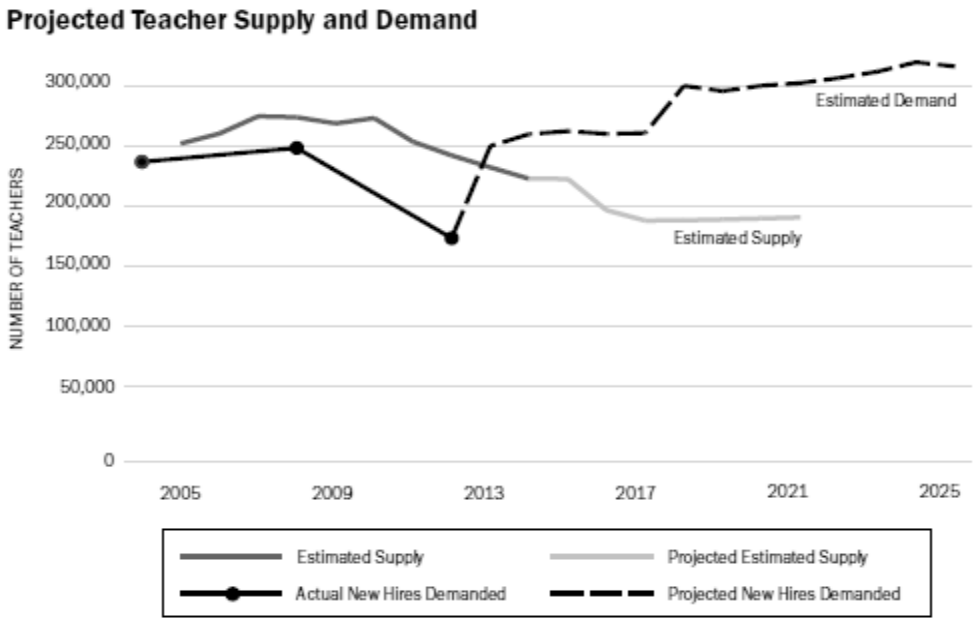

Figure 1. Projected teacher supply and demand. Adapted from "A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.," by Sutcher et al., 2016, p. 15. Copyright 2016 by the Learning Policy Institute.

Specific teacher shortages exist in high-need content areas such as special education, math, and science (Aragon, 2016; Dee & Goldhaber, 2017). According to Podolsky, Kini, Bishop, and Darling-Hammond (2017), "Teacher shortages have been growing in locations where wages and working conditions are least attractive" (p. 1). Schools with high-poverty and high-minority student populations in both rural and urban geographic locations often face staffing problems (Aragon, 2016; Ingersoll, May, & Collins, 2017).

States and districts are turning to targeted teacher recruitment methods as a means of confronting their teacher shortages, needs, and contexts (Aragon, 2018). Grow Your Own Teacher programs specifically "motivate and expose talented individuals to a career

in education, and may help them along the pathway into the profession" (Podolsky, Kini, Bishop, & Darling-Hammond, 2016, p. 25). Utilizing community resources to recruit and develop future teachers, providing financial incentives to decrease the cost of entry, and capitalizing on research that suggests teachers prefer to return home to their own communities make the Grow Your Own Teacher program a viable option for many districts (Valenzuela, 2017).

Conceptual Framework

The conceptual framework that guided this research was the Grow Your Own Model developed by the MODESE (2016c). According to the MODESE (2016c), there are four components to the Grow Your Own Model: teacher shortages, teacher incentives, diverse educators, and urban education. This study was viewed through the lens of these four components.

Grow Your Own Teacher programs came about for the specific purpose of utilizing an existing labor force within a defined community or geographic region to meet the demands of the teacher shortage (Gist, Bianco, & Lynn, 2018). These programs were developed on state and local levels to provide pathways to the teaching field for teacher candidates interested in returning to their local communities (Sutcher et al., 2016). Programming exists to develop a pathway for community members and/or high school students to join the teaching ranks (Espinoza et al., 2018). Another key purpose of the Grow Your Own movement is to create a more diversified teacher workforce prepared to thrive in urban settings (Gist, Bianco et al., 2018; Lee, 2018; Partelow et al., 2017).

The concept and underlying components of Grow Your Own Teacher programs, as identified by the MODESE (2016c) in *Grow Your Own: A Resource Guide to Creating*

Your Own Teacher Pipeline, enabled the research questions of this study to be written. Eliciting perceptions of Grow Your Own Teacher program participants and key personnel allowed for an analysis of best practices across the continuum of preservice teachers and novice teachers. The data indicated specific program features of varied importance according to the geographic area. Targeted teacher recruitment solutions give institutions the ability to design strategies to meet their individual needs (Aragon, 2018). The research questions specifically address the recommendations for future research suggested by McCollum (2011).

Statement of the Problem

This research project included an investigation of the Grow Your Own Teacher concept, specifically an examination of which practices provide the most value to teachers and schools. The perceptions of teachers, preservice teachers, and key personnel were obtained to gather data on the efficacy of implementing the Grow Your Own Teacher model. This study was timely due to teacher shortages in many parts of the country (Cowan et al., 2016).

The MODESE (2017) recently reported while it is the right of every student to "learn under the direction of effective teachers at every grade level and in every content area, there is reason to believe that virtually all students, at some point, learn from less-than-effective teachers" (p. 1). The teacher shortage facing the United States today acutely impacts several high-need content areas, geographic regions, and impoverished communities (Cowan et al., 2016; Sutcher et al., 2016). Grow Your Own Teacher programs have been established by local school districts and state education departments

as a means to combat these shortages and to provide students with effective educators (Espinoza et al., 2018; MODESE, 2016b; Valenzuela, 2017).

As the popularity of these programs and the necessity for teachers in shortage areas increases, Grow Your Own Teacher programs may be essential to school districts in the recruitment and retention of excellent educators (Gist, 2019). Currently, research indicates the Grow Your Own Teacher concept is one of many solutions to recruiting teachers (Espinoza et al., 2018; Valenzuela, 2017). Though many researchers have identified Grow Your Own Teacher programs broadly as a teacher recruitment tool, limited research exists to describe the perceptions of the most relevant practitioners in the field of education.

Purpose of the Study

School districts across the country, faced with what are sometimes acute teacher shortages (Sutcher et al., 2016), are utilizing unique methods to attract and retain a diverse group of educators for open positions (Gist, Bianco et al., 2018). The MODESE (2016c) has tasked districts to conduct research on Grow Your Own Teacher best practices to support a quality teacher pipeline. The purpose of this qualitative study was to analyze the major components of Grow Your Own Teacher programs and to determine which elements are considered best practices.

Understanding the various components of Grow Your Own Teacher programs can enable both local practitioners and state policymakers to be more aware of how to best implement this unique approach (McCollum, 2011). An analysis of best practices, framed by the conceptual framework and review of literature, guided the development of research questions for this study. Research questions were designed to elicit the

perceptions of participants regarding Grow Your Own Teacher programs. The final research question was formulated to generate new information as to which components are considered best practices across the geographical spectrum.

Research questions. The following research questions guided the study:

1. What do participants of Grow Your Own Teacher programs perceive as best practices to further teacher recruitment in their school districts in the following areas:
    a. Teacher shortages
    b. Teacher incentives
    c. Diverse educators
    d. Urban education?
2. What do key personnel involved in Grow Your Own Teacher programs perceive as best practices to further teacher recruitment in their school districts in the following areas?
    a. Teacher shortages
    b. Teacher incentives
    c. Diverse educators
    d. Urban education?
3. What similarities and differences exist among urban, suburban, and rural school districts that implement Grow Your Own Teacher programs?

Significance of the Study

There has been a great deal of research that indicates teacher shortages in the United States (Berry & Shields, 2017; Espinoza et al., 2018; MODESE, 2016c; Sutcher et

al., 2016; Viadero, 2018). Teacher shortages are generally identified by geography or subject area, and many districts are looking for ways to remedy the problem (Viadero, 2018). Studies of Grow Your Own Teacher programs have revealed several gaps in the available research, including an examination of programs designed to encourage high school students to consider teaching as a career and the possibility of students returning to their home districts for employment after graduation (McCollum, 2011; Moreno, 2018). An analysis of Grow Your Own Teacher program practices will provide valuable research to local districts and education departments as they determine which methods work best in their contexts (MODESE, 2016c).

Moreno (2018) stated, "Homegrown teachers remain an untapped resource in educational settings" (p. 234). Examining best practices of Grow Your Own Teacher programs could reveal if teacher candidates cite mentorship opportunities or financial assistance upon graduation as a greater incentive to enter the education field (McCollum, 2011). McCollum (2011) also expressed in her recommendations for future research: "A replication of this study could be conducted with a stronger and more focused purpose regarding reoccurring themes in tracking and monitoring procedures of Grow Your Own Teacher candidates" (p. 150). This study was conducted in an attempt to fill the gaps within previous research by determining which components of Grow Your Own Teacher programs provide the most significant benefits for districts. Providing data on which program features are considered best practices can influence future policy related to the establishment of Grow Your Own Teacher programs.

Definition of Key Terms

For the purposes of this study, the following terms are defined:

Grow Your Own Teacher programs. According to Valenzuela (2017):

> Grow Your Own Teacher programs help address teacher shortages, retention issues, and teacher diversity by engaging in a variety of strategies that aim to recruit teachers from local communities in hopes that the pool of candidates will increase in diversity and will be more likely to stay teaching in the community. (p. 1)

Teacher shortage. According to Carver-Thomas and Darling-Hammond (2017), a teacher shortage is caused when an "inadequate quantity of qualified individuals [are] willing to offer their services under prevailing wages and conditions" (p. 10).

Delimitations, Limitations, and Assumptions

The scope of the study was bounded by the following delimitations:

Time frame. The data for this study were collected during the fall of 2019.

Location of the study. The study was conducted within three Missouri school districts that had enacted Grow Your Own Teacher programs. The three districts studied were designated as rural, suburban, or urban.

Sample. Teacher and preservice teacher participants in the study were involved with Grow Your Own Teacher programs. Key personnel had knowledge of the districts' Grow Your Own Teacher programs and held supervisory roles over candidates and personnel who were a part of each district's program.

Criteria. Only participants who were part of each district's Grow Your Own Teacher program were selected to participate in the study.

The following limitations were identified in this study:

Sample demographics. The sample represented three districts in Missouri. Though each district represented a unique geographic sample, the sample may not be representative of all the unique teacher shortage needs in the state. As the MODESE has only recently begun encouraging Grow Your Own Teacher programs, many districts do not have current teaching staff who have participated in a recognized program.

Instrument. The focus group and interview questions were created by the researcher. Questions for Grow Your Own Teacher program participants and key personnel were piloted by teachers and key personnel outside of the study.

The following assumptions were accepted:

1. The responses of the participants were offered honestly and willingly.
2. The sample was representative of the general population of educators who held teaching certificates from the MODESE.
3. Teacher shortage areas exist in specific geographic locations, subject areas, and schools with high-minority and/or high-poverty student demographics.
4. The participants had direct experience with the origin, development, or implementation of their district's Grow Your Own Teacher program.

Summary

Teacher shortages have presented a concern for school districts for decades, especially in certain geographical areas, hard-to-staff subjects, and minority sectors (Aragon, 2018; Ingersoll et al., 2017). Recognizing this need, school districts and state departments have turned to unique approaches to fill the need for qualified and excellent

educators (Dee & Goldhaber, 2017; Gist, 2019). Grow Your Own Teacher programs have cropped up across the state in response to these shortages (MODESE, 2016c).

Within Chapter One, the background of the study was described, along with the pragmatic approach of the study. The statement of the problem section included descriptions of the gaps in research related to Grow Your Own Teacher programs. The purpose of the study was outlined, along with accompanying research questions. The means by which the research questions allowed the researcher to address the gaps in research on Grow Your Own Teacher programs were discussed in the significance of the study section. The definition of key terms and the study's delimitations, limitations, and assumptions concluded Chapter One.

Provided in Chapter Two is a review of literature regarding the nature, origin, and components of Grow Your Own Teacher programs. The most recent and available literature focuses on teacher shortages, the need for greater teacher diversity and parity among teachers and students, salary and benefits, and Grow Your Own Teacher programming at the high school level. The review includes an examination of how existing initiatives include the development of program features pertaining to these elements.

Chapter Two: Review of Literature

As many school districts across the country experience both broad and specific teacher shortages, many are choosing to implement Grow Your Own Teacher programs to provide a quality teacher supply (Berry & Shields, 2017; Sutcher et al., 2016; Valenzuela, 2017; Viadero, 2018). The goal of this research study was to determine which elements of Grow Your Own Teacher programs are most effective and should be considered best practice for future practitioners and policymakers to implement. To make such a determination about various program components, an appropriate analysis of practices and why these programs exist must take place by carefully critiquing and analyzing available literature on the topic (Machi & McEvoy, 2012).

Provided in Chapter Two is a review of literature surrounding Grow Your Own Teacher programs. The four main components of Grow Your Own Teacher programs in the *Grow Your Own Resource Guide* (MODESE, 2019) were utilized as the conceptual framework of the review. These four components were teacher shortages, teacher incentives, diverse educators, and urban education.

Detailed in Chapter Two are how the teacher shortage facing districts today is complex in nature and involves inadequate supply in specific content fields (Cowan et al., 2016), geographic areas (Sutcher et al., 2016), and high-need or high-minority regions (Albert Shanker Institute, 2015; Farinde-Wu, 2018; Sutcher, Darling-Hammond, Carver-Thomas, 2019). Districts enact various recruitment strategies to attract new teachers to their districts and the education profession (Haeffele, LaSota, & Perona, 2015). Early efforts put forth by schools to develop an interest in current high school and junior high students to pursue teaching as a profession are also addressed in Chapter Two (Coffey,

Putman, Handler, & Leach, 2019; Gist, 2019; Valenzuela, 2017). Creating a culturally diverse pipeline of future educators is another primary function of Grow Your Own Teacher programs (Albert Shanker Institute, 2015; Valenzuela, 2017). Finally, the unique opportunities and challenges supported by Grow Your Own Teacher programs in urban environments are mentioned in this chapter.

Conceptual Framework

Interwoven into the conceptual framework provided in the *Grow Your Own Resource Guide* (MODESE, 2019), are four components which include: teacher shortages, teacher incentives, diverse educators, and urban education. Within each of those four components are four aspects that districts can utilize when developing a plan for their Grow Your Own Teacher program (MODESE, 2019). These aspects are awareness, experience, exposure, and education (MODESE, 2019). Each of these aspects are mentioned in the research concerning Grow Your Own Teacher Programs (Sutcher et al., 2019; Valenzuela, 2017).

District key personnel must create a task force, partner with universities and colleges, and enhance the recognition of teachers in the local community to address the awareness aspect of the model (MODESE, 2019). Creating this awareness through partnerships with teacher education colleges can attract more professionals to teaching due to the removal of financial or academic barriers (Goings & Bianco, 2016; Roegman & Kolman, 2020). Enhancing local awareness of Grow Your Own Teacher programs is first established in many high schools through curricular and extracurricular programs like Educators Rising and other Pathways programs (Bianco & Marin-Paris, 2019; Brown, 2016).

Research also supports the notion of providing exposure, experience, and education from early stages in middle or high school all the way through teacher education courses (Coffey et al., 2019). Districts with the most success in their Grow Your Own Teacher program efforts place supports along a continuum and allow for hands-on classroom experience at each level (Dee & Goldhaber, 2017; Goings & Bianco, 2016, Quiñones, 2018). The removal of financial barriers and provision of alternative pathways to certification both consistent themes within the research (Aragon, 2016; Guillen & Zeichner, 2018; Miller, Elder, Seymour, Cheatham, & Brenner, 2019)

The ability of local school districts to attract and retain high-quality, certified teachers is of great concern across the nation (Berry & Shields, 2017). While the overall teaching workforce does not have a supply and demand problem (Viadero, 2018), shortages exist in certain subjects, geographical areas, and under-resourced districts (Carver-Thomas & Darling-Hammond, 2017). These shortages, especially those impacting under-resourced schools with high-minority and high-poverty demographics, create equity concerns when teacher diversity does not adequately equate to student diversity levels (Andrews et al., 2019; Goings & Bianco, 2016).

The concept of utilizing Grow Your Own Teacher programs as a means to combat these shortages has been in place for over three decades (Valenzuela, 2017). Several state-wide initiatives in North and South Carolina, Illinois, and New York are examples of how large-scale efforts to meet specific teacher shortages have been implemented (Gist, Bianco et al., 2018). The features of these programs vary greatly from state-to-state as educational dynamics and needs are unique to each location (Valenzuela, 2017). Individual district contributions to the grounding of the Grow Your Own Teacher

program concept have been recognized by the MODESE (2016a). In this current study, the participants from Districts 1, 2, and 3 were recognized for their unique efforts to create equitable access to excellent educators.

The foundational programming features of Grow Your Own Teacher programs "are designed at the state and university levels, while others are designed at the school district and community level, or a combination thereof" (Valenzuela, 2017, p. 1). Universities have caught on to the value of providing coursework that "reflects a particular tendency to understand teacher-family-community interaction as a technical matter that can be enhanced through skill development" (Zeichner, Bowman, Guillen, & Napolitan, 2016, p. 280). District-level programming historically entails middle or high school learning experiences through classes or extra-curricular organizations (teacher cadets, Educators Rising, Future Teachers of America) (Brown, 2016; MODESE, 2016c) and mentorship programs for preservice and current teachers (Carver-Thomas & Darling-Hammond, 2017).

Sutcher et al. (2016), in their recent report on teacher shortages, pointed out the need for greater teacher diversity. Increasing the proportion of teachers of color to meet the proportion of students of color has well-established benefits across the literature (Andrews et al., 2019; Gist, 2017; Gist, Bianco et al., 2018; Moreno, 2018; Partelow et al., 2017; Quiñones, 2018; Valenzuela, 2017). This foundational concept was solidified in Sleeter's (2017) study on critical race theory and teacher education programs, which "turn out roughly 80% white cohorts of teachers even though white students are less than half of the K-12 population" (p. 1). Grow Your Own Teacher programs are often

designed with the express intent of increasing parity between minority students and teachers (Gist, 2019; Goldhaber et al., 2019; Zeichner et al., 2016).

Teacher Shortages

Ever since the Baby Boomer generation began retiring in the 1990s, educational researchers have pointed out the high demand and low supply of teachers across the national landscape (Sutcher et al., 2016). The broad teacher shortage crisis never actually took place (Berry & Shields, 2017; Cowan et al., 2016; Viadero; 2018); however, "current teacher shortages vary somewhat more by region and subject area, but they are just as serious today as in the 1990s" (Berry & Shields, 2017, p. 9). Beyond the specific content area and geographic shortfalls that exist today, another teacher shortage area is found in low-income and high-minority districts (Sutcher et al., 2019). Researchers also noted the increasing demand placed on the profession as student enrollment is on the rise and expected to grow by three million students over the next 10 years (Berry & Shields, 2017).

According to Sutcher et al. (2016), a teacher shortage is defined as "an inadequate quantity of qualified individuals willing to offer their services under prevailing wages and conditions" (p. 10). Shortages in specific subject areas are widespread across the nation and are being observed both by districts and teacher education programs (Berry & Shields, 2017; Sutcher et al., 2016). Subject areas that experience the greatest difficulty with staffing are special education, science, technology, engineering, and math (STEM), as well as English as a second language (ESL) (Berry & Shields, 2017; Cowan et al., 2016; Goldhaber, Krieg, Theobald, & Brown, 2015; Hagaman & Casey, 2018; Mason-Williams et al., 2020; Smith, 2018; Viadero, 2018). The high demand for bilingual

laborers as well as workers in the STEM areas has led to a shortage in the teaching field as highly-skilled individuals seek employment in the national workforce market (Arroyo-Romano, 2016; Sutcher et al., 2016)

Geographical areas (region, state, and district) can also have a large impact on teacher shortages (Dee & Goldhaber, 2017; Espinoza et al., 2018; Swanson, 2011). Researchers have frequently pointed to the low teacher supply in rural parts of the United States (Monk, 2007; Sutcher et al., 2016; Viadero, 2018) and in disadvantaged urban areas with low-income and high-minority student populations (Cowan et al., 2016; Sutcher et al., 2016). Teachers are not only less available at these opposing ends of the geographic spectrum (rural and urban), but tend to have higher rates of attrition as well (Sutcher et al., 2019).

Rural school districts face unique challenges with regard to teacher retention and providing highly-qualified teachers for all positions (Aragon, 2016; Dee & Goldhaber, 2017; McHenry-Sorber & Campbell, 2019; Miller et al., 2019; Monk, 2007). According to Lazarev, Toby, Zacamy, Lin, and Newman (2017), increasing numbers of teacher vacancies in Oklahoma (70% rural) have created a teacher market that has great difficulty retaining teachers (p. 2). McHenry-Sorber and Campbell (2019) stated, “While rural teachers are less likely to transfer across school types than urban teachers, they are also more likely to leave the teaching profession entirely” (p. 4). Teacher retention issues in rural areas have led to a number of local, state, and federal initiatives to combat this shortage (Aragon, 2016).

Districts are forced to turn to lesser qualified and/or underprepared teachers when faced with inadequate supply and higher attrition rates as “underprepared teachers were

61% more likely to be employed in a high-poverty, high-minority school than in low-poverty, low-minority schools (8.3% vs. 5.2%)" (Sutcher et al., 2016, p. 13). Schools with larger high-poverty and student-of-color demographics often face what Carver-Thomas and Darling-Hammond (2017) referred to as a "revolving door" of teachers who have little or no experience and may be quite underprepared to take on the task of teaching in these areas (p. 14).

Research on teacher shortages has led federal, state, and local educational agencies to a vast array of solutions and "fixes" for solving the crisis (Cowan et al., 2016). According to Monk (2007), "Neoclassical economic theory holds that people's willingness to accept a particular wage is related in part to the attractiveness of the location where the work will be done" (p. 182). If the living conditions and surrounding region do not offer as attractive or robust opportunities as other markets, districts are forced to try and pay their teachers more yet often struggle to do so due to local and state funding sources (Viadero, 2018). Carver-Thomas and Darling-Hammond's (2017) graph, as shown in Figure 1, demonstrates the correlation between teacher compensation and turnover.

Figure 2. Predicted turnover rate by highest district salary. Adapted from "Teacher Turnover: Why It Matters and What We Can Do About It," by D. Carver-Thomas and L. Darling-Hammond, 2017, Learning Policy Institute, p. 380. Copyright 2017 by Learning Policy Institute.

Teacher salaries are not the only economically appealing means to attract teachers (Berry & Shields, 2017; Ingersoll & May, 2016; Sutcher et al., 2016). State and local policies generally limit the ability of schools to pay teachers in high-need areas more than their peers (Cowan et al., 2016); however, "one of the most straight-forward solutions available to district policy makers is to move beyond single salary schedules and offer differential economic incentives to teachers in high-need areas" (Goldhaber et al., 2015, p. 60). Less-focused strategies of providing teacher compensation include tuition reimbursement, loan forgiveness, and one-time bonuses designed to attract recruits to a specific high-need school or subject (Feng & Sass, 2015). Cowan et al. (2016) described these broad strategies as "trying to hit a pin with a sledgehammer" (p. 461). Reduced

child care and affordable housing options are other measures districts have implemented to provide an additional incentive to attract employees (Viadero, 2018).

Teacher Incentives

This study included an analysis of two areas of teacher incentives utilized by Grow Your Own Teacher programs. The first area, recruitment strategies, includes how Grow Your Own Teacher programs are utilized to address the teacher shortage (Aragon, 2018; Bland et al., 2016; Valenzuela, 2017). The second area, early efforts, includes information on what specific strategies schools are using to attract potential teacher candidates (Bland et al., 2016; Coffey et al., 2019; Garcia, Manuel, & Buly, 2019; Gist, Bianco et al., 2018; Rogers-Ard, Knaus, Bianco, Brandehoff, & Gist, 2019).

Recruitment strategies. Grow Your Own Teacher programs represent one specific strategy within a larger initiative to address teacher shortages (Bland et al., 2016; Valenzuela, 2017). A growing number of targeted teacher recruitment strategies are often coupled with Grow Your Own Teacher program specifics to attract new teachers to the workforce (Aragon, 2018). According to Aragon (2018), programs and initiatives designed to target specific groups of preservice teachers come from a wide range of departments and institutions including state legislatures, state education departments, colleges and universities, grant foundations, nationally-recognized preservice teaching societies, and local school districts. Across the nation, groups are responding in very specific and relevant ways to address challenges created by teacher shortages (Coffey et al., 2019).

Targeted teacher recruitment goes beyond generalized salary hikes and blanket benefits (Viadero, 2018). In 2017, “47 bills were enacted in 23 states (see Figure 3) to

recruit teachers to high-need schools and subjects" (Aragon, 2018, p. 2). The legislation represented an assortment of various forms of teacher recruitment strategies, each with an explicit function to attract specific types of teachers to specific types of schools (Podolsky et al., 2017). This large amount of legislation demonstrates the traction targeted teacher recruitment is gaining across the country.

State	Legislation	Status
Arkansas	H.B. 1303	Enacted
	H.B. 1425	Enacted
	S.B. 26	Enacted
	S.B. 27	Enacted
	S.B. 555	Enacted
Arizona	S.B. 1038	Enacted
	S.B. 1040	Enacted
	S.B. 1042	Enacted
California	A.B. 45	Vetoed
	A.B. 99	Enacted
	S.B. 113	Enacted
Colorado	H.B. 1003	Enacted
	H.B. 1176	Enacted
	S.B. 296	Enacted
Connecticut	H.B. 7212	Enacted
Florida	H.B. 293	Enacted
	H.B. 7069	Enacted
Idaho	H 113	Enacted
Illinois	H.B. 3820	Enacted
	S.B. 1739	Enacted
	S.B. 1991	Enacted
Maine	L.D. 1569 (H.P. 1080)	Enacted
Minnesota	H.F. 890	Vetoed
	H.F. 2	Enacted
Montana	H.B. 119	Enacted
	S.B. 115	Enacted
North Carolina	H.B. 155	Enacted
	S.B. 257	Enacted
	S.B. 315	Enacted
	S.B. 599	Enacted
North Dakota	H.B. 1015	Vetoed
	S.B. 2037	Enacted
Nevada	A.B. 7	Enacted
	S.B. 548	Enacted
Oklahoma	H.B. 1206	Enacted
	H.B. 2157	Enacted
	S.B. 15	Enacted
	S.B. 428	Enacted
Oregon	S.B. 182	Enacted
Tennessee	H.B. 166	Enacted
	H.B. 329	Enacted
Texas	H.B. 2039	Enacted
	H.B. 3349	Enacted
	S.B. 1	Enacted
Utah	H.B. 43	Enacted
	H.B. 212	Enacted
Virginia	S.B. 1583	Enacted
Washington	H.B. 1115	Partially vetoed
	H.B. 1341	Partially vetoed
	H.B. 1445	Enacted
	H.B. 1654	Enacted
Wisconsin	A.B. 64	Partially vetoed
West Virginia	H.B. 2637	Enacted

Figure 3. Targeted teacher recruitment by state. States enacting targeted teacher recruitment legislation in 2017. Adapted from "Targeted Teacher Recruitment: What is the Issue and Why Does it Matter?" by S. Aragon, 2018, Learning Policy Institute, p. 2. Copyright 2018 by Education Commission of the States.

Preservice teachers preparing to enter teacher education programs have the ability in some states to take advantage of merit-based scholarships, which often open the door to free community college (Buchanan & Wilson, 2017). The ability for students to obtain an associate's degree free of charge leads to the completion of many general education courses and can increase total college-going rates (Muñoz, Harrington, Curs, & Ehlert,

2016). According to Muñoz et al. (2016), the Missouri A+ Schools Program has seen large increases in participation since its inception in 1997 (see Figure 4). This unique merit-based program has increased enrollment in community colleges by 5.1% and four-year university enrollment by 3.4% (Muñoz et al., 2016, p. 824). The A+ Schools Program was designed to "establish a procedure for the reimbursement of the cost of tuition, books and fees to any public community college" to qualifying students in Missouri (Missouri General Assembly, 2009, 160.545.8). Teacher candidates with these scholarships are able to transition from community colleges to education degree programs with a large portion of their general education coursework funded (Buchanan & Wilson, 2017).

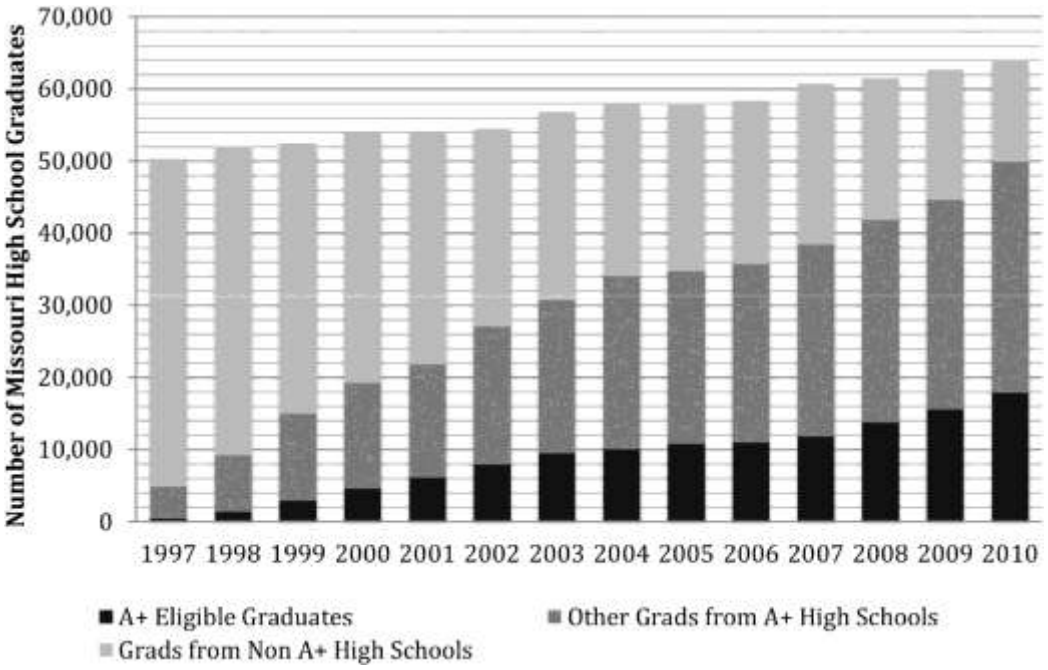

Figure 4. Growth of A+ scholarship program. Adapted from "Democratization and Diversion: The Effect of Missouri's A+ Program on Postsecondary Enrollment," by J. Muñoz, J. Harrington, B. Curs, & M. Ehlert, 2016, *Journal of Higher Education*, p. 805.

Providing scholarship and grant funding for preservice teachers in university teacher preparation programs can be seen as a general recruitment strategy, rather than a targeted strategy (Allegretto & Mishel, 2016; Podolsky et al., 2017). However, many Grow Your Own Teacher program scholarship and funding sources direct monies toward specific types of educators (Garcia, Manuel, & Buly, 2019). In Minnesota, grants of up to $7,500 were established in 2017 for student teachers of color, American Indian educators, or those entering into high-needs subject areas (Burnett, Espinoza, & Spies, 2019). A Washington state program allotted $5 million toward block grants "to fund school district-teacher education program partnerships" (Garcia et al., 2019, pp. 72-73). According to Garcia et al. (2019), under these block grants, teacher candidates could receive $8,000 per year but must agree to teach at a school district in Washington for two years for each year of scholarship money received. Arkansas has passed legislation to create a loan forgiveness and scholarship program for students who teach in either high-need subjects or geographic areas for five years (Aragon, 2018).

Grow Your Own Teacher programs do more than provide financial supports and assistance as a means of targeted teacher recruitment (Sutcher et al., 2016; Warner & Duncan, 2019). Programs exist that offer alternative routes and pathways to teaching for paraprofessionals, community members, military veterans, and professionals from other fields (Coffey et al., 2019). In Washington, one program, through a partnership between Western Washington University's Woodring College of Education and Highline Public Schools, offers bilingual paraprofessionals a route to certification (Garcia et al., 2019). Garcia et al. (2019) stated the Woodring Highline Future Bilingual Teacher Fellows Program provides paraprofessionals in the district with on-the-job training and several

mentors to help them navigate the program. The University of Illinois at Chicago partnered with Chicago Public Schools to create Project 29 (Gist, Bianco et al., 2018). This program provides "bilingual Latino/a" community members with paraprofessional positions in the district while obtaining their teaching certificates (Gist, Bianco et al., 2018, p. 15).

Targeted recruitment strategies that make way for alternate pathways to the teaching field include a cultural component as well as a vocation-based component (Podolsky et al., 2017). The Institute for Native Pacific Education and Culture (INPEACE) offers cultural and educational programming to Native Hawaiians seeking teacher certification (Rogers-Ard et al., 2019). Rogers-Ard et al. (2019) stated, "Most candidates spend years in INPEACE programming, eventually joining a cohort navigating through community college to a 4-year teacher preparation program, with professional development and Native Hawaiian educator mentors throughout the process" (p. 29). Teacher candidates who receive mentoring from families and community leaders develop a great sense of cultural awareness that lends itself to the classroom environment (Zeichner et al., 2016).

On the federal level, the Troops to Teachers program has placed over 17,000 veterans in the teaching field (Parham & Gordon, 2016). According to Parham and Gordon (2016), "Service members must live and work with individuals from other cultures, quickly adapt to changing conditions, be resilient, and collaborate with others to achieve a common mission—all attributes that will serve them well as teachers" (p. 44). An alternate route program in Mississippi, the Master of Arts in Teaching Middle Level (MATM), has placed 113 teachers into full employment positions over the past five years

(Miller et al., 2019, p. 5). This program, which focuses on placement in rural areas, has utilized three strategies: fostering and maintaining relationships, targeting appropriate audiences, and various communication strategies (Miller et al., 2019).

New provisions in the Every Student Succeeds Act have stripped the highly qualified teacher requirements at the federal level, and districts are beginning to explore how greater freedom in hiring can impact their districts (Fennel, 2016). Alternative routes to certification, while providing flexibility and cost-effective pathways, are not without critics (Podolsky et al., 2017; Saultz et al., 2017). Podolsky et al. (2017) noted that teachers who enter the profession via alternative routes or fast-track programs are often underprepared for the classroom and quickly leave the teacher workforce (Podolsky et al., 2017; Warner & Duncan, 2019). Zhang and Zeller (2016) stated, "Substantial numbers of ARC (alternative route certification) teachers lack an understanding of pedagogy, instructional strategies, classroom management, and students' social and academic development issues" (p. 4). The lower retention rate of teachers who enter the profession through alternative certification programs can also be attributed to data that suggest alternatively certified teachers often seek employment in high-minority and high-poverty schools where teacher retention is already an issue (Zhang & Zeller, 2016).

Early efforts. A hallmark of Grow Your Own Teacher programs is programming designed to recruit and develop local middle and high school students to pursue teaching as a career (Bland et al., 2016; Coffey et al., 2019; Garcia et al., 2019; Gist, Bianco et al., 2018; Rogers-Ard et al., 2019). Grow Your Own Teacher programs with this pre-collegiate approach often offer future teacher clubs and coursework at the middle and high school levels to foster interest in the profession (Bland et al., 2016; Podolsky et al.,

2017; Swanson, 2011). As with all targeted recruitment efforts, Grow Your Own Teacher programs have unique programming features that vary by state, district, context, and teacher shortage need (Valenzuela, 2017).

Future teacher clubs and curricular classes such as Educators Rising, North Carolina's Teacher Cadet Program, and Pathways2Teaching bring about awareness, education, and in some cases, college-bearing credit to high school and junior high students with an initial interest in the educational field (Brown, 2016; Coffey et al., 2019; Valenzuela, 2017). South Carolina's Teacher Cadet Program, one of the oldest in the country, exposes high-achieving students to teaching careers through a two-year process (Coffey et al., 2019; Valenzuela, 2017). As stated by Coffey et al. (2019):

> The program includes a dual-credit course taught by a specialty certified instructor; field experiences; and standards and assessments for future educators that are aligned with the National Council for Accreditation of Teacher Education, the Association of Teacher Educators, the National Board for Professional Teaching Standards, and the Interstate Teacher Assessment and Support Consortium. (p. 42)

The Teacher Cadet Program has been heralded for its results in producing preservice teachers (Valenzuela, 2017). Close to 40% of Teacher Cadet graduates go on to become teachers, while 74% of those students who entered a teacher education program stated Teacher Cadet involvement was the most influential factor (Valenzuela, 2017, p. 6).

While a large percentage of Grow Your Own Teacher programs at the pre-collegiate level seek to spark interest in education for the best and brightest students, others are expressly recruiting underrepresented groups to create more diversity in the

teaching workforce (Berry & Shields, 2017). A Denver-based Grow Your Own Teacher Program, known as Pathways2Teaching, seeks to elevate the teaching field among high school students while at the same time fostering educational justice and diversity (Bianco & Marin-Paris, 2019; Coffey et al., 2019; Rogers-Ard et al., 2019; Valenzuela, 2017). The Pathways2Teaching program is considered non-selective, as it does not have specific requirements of grade point average or entrance exam scores, and is facilitated through a partnership between the University of Colorado-Denver and public high schools in the Denver area (Valenzuela, 2017).

Pre-collegiate students develop a respect and appreciation for teaching they would otherwise not have except for the coursework and field experience provided (Goings & Bianco, 2016). When black males in the program were asked if teaching was worth it, one research participant responded, "When I work with the Black male students, I think they take to me because they see me as an older Black kid. He looks like me [like] he's taking time to help me" (Goings & Bianco, 2016, p. 637). The Pathways2Teaching program is among several non-selective, diversity-focused programs in the country.

Coolidge High School in Washington, DC, creates a practicum teaching experience and preservice education for African American students as early as the ninth grade (Coffey et al., 2019). One high school-based program, the Recruiting Washington Teachers-Bilingual Educators Initiative, provides bilingual high school students with dual credit opportunities through specific coursework (Garcia et al., 2019). In Western New York, bilingual educators are returning to their home districts to teach in the same schools that provided pre-collegiate programming through the Teaching and Learning Institute, a high school pathway program (Quiñones, 2018). North Carolina legislation in

2017 created the Future Teachers of North Carolina Program (Aragon, 2018). This bill supports any student with strong leadership ability by offering dual credit education courses at the high school level.

Effective mentorship from an early level through development as a new teacher can help districts meet their recruitment and retention goals for teachers (Orland-Barak & Wang, 2020; Rhodes, 2017; Woods, 2016). According to Rhodes (2017), "There is scarce evidence that [these] communities are effectively tapping into their own natural resources to recruit and mentor potentially powerful educators" (p. 23). Early mentorship programs can help districts build a "broad, diverse, skilled, and committed teaching talent pool" from within their own local communities (Brown, 2016, p. 32).

While early efforts to encourage high school students to pursue careers in education certainly have value, few experiences of preservice teachers are more important than student teaching (Orland-Barak & Wang, 2020). Orland-Barak and Wang (2020) quoted a preservice teacher who said, "The most meaningful aspect of my preparation as a future teacher had to do with the opportunities to practice teaching in a real-life classroom with the right kind of mentor" (p. 1). This mentorship practice has traditionally consisted of the student and teacher partnering with the mentor teacher to plan/co-plan lessons, observe and debrief instructional practice, and cooperatively analyze student work and learning (Stanulis et al., 2019). For mentor teachers to facilitate a quality student teaching experience, districts and states need to focus attention on how to adequately prepare cooperating teachers for their role as mentors (Roegman & Kolman, 2020).

Diverse Educators

Many Grow Your Own Teacher programs are instituted expressly to recruit teachers of color to the teaching profession (Gist, 2018a, 2019; Goings & Bianco, 2016; Valenzuela, 2017; Zeichner et al., 2016). These programs seek to diversify the teacher workforce by creating new pathways and knocking down traditional barriers to the teaching field (Haddix, 2017; Ingersoll et al., 2017; Warner & Duncan, 2019). A major challenge of the United States education system today is to more accurately match the diversity of teachers to students (Goldhaber, Theobald, & Tien, 2019; Partelow et al., 2017). According to Rogers-Ard et al. (2019), a diverse teaching staff can lead to decreased suspension rates, increased recommendations for gifted education, fewer misplacements in gifted education, and higher graduation rates for students of color.

The shortage of teacher diversity has exacerbated the problem of racial parity between teachers and students (Albert Shaker Institute, 2015; Bianco & Marin-Paris, 2019; Carothers, Aydin, & Houdyshell, 2019). In a report on minority teachers from 1987-2013, Ingersoll et al. (2017) stated during the 2011-2012 school year, 44% of all students were in the minority compared to 17% of teachers (p. 5). According to Partelow et al. (2017), 40% of America's schools have no teachers of color on staff (p. 4). Demographic changes are on the rise in the United States, as the percentage of students of color is expected to jump from 50% to 56% by 2026 (Jones, Holton, & Joseph, 2019, p. 56).

In reaction to the shortage of diversity among America's teachers, Grow Your Own Teacher programs have been implementing policies to pinpoint specific demographics (Bianco & Marin-Paris, 2019; Goings & Bianco, 2016; Valenzuela, 2017).

Black male teachers have been a targeted group of individuals frequently underrepresented in the teaching force (Gist, 2018a; Jones et al., 2019; Okezie, 2018). According to Jones et al. (2019), "African American men represent roughly 2% of the U.S. teaching population, while Latino men represent less than 2%" (p. 57). In response, programs like the Griot Program at Marygrove College, Call Me MiSTER at Clemson University, and Boston Public School's Accelerated Community to Teacher Program have been developed with specific goals of introducing more black men to the teaching profession (Bristol & Goings, 2019; Goings & Bianco, 2016; Jones et al., 2019; Okezie, 2018). According to Carothers, Aydin, and Houdyshell (2019), collaboration occurred between school districts and a Southwest Florida public university with the goal of using specific recruitment "to create a larger and more diverse pool of qualified teachers from which districts can hire" (p. 51). This effort led to a greater number of students taking dual enrollment courses and increased participants' cultural awareness and sensitivity (Carothers et al., 2019)

Creating a new source of teacher diversity goes beyond solely recruiting black males to the profession (Gist, 2017; Goings & Bianco, 2016). Black, Hispanic, Asian, and Native American males and females are being encouraged to enter the teaching field (Rogers-Ard et al., 2019). Gist, White et al. (2018) described a four-phase approach to the black women educator pipeline:

> (a) Black girls' K-12 educational experiences (Phase 1), (b) Black women's higher education experiences (Phase 2), (c) Black women's teaching and learning experiences as they transition to the K-12 school settings as teachers of record

> (Phase 3), and (d) Black women's sustainability, leadership, and/or advancement within K-12 school settings and local communities (Phase 4). (pp. 62-63)

Quiñones (2018) noted that many Latino teachers have a desire to return to their same urban schools to give back to local communities and children. With a similar cultural background and having faced similar challenges, Latino teachers are able to foster a greater sense of agency and are better able to relate to English learners (Morales & Shroyer, 2016).

While preservice teachers of color may have the desire to return to their schools and communities of origin, challenges still exist to reach the goal of certification and employment (Andrews et al., 2019; Gist, White et al., 2018; Sleeter, 2017). Critical race theory suggests systemic racism exists in all sorts of organizations, including universities and teacher education programs (Rogers-Ard et al., 2019). Andrews et al. (2019) determined that professional readiness exams, such as the Praxis and National Teacher Exam, have disproportionately excluded prospective teachers of color. Haddix (2017) stated, "Students of color are expected to excel in Whiteness-centered teacher education programs and in standardized teacher metrics to be identified as a 'teacher'" (p. 145). For many preservice teachers of color, enrolling in a teacher education program means giving up racial and cultural traditions and identity (Haddix, 2017). Warner and Duncan (2019) advocated that education preparation faculty select teacher candidates holistically and support culturally responsive instruction and pedagogy.

Teachers of color who overcome the challenges of becoming educators are able to offer unique opportunities to their students (Gist, 2018b; Goldhaber et al., 2019). Race-congruent teachers are shown to have a positive impact on social-emotional learning, as

well as the overall academic progress of race-congruent students due to their ability to serve as role models from socially significant minority segments (Joshi, Doan, & Springer, 2018). Racial congruency is only one aspect of what makes teachers of color successful if they return to their communities to teach (Warner & Duncan, 2019). Bianco and Marin-Paris (2019) stated the unique ability of homegrown teachers of color to share their "lived experiences and deep understanding of their home communities" should not be overlooked (p. 38). To be successful in the classroom, teachers of color must be trained in how to instruct and manage students in the high-minority and high-poverty schools to which they return (Gist, 2018b).

A diverse teaching force is also more likely to hold higher expectations for students of color (El-Mekki, 2018; Goldhaber et al., 2019; Partelow et al., 2017). Beyond tangible assessment scores and placement data, a teacher's perception of expectation can significantly predict a student's future academic progress (Partelow et al., 2017). A report from the Albert Shanker Institute (2015) stated:

> Some of the literature related to educational opportunities for Black students has focused on the ways in which a shared racial and cultural background can facilitate the development of a trusting, 'warm demander' relationship in which high expectations are seen as a natural byproduct of mutual respect. (p. 7)

Students of color have a greater degree of sensitivity to teacher expectations due to institutional and systemic racism (Goldhaber et al., 2019).

Another advantage that teachers of color can offer the educational community is a unique community of cultural wealth (Gist, Bianco et al., 2018). The notion of community cultural wealth comes from the idea that teachers of color can draw upon a

unique set of capital that historically white educators cannot (Gist, Bianco et al., 2018). A diverse teaching force is able to develop students with cross-cultural skills and can foster cultural humility (Andrews et al., 2019). Students of color can also benefit from racial parity in the classroom as teachers of color have an ability to provide culturally-relevant curriculum and pedagogy (Valenzuela, 2017).

Urban Education

Urban education is the final component of the Grow Your Own Teacher model. According to the MODESE (2016c), "Urban schools face a real challenge of recruiting and retaining teachers that are prepared to teach effectively in urban districts" (p. 2). Students in urban schools are faced with a unique set of challenges when it comes to recruiting and retaining teachers (Coffey et al., 2019; Wronowski, 2018). Urban schools employ fewer teachers who hold master's degrees and more who are inexperienced (Wronowski, 2018). Urban students are also less likely to be taught by teachers of their race or ethnicity (Coffey et al., 2019). Urban schools face what Bauml, Castro, Field, and Morowski (2016) referred to as a "demographic imperative" (p. 5). Researchers have noted the divide between the diverse student population within urban schools and the largely white, middle-class teachers urban districts employ (Bauml et al., 2016; Ingersoll & May, 2016; Partelow et al., 2017; Warner & Duncan, 2019).

Revised methods of preparation for preservice teachers are being utilized to train and develop educators seeking to enter the urban educational environment (Coffey et al., 2019; Hammerness, Williamson, & Kosnick, 2016; Lee, 2018). Efforts to improve urban teacher preparation include engaging parents and community members into the university-public school partnership to assimilate teacher candidates into the culture of

the school and urban community (Lee, 2018). Researchers have studied the impact of Family and Community Mentor Networks on preservice teachers and their experiences entering urban educational environments (Guillen & Zeichner, 2018). Researchers Guillen and Zeichner (2018) found preservice teachers and community mentors experienced conflict while discovering a common understanding that "although these conversations did not always end with a sense of resolution or conclusion, all of the mentors interviewed ultimately felt that the partnership was a positive and important endeavor" (p. 144). In this preparation model developed at the Pineridge University teacher education program, preservice teachers are mentored by community members who have a unique and localized perspective of the urban setting in which the schools operate (Guillen & Zeichner, 2018).

Teacher candidates best-suited for success in high-needs schools may not be the typical high-achieving students sought after by less-diverse suburban districts (Taylor & Klein, 2015; Wronowski, 2018). Urban districts look for less-measurable qualities in teacher candidates, including cultural knowledge, language diversity, and ability to relate to urban youth (Haddix, 2017; Quiñones, 2018; Wronowski, 2018). It is more important for urban teacher candidates to have an understanding of the unique contextual differences apparent in each urban district than to earn high scores on standardized assessments (Hammerness et al., 2016).

Universities have also recognized the unique environment teacher candidates must prepare for before entering an urban district (Carothers et al., 2019; Hammerness et al., 2016; Taylor & Klein, 2015; Wronowski, 2018). One unique method used to address the challenges faced by preservice teachers in urban settings is the urban teacher

residency model. Hammerness et al. (2016) stated these "models are based upon a design in which teacher candidates are completing coursework while engaging in supervised fieldwork for a year" (p. 1156). Greater immersion into the unique urban school environment, a longer student teaching experience, and increased opportunities to connect with urban youth are all touted as benefits of these programs (Hammerness et al., 2016).

Arkansas State University partnered with urban districts to create a summer camp experience for high school students interested in education (Carothers et al., 2019). This collaboration was intentionally established to create a more diverse pool of teacher candidates (Carothers et al., 2019). Banks (2015) stated, "The traditional model of teacher education is actually counterproductive for many teachers, including those working in impoverished areas or diverse settings" (p. 66). The current system of teacher preparation is not adequately preparing teacher candidates to best serve students in the urban classroom (Banks, 2015; Bauml et al., 2016).

Urban educational environments have long been wrought with challenges to teacher retention (Cross & Thomas, 2017; Farinde-Wu, 2018; He, Cooper, & Tangredi, 2015; Kotzin, 2019; Lenhoff, Lewis, Pogodzinski, & Jones, 2019). According to Kotzin (2019), "The greatest challenge to urban education has been a persistent absence of a cumulative long-term perspective on the learning and development of urban youth" (p. 2). As urban children progress toward adolescence, their teachers focus on equitable treatment, whereas many urban youth still require individuation (Kotzin, 2019). When high teacher turnover rates, coupled with the impacts of poverty on learning, lead to low performance on state benchmark assessments, urban districts often face reforms "where

state legislators have increasingly adopted top-down policies such as state takeover, accountability systems, and school choice, without the input of local community members, who are often people of color" (Lenhoff et al., 2019, p. 3). Researchers Cross and Thomas (2019) cited "challenging working conditions, the absence of a supportive professional culture, and an overwhelming workload" as contributing factors to high teacher attrition in urban schools (p. 1).

Summary

Targeted teacher recruitment efforts are being enacted across the United States teacher workforce landscape (Aragon, 2018; Berry & Shields, 2017). Grow Your Own Teacher programs are utilized to attract the brightest students to return to their home districts, create a more diverse teaching cadre, and play on the tendencies of recent graduates to return to their hometowns (Coffey et al., 2019; Valenzuela, 2017). Researchers have found the Grow Your Own Teacher concept particularly useful in addressing the problem of teacher shortages at micro and macro levels (Aragon, 2016; Dee & Goldhaber, 2017; Podolsky et al., 2016). State education departments, higher education organizations, and local school districts are working cooperatively to develop Grow Your Own Teacher policies and programs that best fit their teacher shortage needs (Garcia et al., 2019).

The various teacher recruitment strategies incorporated in Grow Your Own Teacher programs were discussed in Chapter Two. Current high school students have the opportunity to be involved in clubs and courses that develop interest and grant college credit in many home-grown educator programs (Aragon, 2018; Rogers-Ard et al., 2019; Valenzuela, 2017). These early efforts allow for prospective educators to experience the

classroom prior to their teacher education programs. Programs exist that create new and innovative pathways into the teaching field for locally-sourced groups such as paraprofessionals, community leaders, and existing professionals (Burnett et al., 2019; Gist, 2019).

A discussion about improving racial parity between teachers and students through the development of Grow Your Own Teacher programs is included in Chapter Two. The ability of school leaders to implement Grow Your Own Teacher programs to locally source and develop the labor pool has shed light on their role in creating more diversity among the teaching ranks (Andrews et al., 2019; Bristol & Goings, 2019; Partelow et al., 2017). School district personnel are able to leverage Grow Your Own Teacher program participants' community connections to help attract minority teacher candidates (Espinoza et al., 2018). The cultural wealth of homegrown minority teacher candidates has been identified as a major factor in recruiting teachers back to high-minority districts (Gist, Bianco et al., 2018).

Specific issues pertaining to urban education are also presented in Chapter Two. Urban educators require specific skill-sets related to cultural and community knowledge that many Grow Your Own Teacher programs hope to capitalize on (Gist, Bianco et al., 2018; Guillen & Zeichner, 2018). Educators are enveloping Grow Your Own Teacher programs into the fold of a broad scope of urban teacher recruitment and retention strategies (Carothers et al., 2019; Hammerness et al., 2016).

Chapter Three includes a description of the methodological practices employed in this study. The problem and purpose are presented. The guiding research questions and research design elements are provided. A description of the population and purposive

sample of the research participants is given. Instrumentation, data collection, data analysis, and ethical considerations are also addressed.

Chapter Three: Methodology

Missouri school districts with varying geographic and socioeconomic demographics and recognized as having established Grow Your Own Teacher programs participated in this study (MODESE, 2016c). Selection of districts with geographic and demographic variations provided a greater cross-section of the population of teachers involved in the study. A qualitative approach allowed for the elicitation of shared experiences and perceptions of teachers, preservice teachers, and key personnel involved in Grow Your Own Teacher programs to discover best practices (Merriam & Tisdell, 2016). When school-district administrators, boards of education, teacher education colleges, community groups, and policymakers are made aware of the best practices of Grow Your Own Teacher programs, they will be better able to implement and design programming to best fit and meet the needs of their local schools, communities, and students (Bland et al., 2016).

The discovery of common themes within the perceptions of teachers, preservice teachers, and key personnel has lent itself to the use of phenomenology (Creswell & Poth, 2018). Bloomberg and Volpe (2016) described phenomenological research as the investigation of "the lived experience of people to identify the core essence of human experience or phenomena as described by research participants" (p. 48). The phenomena or concept studied with these research participants was their common involvement and experience with Grow Your Own Teacher programs.

Chapter Three includes a description of the overarching problem of why Grow Your Own Teacher programs were initially created and a summary of the purpose to determine best practices. The research questions are restated. The research design

process is described with an emphasis on why qualitative research was the appropriate methodology for the study. The population and sample are discussed with information about the instrument and interview/focus group questions. Data collection and analysis methods are presented with the safeguards for research participants. A summary of the research methodology concludes the chapter.

Problem and Purpose Overview

Recent research points to a possible future where a major teacher shortage problem exists at both macro and micro levels (Sutcher et al., 2016; Valenzuela, 2017). The increased demand and declining supply of preservice teachers present a comprehensive problem "that will, if trends continue, grow worse before it improves" (Sutcher et al., 2016, p. 70). Perennial shortages exist based on geography, subject areas, and at high-poverty/high-minority districts where greater numbers of teachers of color are needed to adequately reflect the proportion of students of color (Brownell, Bishop, & Sindelar, 2018; Hagaman & Casey, 2018; Partelow et al., 2017; Wright, Balgopal, Sample McMeeking, & Weinberg, 2019).

In a report by the Council of Chief State School Officers, Warner and Duncan (2019) stated, "In America, 50% of our students identify as being a person of color compared to only 20% of their teachers and with only 2% being black men" (p. 7). The need for parity between teachers and students is apparent throughout the nation's educational system (Joshi et al., 2018). State departments and school districts, faced with issues of educator quality and certification, have examined new and creative ways to develop the teacher supply line (Espinoza et al., 2018; MODESE, 2017; Valenzuela, 2017). There have been several attempts across states and districts to develop Grow

Your Own Teacher programs as a means to address these shortages and to play to the tendency of beginning teachers to return to their local communities to teach (Valenzuela, 2017). As districts explore their options with Grow Your Own Teacher programs, the need for research-based best practices regarding programming options has become apparent (McCollum, 2011).

Uncovering the perceptions and shared experiences of individuals who have participated in and/or supervised these programs allowed for the identification of program features that can be considered best practice. A determination of what constitutes best practices in these programs was made through comparison and a compilation of data from both teachers and superintendents. Obtaining teacher and superintendent data for each subsidiary question has further promoted the notion of pragmatism by involving multiple qualitative approaches to the research (Creswell & Poth, 2018). Comparing and contrasting best practices based upon district demographics and geography can guide future policy and allow effective programs to be realized.

Research questions. The following research questions guided the study:

1. What do participants of Grow Your Own Teacher programs perceive as best practices to further teacher recruitment in their school districts in the following areas:
    a. Teacher shortages
    b. Teacher incentives
    c. Diverse educators
    d. Urban education?

2. What do key personnel involved in Grow Your Own Teacher programs perceive as best practices to further teacher recruitment in their school districts in the following areas:

    a. Teacher shortages

    b. Teacher incentives

    c. Diverse educators

    d. Urban education?

3. What similarities and differences exist among urban, suburban, and rural school districts that implement Grow Your Own Teacher programs?

Research Design

Qualitative research was chosen as the method to appropriately address the research questions of this study regarding teacher and superintendent or designee perspectives of Grow Your Own Teacher programs. A phenomenological approach to this qualitative study allowed the researcher to describe the "common meaning for several individuals of their lived experiences of a concept or phenomenon" (Creswell & Poth, 2018, p. 75). Bloomberg and Volpe (2016) described phenomenological studies as hermeneutical when they not only describe but also interpret a concept to determine the overall essence of the phenomenon. Studying multiple lived experiences of school personnel who have designed, supervised, or participated in Grow Your Own Teacher programs allowed for the revelation of best practices within individual programs.

Analysis of Grow Your Own Teacher programs as the unique phenomenon that requires study made it necessary to choose a qualitative research design (Ravitch & Carl, 2016). In a phenomenological study, the lived experiences of those involved (in this case

Grow Your Own Teacher program participants and superintendents) are elicited through focus groups and interviews (Creswell & Poth, 2018). The instrument used to collect data, focus group and interview questions, was aligned to the conceptual framework. The data were analyzed around the four critical areas of Grow Your Own Teacher programs to complete the study.

The research questions for this study allowed for the elicitation of shared experiences of personnel involved with Grow Your Own Teacher programs and for varying contexts to be studied. Qualitative research was employed as the best means of studying these "multiple, situated truths and perspectives" (Ravitch & Carl, 2016, p. 5). Responses from the focus groups and interviews were analyzed to make meaning of the experiences of teachers and superintendents or designees in Grow Your Own Teacher programs. An analysis of the participants' interview transcripts revealed perceptions of best practices, while focusing on the participants' contexts revealed similarities and differences among the districts' geography and demographics.

Creswell and Poth (2018) encouraged researchers to collect data from in-depth and open-ended questions. The interview questions were crafted to address the research questions of this study. Questions that could be answered with a simple "yes" or "no" response were avoided. It was of great significance for the researcher to bracket, or suspend, preconceived notions of the phenomenon (Merriam & Tisdell, 2016). This allowed for the removal of bias and provided a fresh take on the research (Merriam & Tisdell, 2016). Focus group and interview responses were transcribed and the data analyzed to produce themes and patterns from each perspective.

Population and Sample

The population for this study included all teachers or preservice teachers and superintendents or designees from existing Grow Your Own Teacher programs in Missouri. The defined population consisted of 40 Grow Your Own Teacher districts and included 170 teachers or preservice teachers and 40 key personnel who oversee the programs (MODESE, 2016c). Due to the limiting factors of qualitative methodology, the unit of analysis of teacher or preservice teacher focus group participants consisted of three school district groups from differing geographic locations (rural, urban, and suburban). Each focus group consisted of five to eight teachers or preservice teachers who participated in each district's program (Creswell & Poth, 2018). The unit of analysis of key personnel participants included three key personnel (rural, urban, and suburban) who had direct oversight of teachers or preservice teachers who participated in each district's Grow Your Own Teacher program.

District 1 is a small, rural district in southwest Missouri that has been recognized for contributions to Grow Your Own Teacher programs (MODESE, 2016c). This district had an enrollment of 1,800 students with a free/reduced meal rate of 56%. The teacher-to-student ratio was 18:1.

District 2 is a large, suburban district in Missouri with 18,000 students. The percentage of students who qualify for free/reduced meals was 21%. The teacher-to-student ratio in District 2 was 16:1.

District 3 is an urban district in Missouri with an enrollment of 8,800 students. The percentage of students receiving free/reduced meals was 65%. District 3 had a teacher-to-student ratio of 18:1. District 3 opted out of participating in this study.

Purposive sampling was utilized in this study (Merriam & Tisdell, 2016). This type of sampling "will intentionally sample a group of people that can best inform the researcher about the research problem under examination" (Creswell & Poth, 2018, p. 148). The teacher and administrative staff involved in the study were chosen due to the recognition of their districts' Grow Your Own Teacher programs (MODESE, 2016c).

This sample was justified through both expert and literary sources P. Katnik (personal communication, October 5, 2018), assistant commissioner at the MODESE, stated the three districts selected to participate in this study were noted in the state's *Grow Your Own: A Resource Guide to Creating Your Own Teacher Pipeline* and were some of the most-developed and recognized programs in the state (MODESE, 2016c). Specifically, comparison-focused sampling was used to determine the similarities and differences of Grow Your Own Teacher programs among rural, urban, and suburban districts (Ravitch & Carl, 2016).

Instrumentation

Two instruments were developed for this study. Each instrument consisted of a set of open-ended interview questions. One set of questions was used to gather data and perceptions from focus groups of teachers who participated in Grow Your Own Teacher programs. The second set of interview questions was used to collect data from key personnel about their experiences with Grow Your Own Teacher programs. Focus groups settings were chosen for the teacher participants, so "a more complete and revealing understanding of the issues will be obtained" (Bloomberg & Volpe, 2016, p. 174). Interview and focus group questions were designed to elicit semi-structured, open-ended responses from participants.

Questions for both teacher focus groups and key personnel interviews were created after reviewing the literature surrounding Grow Your Own Teacher programs, developing the conceptual framework of how programs specifically address the teacher shortage, and designing the research questions for this study. The subheadings in the literature review and areas of emphasis for the first two research questions were directly related to the focus group and interview questions. The concept of Grow Your Own Teacher programs would never have developed if not for specific teacher shortages (Berry & Shields, 2017; Cowan et al., 2016; Dee & Goldhaber, 2017; Espinoza et al., 2018). Questions were established based upon the ways in which Grow Your Own Teacher programs are implemented to address the teacher shortage. Interview questions were focused on the specific teacher shortage areas addressed and on the specific types of district and/or community supports in place.

Questions for focus group participants were centered on the specific teacher shortage areas and the specific types of recruitment goals in place. Focus group questions were field-tested by a group of teachers not related to the research project. Interview questions were field-tested by two superintendents not included in the study.

Reliability. Focus group questions were field-tested by a group of five teachers who indicated an initial knowledge of Grow Your Own Teacher programs and who were not involved in the study. Interview questions underwent field testing by two key personnel unrelated to the study. Bloomberg and Volpe (2016) encouraged researchers to conduct a pilot or field test to examine procedures, questions, and capabilities prior to the actual research. Ravitch and Carl (2016), when discussing instrument piloting, stated, "The goal is to examine the data you need to be able to answer your research questions"

(p. 93). Field testing the instrument aligned it to the research questions and literature review, which provided the researcher with a more valuable instrument (Creswell & Poth, 2018).

Validity. To obtain credible and valid data from each instrument, several strategies were employed. Triangulation of methods occurred within the interviews as one set of interviews was directed to a focus group of teachers and preservice teachers, while the other was directed to individual key personnel. Utilizing within-methods triangulation provided increased validity as to the methods involved (Ravitch & Carl, 2016). Carefully selecting districts from identified rural, urban, and suburban areas allowed the researcher to comparatively analyze best practices from three distinct demographics. Transcriptions of the interviews were returned to participants for their review. This process, known as member checking, assured there was no bias on the part of the researcher and made the data more authentic (Creswell & Poth, 2018).

Data Collection

Interview and focus group candidates were recruited from districts identified based upon their involvement in Grow Your Own Teacher programs (MODESE, 2016c). An introductory letter to district superintendents to request permission to utilize their districts in this research was emailed (see Appendix A), along with a description of the study. Once permission was granted and Lindenwood Institutional Review Board approval was received (see Appendix B), key personnel who were most responsible for the Grow Your Own Teacher programs were contacted to select the correct buildings and groups of teachers or preservice teachers for the study. The rationale for this selection was that the participant teachers or preservice teachers must have been through some

aspect of the district's Grow Your Own program, while key personnel must have supervisory duties over such teachers or preservice teachers.

A purposive sample of teachers or preservice teachers in three districts, one rural, one suburban, and one urban, was selected by key personnel. The teachers or preservice teachers selected for the study were then contacted concerning a date and time to conduct the focus group. After obtaining initial approval, participants were sent a Research Information Sheet (see Appendix C) and a copy of the focus group or interview questions (see Appendices D & E).

Key personnel from the purposively selected districts with recognized Grow Your Own Teacher programs were interviewed. Focus group discussions were conducted in each of the selected districts with groups of five to eight teachers or preservice teachers. Interviews of key personnel occurred either during the site visits or over the phone.

Interview and focus group participants were given a choice to accept or decline participation in the study. The researcher served as the interviewer for this study. The focus group discussions and interviews were conducted at the site of the participants' choosing. Interviews were video- and audio-recorded with permission from each participant. All audio and video data were retained in a password-protected file server to ensure confidentiality. The recorded focus group discussions and interviews were transcribed and reviewed. Participants were provided a copy of the transcripts to review as a form of member checking.

Data Analysis

This research study included data from multiple sources (teachers, preservice teachers, and key personnel) and methods (focus group discussions and interviews). This

multi-source approach supports “the crucial need to seek out and engage with multiple perspectives to answer each research question” (Ravitch & Carl, 2016, p. 195). With focus group discussions and interviews both conducted for this study, a body of data was collected (Ravitch & Carl, 2016). A data management plan was put into place that included transcribing, precoding, creating analytic memos, conducting multiple readings, coding, and generating themes (Ravitch & Carl, 2016; Saldana, 2016). Creswell and Poth (2018) described this process as a data analysis spiral where “the researcher engages in the process of moving in analytic circles rather than using a fixed linear approach” (p. 185). This spiral approach involved evaluating and revisiting the data multiple times throughout the analysis process (Creswell & Poth, 2018).

Coding in a phenomenological study involves initial, or open, coding (Creswell & Poth, 2018). According to Saldana (2016), this technique captures meaning from participants’ experiences and actions. Coded data are then analyzed to produce significant statements, which develops clusters of meaning into themes (Creswell & Poth, 2018). Comparing and synthesizing these themes assisted in determining which Grow Your Own Teacher program features were considered best practice. Once best practices had been synthesized from each district, the analysis began on the similarities and differences that exist among the rural, urban, and suburban district programs. A composite description of the phenomenon, containing both textual and structural descriptions, was then drafted to capture the essence of Grow Your Own Teacher programs (Creswell & Poth, 2018).

Ethical Considerations

Participant validation strategies, according to Ravitch and Carl (2016), commonly referred to as member checks, are processes by which researchers "'check in"' with participants about different aspects of the research to see how they think and feel about various aspects of the research process and the parts of the data set that pertain to them (p. 197). Focus group and interview participants were given the opportunity to change, modify, or remove themselves from the study at any time.

Once approval was obtained from the Lindenwood Institutional Review Board, a Research Information Sheet was provided to each participant. Email addresses, audio/video files, and transcriptions were stored in a password-protected file set. The anonymity of the participants and school districts was assured by providing each with an alphanumeric code. No identifying information was made available. Transcript data will be stored securely for a period of three years and then will be permanently destroyed.

Summary

Chapter Three included an explanation of the methodology for collecting and analyzing data on teacher and key personnel perceptions of Grow Your Own Teacher programs and what methods are considered best practice. The problems of teacher shortages and lack of research on Grow Your Own Teacher programs were presented, along with the research questions of the study. A discussion of the research design was included in this chapter. This study's population and sample were highlighted with the specific reasons behind the purposive sample. The instrumentation utilized for the study and the processes for data collection and analysis were methodically clarified. The

chapter concluded with a description of ethical considerations, including the manner in which research participants' confidentiality and anonymity were safeguarded.

Findings resulting from the Grow Your Own Teacher participant focus groups and key personnel interviews will be presented in Chapter Four. Highlighted in the chapter are perceptions of participants and key personnel in regard to best practices of Grow Your Own Teacher programs. In addition, this chapter includes tables used to represent demographics of participants and key personnel.

Chapter Four: Analysis of Data

In response to teacher shortages, various educational agencies and school districts have turned to recruitment strategies designed to promote teachers from their communities to fulfill a specific need (Dee & Goldhaber, 2017; Podolsky et al., 2016). As these organizations turn to Grow Your Own Teacher programs and practices, it is necessary to obtain an understanding of what preservice teachers, existing teachers, and key personnel within these programs consider best practice. The ability to determine which practices best fit the needs of schools with varying geographical and demographic conditions can make the difference between program success and failure. The MODESE (2019) *Grow Your Own: A Resource Guide to Creating Your Own Teacher Pipeline* serves a conceptual basis for this study. The data collected are presented in Chapter Four.

Focus Groups

Focus group sessions were conducted with Grow Your Own Teacher program personnel from a diverse background of both preservice and homegrown teachers. Questions for the focus groups were designed specifically to answer research question one. Two school districts, District 1 and District 2, were selected to represent rural and suburban districts (a third district, District 3, could not be secured by the researcher to conduct research in an urban district). Grow Your Own Teacher program participants included any preservice teacher in the district's pipeline (either a high school or college student participating in some element of the district's program). Participants also included teachers who either participated in their district's Grow Your Own Teacher Program or successfully returned to teach in the district from which they graduated.

Participants were assigned alphanumeric codes to provide anonymity for the districts and personnel. For example, privacy was ensured by referring to participants from District 1 as Participant 1A, Participant 1B, Participant 1C, and so on.

Focus group question one. What grade level/subject area do you teach, and how long have you been in education?

Participants in the focus groups were purposively selected to offer a diverse and robust discourse on Grow Your Own Teacher best practices. Their backgrounds, years of service, and current roles in their district's program were varied. Six participants were preservice teachers, including three in high school pathways and three in college pathways. Seven of the participants were homegrown teachers who were a part of their district's program (See Table 1).

Table 1

Background of Focus Group Participants

Participant	Preservice Teacher		Homegrown Teacher
	High School	College	
Participant 1A			X
Participant 1B			X
Participant 1C		X	
Participant 1D		X	
Participant 1E			X
Participant 1F			X
Participant 1G			X
Participant 2A	X		
Participant 2B	X		
Participant 2C	X		
Participant 2D		X	
Participant 2E			X
Participant 2F			X

The experience for homegrown teachers in their districts ranged from three years to 24 years in education, while years in their current roles ranged from three years to 10 years (see Table 2).

Table 2

Homegrown Teachers Years of Experience

Participant	Overall Years of Experience in Education	Years of Experience in Current Position	Current Grade Level and/or Subject
Participant 1A	10	4	7/8 Project Lead the Way Shop Class
Participant 1B	3	3	Fourth Grade
Participant 1E	4	4	Kindergarten
Participant 1F	6	6	First Grade
Participant 1G	10	10	HS Family & Consumer Science
Participant 2E	24	8	HS Assistant Principal
Participant 2F	19	7	HS Career & Technical Education Director

Focus group question two. In what capacity were you involved with your district's Grow Your Own Teacher Program?

Participants 1C, 1E, and 1F described their experiences with the A+ Scholarship Program, and how their time logged tutoring and observing in various classrooms during high school influenced their decisions to choose education as a career. Participant 1E stated, "I did the A+ plus program in a preschool actually. And that's kind of what started me wanting to be a teacher." Participant 1F added, "I had 200 hours in A+ teaching in the classroom before I graduated high school," which reinforced the impact of the A+ Scholarship Program

Participants 2A, 2B, and 2C shared a similar experience through their involvement with the Education Exploration Program at their district's career center.

These three preservice teachers in high school were a part of the district's larger Center for Advanced Professional Studies (CAPS) program. Participant 2F, the director of the CAPS program, reported, "They have a very broad exposure to all the different types of educational opportunities so that hopefully when they get later on in their education and then make a choice about what they want to do." Participant 2C affirmed the statement from 2F by stating, "I've done a history class at [School Name] Middle, and then I did a preschool experience because I kind of, I'm all over the place." Participants 2C and 2F both spoke about the enhanced perspective provided by observing and participating in a wide range of experiences.

Another result of involvement in the CAPS program at District 2 reported by Participants 2A, 2B, and 2C was the ability to network and build professional skills. Participant 2C described how her participation in the Education Exploration Program helped to secure her a paid internship in high school:

> Through this program, they opened up an internship at [Local Business] Kids, which is a Montessori preschool. And then I applied, and I got that position there next semester. And so, being in this program really helped because some of the questions in the intern or in the interview that they asked were, "How are you professional in your daily life?" and, "How do you interact with kids in your day to day experience?" And then I got to tell them every morning we're professional for two and a half hours… And then we also get to see kids, either it's like helping them get to class, or on our two-week practicums we're in a class actually student teaching. So, I think this program really helped me get that position because of all the experience that I got through this.

Focus group question three. Were you aware of any general or specific teacher shortages during the time you chose education as a career? If so, how did your knowledge of a specific teacher shortage impact your decision to choose education as a career?

Participants from District 1 did not seem to be aware of any teacher shortage during the time they were considering joining the teaching ranks. Participants 1B, 1D, and 1E reported they were not aware of shortages but wanted to pursue a career in education from an early age. Participant 1B stated, "I was not aware. I knew that this is something that I wanted to do since I was in second grade." Following up on her comment, 1B explained, "It wasn't ever, I think something that we even thought about… I think everyone can agree, it's not something we thought about going back to our hometown and teaching." Participant 1G mentioned:

> I think… if you ask them as a senior where they want to be in five years, they will never tell you [city and state]… but what you see is if you do go into education, you do come back here, or you at least want to.

Participants at District 2 were more aware of the teacher shortage and how the shortage impacted future employment opportunities. All three of the participants involved in the high school Education Exploration Program were aware of teacher shortages, as was Participant 2D, who was currently in the college pipeline. Participant 2B explained, "Yes, we are aware. Going in, I wasn't aware… But, being in the program has opened my eyes, and it's for sure that I'll have a job once I graduate from college." Participant 2F stated, "I knew there was a math shortage, which is originally what I started out in

whenever I headed to college." This statement came after 19 years of teaching experience.

Several participants pointed out they were drawn to a career in education due to their parents' occupation as educators. Participant IE noted, "I come from a long line of educators, so it's something that I've always wanted to do." Participants 1E, 1D, 2D, and 2F stated their parents' career in education had a major impact on their decision to become an educator. According to Participant 1D, "It's just kind of what I always wanted to do. When I was little, I used to play with my mom's extra grade books. So, that's just something I always wanted to do, and now I'm here." Close proximity to the field of education through their parents' career choice had a great deal of influence on their decision.

Focus group question four. Were you involved in any high school programming (clubs, classes, organizations) that helped you make the decision to choose education as a career? If so, how did that involvement help prepare you for a career in education?

All participants agreed the experiences they had during high school, whether aligned with specific district programming or not, helped to solidify their choice of education as a career. Some participants, including Participants 1C, 1E, 1G, 2A, and 2B, indicated specific high school programming influenced their decision. Clubs like Future Business Leaders of America (FBLA), Family Career and Community Leaders of America (FCCLA), Future Teachers of America (FTA), student council, CAPS programming, and career and technical education coursework were all mentioned by participants as effective methods to interest them in a career in education. Participants 1C and 1G noted FCCLA provided leadership qualities and hands-on teaching experience

that was important in their decision-making process. Participants 1E, 2A, and 2B affirmed the influential connection of hands-on teaching experience. Participant 2B concluded:

> I was in advanced child development class at my school, which allows you to be a part of the preschool… and we were able to be hands-on and teach our lesson plans, and just really get a feel of what it would be like to be a teacher… And that's how I knew that I wanted to join the CAPS program and that I was interested in education.

The A+ Scholarship Program is another example of how hands-on teaching experience can encourage preservice teachers to choose teaching. Participant 1E shared her experience in A+ Tutoring and assisting during summer school. She noted, "You got to see them all day and see the ups and downs, and how the teacher handled it. That's when it started to spark my interest." Participant 2B also recognized the value of the A+ Scholarship program, calling it "a great opportunity" to gain a holistic view of the teaching experience.

One participant, 2C, attested her interest in education was due to taking courses that led her to know what she did not want to do. Participant 2C stated, "I did a bunch of business classes my freshman and sophomore years, and I was like 'No way, this is not for me.'" This experience, while negative in nature, further affirmed being an educator as a viable career option.

The admiration of participants' own teachers or love of a sport was brought up by Participants 1F, 1G, and 2E as an important determinant to choose education as a career. Participant 1F explained, "I was involved in athletics, and I knew that if I went into

teaching there would be other opportunities like coaching that I would be interested in." This notion was also recognized by Participant 1F, who shared, "I was the same as 1F. I was motivated by coaching to go into education. It wasn't until college that I realized my passion for teaching and especially the shop area and robotics." Participant 2E explained, "There was a certain teacher that was a fantastic teacher, and just the way he taught, the way he handled a classroom. I found myself when I became a teacher to mimic some of the things he would do." He continued by saying, "You can't underestimate the power of a teacher with passion inspiring students." He recognized the impact of previous educators on his decision.

In several cases, opportunities and experiences outside of school formatively impacted participants' decisions to become educators. Teaching students at church was a common factor for Participants 2A and 2D. Volunteering in the children's department or teaching a class at Vacation Bible School were reported as the types of activities that drew preservice teachers to the profession. Summer work with children was also mentioned by Participant 2C. She noted, "I taught swim lessons to ages eight months to 16 years. And so, that's kind of where I thought, 'Do I want to teach preschool or high school?'" The instruction of "even basic skills, like swimming" can at times be enough to get a preservice teacher hooked into education.

Focus group question five. Does your district offer to help lessen the cost of teacher preservice training/coursework for teachers who are from their Grow Your Own Teacher program? If so, how does your district provide this opportunity?

Participants 1B, 1G, 2A, and 2D responded that local community scholarships lessened the cost and aided in the removal of financial barriers to their college

coursework. Participant 2A stated, "Our senior secretary sends out emails once a week or more of scholarships… which has a bunch of scholarships on it of local stuff we can use." Districts are also assisting by providing scholarships to future educators. Participant 1B received a scholarship from the [School District] Community Teachers Association. The scholarship was described by Participant 1G, who serves as president of the group, as "two $500 scholarships every year, at least, if not more" to students who exhibit financial need and are interested in education. To supply the grant, Participant 1E pointed out, "The majority of the staff join [School District] Community Teachers Association, and we have dues and fundraisers, and that's where that money has been." A majority of participants indicated receiving some form of short-term community-based financial assistance.

In District 2, Participant 2D received a Grow Your Own scholarship. This scholarship provides recipients with $10,000 toward college costs and then requires them to come back and teach in the district for four years. She explained scholarship recipients still must go through the interview process. Should students receive the award and choose not to stay for four years, recipients are required to pay back the money. Participant 2E clarified as to the specific subject or area recipients must enter by stating, "They developed a scholarship for high need areas in the district." Elementary education, special education, and science and math at the secondary level are also considered high-need areas acceptable to receive the scholarship.

Focus group question six. Does your district offer to help lessen the cost of teacher preservice training/coursework to teachers who are from their Grow Your Own Teacher program? If so, how does your district provide this opportunity?

District 2 offers a Grow Your Own scholarship as the primary means of financial assistance to preservice teachers. One ancillary program mentioned by Participant 2F is the [School District] Education Foundation and their assistance with dual credit scholarships for students. She explained, "It does not pay the entire amount, but it is a reduced amount of tuition for the dual credit." Participant 2B elaborated on the concept of dual credit assistance by stating, "In our program, CAPS, we do it through [Local University], and there's also a scholarship that doesn't pay for the full amount." These dual credit partnerships help to indirectly reduce the financial burden of preservice coursework.

In District 1, participants mentioned the Educational Internship program as a means to lessen the cost of university coursework. Participant 1G explained that many times participants in the program are district alumni in a college preservice teacher program. They are paid to serve as paraprofessionals, usually in special education, during the same time as their coursework. Upon the student teaching semester, the interns are still provided a paycheck as they work on their student teaching. Participant 1G stated, "I think that's pretty significant because for you to be able to be going to college and then working in a school district and getting paid, because student teaching, that's the rough time." Participant 1C, who is currently in the program, mentioned, "Your junior and senior year, especially going into education, are strenuous, and they're tough for you to make some sort of income, and be able to focus more on the teaching aspect rather than the financial aspect." The Educational Internship program serves as a valuable financial stop-gap for preservice teachers.

Focus group question seven. Did the school district you graduated from partner with any local colleges or universities to provide tuition assistance or credit in your undergraduate coursework in education? If so, who were they, and how did you take advantage of the opportunity?

All participants described some tuition assistance or credit by means of district and university partnerships for dual credit classes. Participant 1G explained, "I would say 98% of the dual credit courses offered previously and now are for your general education courses." Participant 2D affirmed this statement by sharing, "I took a lot of dual credit classes in high school, like college algebra, Comp 110, history… and it was a really nice price." Participants stated their districts partnered with colleges and universities based on the location and proximity to the district and the ability for those college credits to be transferred to another college or university. Dual credit programming did exist beyond general education requirements at both districts in that students were eligible for education-specific dual credit coursework. Participant 1G clarified, "If you went into elementary education, and you went through our Teach & Train program at the high school… You would earn three college credit hours in elementary education." This program is seeking to secure a greater dual credit partnership by offering up to 12 college credit hours through early childhood programming.

Some districts partner with community colleges to provide high school associate's degree programs. Participant 2A shared, "One of my friends actually graduated high school as a junior and is currently enrolled in college at [Local Community College]. He is currently a senior and a freshman in college at [Local Community College]." She

continued the discussion on credit and tuition assistance by stating, “I have a lot of friends in the IB program, International Baccalaureate, where they will graduate with a higher standpoint.” These courses can provide students with equivalent college credit based on a qualifying assessment score.

Focus group question eight. What influence did a mentor have on your decision to choose education as a career? Was that mentor assigned to you as part of a specific program?

Through the focus group process, all participants noted a significant mentoring relationship with either an elementary or secondary teacher who encouraged them to pursue education. These mentoring relationships manifest themselves in a variety of ways. Participant 2A mentioned the impact of high school teachers. Participants 2C and 2B agreed, and 2C added, “I always strive to be more like her but in my own way” when working with students in her practicum experience.

Not only do teachers serve as models and examples to be emulated by future teachers, but their words of encouragement can also be a deciding factor in the choice of education as a career. Participant 1B shared that her second grade teacher encouraged her to be a teacher. Adding to this theme, Participant 1C replied, “When you look back, and you have teachers that you’ve thought really highly of… and you come back, and they say, ‘You would be really good at this,’ that’s kind of what sparks you.”

Some teachers are more forward in their approach, as in the case of Participant 1A, who stated, “I had a teacher pick me up a week after I graduated… and he said ‘You’re going to sign up to be a teacher.’ And I signed up and now I’m a teacher.” A

majority of participants responded that a previous teacher had an impact through encouraging words to pursue education.

The conversation in District 1 turned to the lack of positive regard some teachers have toward the profession. Participant 1A mentioned, "Going through school, I always thought I would be a teacher, and then my mom was a teacher, and she tried to talk me out of it." Continuing with the notion of not encouraging education as a career path, Participant 1G concluded:

> We don't always do a very good job of trying to recruit people into teaching… But, if at some point we all realize how big of an impact our words and actions have, I think there's a lot of unintentional mentorship that happens when we start talking about future teachers and educators.

While informal teacher mentorship was a consistent thread throughout the groups, preservice teachers already in the university pipeline mentioned the role of mentorship their professors played. Participant 2D stated, "When you're trying to become a teacher, and yes, being critical, but also giving you the feedback that you need that encourages you that you are here for a good reason." She continued by mentioning one of her professors, "She really showed me that, yes, you can do this. And having that encouragement is really great."

Participant 2F added to the thoughts of 2D by sharing her experience with her college professors and how they helped place her in a career. Participant 2F commented, "She [her professor] was invested in making sure that not only did we get the job, but we found success in the job." Participant 2F also stated, "Her mentorship has meant a lot to

the success of my own career through knowing about grans and knowing about how to spend other people's money." The relationship over time proved to be valuable.

More intentional forms of mentorship come in the form of assigning cooperating teachers during practicum and student teaching placements. Both preservice and active teachers spoke of their initial mentors when they went into the profession. Participant 2A described her experiences and mentorship established through her practicum placement. Participant 1C described his involvement in the Educational Internship program regarding intentional mentor placement. He responded that he was "assigned a classroom with a teacher… the leader of the classroom… We've been working in the special education department, so you have multiple teachers coming in and out."

For those in the high school pathway, the Teach and Train program is intentional about proper placement for mentorship. Participant 1G concluded, "They are assigned a practicum level class… so that person is their cooperating teacher, much like if they were student teaching… So that person is very much a mentor to them." All preservice teachers mentioned the importance of their relationship with a cooperating or practicum teacher.

Focus group question nine. Which Grow Your Own Teacher program practice would you consider to have been the most beneficial? In what ways was it beneficial?

Each of the preservice teachers who responded listed some form of hands-on classroom teaching experience as the practice they found to be most beneficial. The emphasis on building student relationships was a key factor for Participants 2A, 2B, and 2C. In a small differentiated reading class, Participant 2C noted, "With so few kids, I really got to know each of them." When returning to a second-grade practicum

placement classroom, Participant 2A shared, “One of the kids is walking down the hallways, and the whole way back he is staring at me, and they’re like, ‘She’s back, she’s back, she’s back, she’s back,’ for 10 minutes straight!” Participant 2B also pointed to student relationships as the biggest factor of her practicum experience. She stated, “Then it was time to choose for my second practicum, and I said, ‘That’s it, I’m going back to first grade with the same teacher.’ So, I was with her for two months, and I love my first graders.”

Participant 1F, who has six years’ experience in the first-grade classroom, noted that her time spent as an A+ tutor was the most beneficial practice. The reason behind this practice has less to do with the financial benefits of the A+ Scholarship program, but more with the hands-on experience with students. As Participant 1F stated, “Any experience that you have inside the classroom is super beneficial.”

The practicum experience provides value for preservice teachers to develop their identities as teachers. Participant 2B spent time in a first-grade classroom, an elementary art class, and with the secretary at an elementary school to become familiar with a wide variety of classrooms, students, and educational career paths. The practicum experience help shape her views on electives and specials as well. Participant 2B mentioned:

> I didn’t think I would like teaching third grade, but I gave it a chance in an art class, and I also fell in love with it. And then I also really enjoyed the classroom. I don’t know, art, although it’s a special, it’s not a real class. It’s so hard! And then you get to see that different side.

As a program director, Participant 2F noted the most beneficial program practice from previous student surveys: “The practicum piece is really [the most beneficial], and the

opportunity to not just see one part of it." Participant 2C replied she had been thrown into a classroom environment where the teacher had turned over the whole class to her immediately, and she stated through her multiple practicum experiences she knows "how I like to teach and who I am as a teacher." Each preservice teacher specified these early formative teaching experiences greatly impacted their trajectory toward education as a career.

Seeing the impact of learning and professional growth through actual classroom experience was noted by the high school pathway preservice teachers. Participant 2C found professional satisfaction in the growth and development of her students and stated, "I just really love seeing the way that they learn." This excitement from facilitating intellectual growth did not just stop with her preschool students but carried over to her time back at the high school. She was able to recognize that even though "you can't see it on their face as well," students are still learning. Preservice Participant 2D also looked forward to honing her craft in various collegiate methods courses. She expressed her hope to "learn to grow your own knowledge of education in general," and recognized a great deal of benefit to her professionally from the individual methods courses.

Preservice teachers and practicing homegrown educators in District 1 agreed the Educational Internship program was the most valuable. The program provides both classroom experience during a very formative period in the education of preservice teachers but also provides financial benefit when preservice teachers may possibly struggle with financial hardship. Participant 1E noted, "If I would've had that program, I would have wanted to stay here [in the current district], and it would've saved a lot of money." Participant 1A agreed the Educational Internship program is highly valuable,

and that it allows the district to "mold their teachers" and train them in specific methods. This particular internship program also allows for aides and other staff members who do not have a degree in education to join the teaching ranks. Participant 1D mentioned some benefits of the program: "They're already a part of that climate. And to be able to move them from that supportive position to a classroom teacher position is only going to be beneficial to the entire district and to our students." According to Participant 1D, the district is hoping to provide this low-cost alternative for non-education majors to become a part of their teaching team.

Focus group question 10. Describe the demographics of your student population. Does your district attempt to recruit teachers of similar racial/ethnic/socioeconomic status as that of your students? If so, have you seen this be a successful method of aligning student and teacher demographics?

Neither district had a specific recruitment strategy in their Grow Your Own Teacher program aimed at targeting a certain racial, ethnic, or socioeconomic status. In both districts, participants indicated that by seeking out students from within their schools, it was implied the Grow Your Own participants would be reflective of the district's demographics. Participant 2E stated that if a potential Grow Your Own or teacher candidate "looks like our students gender-wise, socioeconomic background where they've had to struggle to grow," they are more highly considered for the position. Participant 2F stated their board of education had created a goal that the "employees be more reflective of our student population." She went on to explain how a potential math candidate who has a 4.0 grade point average may not be the best candidate, because he or she may "have to be able to help kids who struggle with math and not just repeat the

same thing 15 times." Through intentional recruiting of high school students into their Education Exploration Program, they hope to more closely align student and staff demographics.

District 1, a rural district, has very little diversity beyond socioeconomic status, according to participants. Participant 1G reported the district does "have a very high free and reduced lunch rate." She stated most of the teachers in the area come from traditional middle-class families, where both parents work, and a high value is placed on education. Participant 1D spoke to the connection built when teachers are able to relate their school experiences to that of their students. She reported students would say, "Mrs. [Teacher Last Name], did you go to school here?" She was able to respond that she did, and this was where her former classroom or locker was. This type of tangible connection to the physical space allows the teacher to start "making that connection with them." Participant 1D also stated students "can kind of start having those dreams, because at home they don't have those dreams," indicating many students come from impoverished communities without much hope.

Focus group question 11. In what ways has graduating from your current district allowed your district to retain your teaching services (What has kept you in the area to teach)?

Homegrown teachers from District 1, including Participants 1A, 1B, 1E, and 1G, commented on the power of relationships within the school community that heavily influenced their decisions to stay in the district where they graduated. Being able to come back and work with former teachers, principals, and staff made a great deal of difference for these participants. Participant 1C opened with how the established

relationships and rapport she developed during school assisted her in returning to her home district. She stated, “The people you had good rapport with and the relationships you built really help you be able to kind of get in, or at least be a bird in someone’s ear.” Participant 1D was able to clarify this statement by adding:

> My high school principal was actually the principal of the building I just did my student teaching in. So, having a relationship with him in high school and then having a different relationship with him as an ‘almost teacher’ are two totally different things.

Participant 1B agreed prior relationships in school were a determining factor in her decision to return to her home district. In discussing the relationship with her current principal, who was her former middle school principal, she explained, “I think having those connections, he felt comfortable with me, and he knew me as a person on a personal level, but also on a teaching level.” Participants frequently observed their initial connection to a certain job or position had been developed through a prior relationship they had from their days in school.

Not only did participants mention the value of established relationships, they also noted the benefits of familiarity with facilities and the community, which impacted their decisions to return to their home districts. Several participants, including Participants 1E and 1B, felt uneasy being in other districts where they did not know the building or were overwhelmed by the size of the district. Participant 1E elaborated by stating, “It makes me uneasy to think about going to a different district and not be able to get to the gym.” Additionally, Participant 1B shared her discomfort being in a larger district by saying, “I couldn’t imagine going to a different district that I wasn’t comfortable in. I did do some

student teaching in [Neighboring Large District], and there is like three different intermediates, and I was so lost."

District 1 and 2 participants also discussed the benefits of their connections to the community and how it allows them to know their students at a deeper level. Participant 1G pointed out, "There are very few things that go on with my students that I don't know about." She shared returning to her home district to teach improved "my ability to do my best job to support the 'outside of education stuff,' that greatly impacts education, is far better because I am here." Adding to the discussion, Participant 1B shared, "You do know their parents, or their families, or their background, what they're coming from and what their struggles are." Participant 1E further illustrated the point concerning community connections by adding, "I can go to pretty much anyone and be like, 'Hey, I have so and so. I'm really kind of concerned. What do you know?' And they can tell me everything about them."

Knowing the backgrounds of students and their experiences was not limited to District 1. Participants from District 2 also contributed to the notion of community connections and their ability to better relate to students. While discussing the benefits of not only having gone to school, but also raising a family in the same district he was from, Participant 2E mentioned, "I think that speaks volumes to the kids. When they find out that you live here, too. And then they find out my kids went to the same high school, you're not better than us or whatever." Knowing the community, according to Participant 2D, creates excitement "to come back and teach in [School District]" and support the students she knows have a need.

Participant 2F is from a long line of graduates from her home district. She stated, "My niece and nephew are the fifth generation to graduate from this school district." The cycle of "giving back" to the community is another determining factor in the district's ability to retain her services. Being rooted in the community and district creates a deeper sense of "this is really home." According to Participant 2F, the sense of home makes it much more difficult to leave when offered positions in other districts. Participant 2F continued, "I think seeing your former students come back and make such great impacts on kids is truly one of the best gifts that you get." The cycle of giving back to something larger than oneself was a deciding element in her career choice.

Interviews

Interviews were conducted with Grow Your Own Teacher program key personnel who had direct supervision over the program. The questions used for interviews were designed to address research question two. Key personnel from two districts, one rural and one suburban, participated in the interviews (a third district, District 3, could not be secured by the researcher to conduct research in an urban district). The key personnel from each district included either superintendents or their designees who managed aspects of the district's Grow Your Own Teacher program. Key personnel were assigned alphanumeric codes to provide anonymity for the districts and participants. For example, privacy was ensured by referring to key personnel from District 1 as Key Personnel 1.

Interview question one. What is your current title, and how long have you been in this position?

The current title for Key Personnel 1 was superintendent, and the current title for Key Personnel 2 was assistant superintendent of human resources. Key Personnel 1 had

11 years of experience in the position, while Key Personnel 2 had five years of experience in the position (see Table 3).

Table 3

Key Personnel Years of Experience

Participant	Years of Experience in Current Position	Current Position
Key Personnel 1	11	Superintendent
Key Personnel 2	5	Assistant Superintendent of Human Resources

Interview question two. How long have you been associated with your district's Grow Your Own Teacher program?

Key Personnel 1 had been associated with an official Grow Your Own Teacher program for five years, while Key Personnel 2 had been associated with her district's program for four years (see Table 4).

Table 4

Key Personnel Years of Associated with Program

Participant	Years of Association with Grow Your Own Teacher Program
Key Personnel 1	5
Key Personnel 2	4

Interview question three. What teacher shortages exist in your district? Is your Grow Your Own Teacher program designed to fill specific personnel shortages?

Key shortage areas specific to District 1, according to Key Personnel 1, included math, science, counseling, and English Language Learner (ELL) teaching positions. District 2 had specific teacher shortages in special education (SPED), math, and science, according to Key Personnel 2 (see Table 5).

Table 5

High-Need Teacher Shortage Areas by District

High-Need Shortage Area	District 1	District 2
Math	X	X
Science	X	X
Special Education		X
English Language Learner	X	
Counseling	X	

Students in District 2 who were embarking on a degree in education were offered scholarships. The district utilizes a rubric, which according to Key Personnel 2, awards higher scores to prospective scholarship participants going into high-needs areas. The Grow Your Own Teacher program at District 1 does not include a scholarship program, and Key Personnel 1 stated, "The Grow Your Own program is not necessarily designed to fill all of those [high-need shortage areas]." Key Personnel 2 also mentioned the Grow Your Own program is designed to "increase the number of applicants we get for teaching that are teachers of color." She contributed the increased percentage of teachers of color

applicants to the fact the district is 50% students of color, which would be their scholarship pool.

Interview question four. What types of high school programming (clubs, classes, and organizations) does your district offer to encourage students to choose education as a career?

The CAPS program was reported by Key Personnel 2 to be the primary high school offering in District 2. Key Personnel 1 stated the Teach and Train program is the district's high school-based program. The Teach and Train program serves what Key Personnel 1 referred to as the "curriculum part of the program, but also the club part of the program." Both of the key personnel mentioned they formerly ran a Future Teachers of America club in their high schools, but they either lacked interest or did not have a good sponsor. Key Personnel 1 reported the Teach and Train program to be "a more organized effort" for high school students who aspire to join the teaching field. He also explained their district's educational internship program and yearlong student teaching are a "good conversational piece" for current high school students hoping to enter education.

Interview question five. Does your district offer to help lessen the cost of teacher preservice training/coursework for teachers who are from their Grow Your Own Teacher program? If so, how does your district provide this opportunity?

Both districts developed programs to lessen the cost of teacher preparation coursework. District 2 offers a scholarship, while District 1 provides an educational internship program. Key Personnel 2 pointed out the district's Grow Your Own Teacher loan forgiveness program. District 2 awards four scholarships per year, and "they

[recipients] sign a contract that says we will give them $2,500 a year for four years, for a total of $10,000." Upon the completion of their education degrees, they "then come back and teach for us for four years," which releases them from their contractual obligation to repay the money. She also noted recipients who do not complete their education are required to pay back what the district provided. Key Personnel 2 stated, "They're released from the commitment" if the district does not have a position available or decides not to hire them. District 1 utilizes an indirect reduction of tuition costs for future teachers, according to Key Personnel 1. Partnering with a local junior college, District 1 provides students going into education an aide position to gives them "10 to 15 hours depending on their college schedule," allowing the student to receive embedded credit.

Interview question six. Do community groups partner with your district to enhance the Grow Your Own Teacher program? If so, in what ways? If not, could you foresee any potential groups who could provide this service?

Key personnel from District 1 and District 2 answered there are community resources available for students, just not necessarily directly involved with their districts' programs. Key Personnel 2 reported, "Our district leaders and the board of education wanted to be separate from that [the [District 2] Education Foundation]" for their Grow Your Own Teacher loan forgiveness program. Key Personnel 1 noted, "Some of our local businesses, mainly through the chamber of commerce, make available certain gifts that we can give." These items are designed to say "thank you" for choosing education as a career. Key Personnel 1 also stated the [District 1] Community Teacher's

Association provides support and scholarship incentives for students interested in education as a career.

Interview question seven. Do you know of any colleges or universities that partner with your district to provide tuition assistance or credit for participation in your district's Grow Your Own Teacher program? If so, which universities are involved?

District 1 and District 2 both had partnerships with colleges and universities for individualized programming. In District 1, Key Personnel 1 stated, "[Local State University] is our current main partner. [Local Community College] is also a partner." He followed up by saying:

> It's a pretty good opportunity for our students to go right from high school, utilize their A+, go into [Local Community College], and they can actually go right into [Local State University] and not have to go to [Local State University main site].

Key Personnel 2 responded that District 2 has a partnership with a local university that allows paraprofessionals or instructional aides the opportunity to take night classes in education while the district agrees to keep them employed during their student teaching semester. She pointed out, "That's a plus for them because a lot of times, they can't afford to do their student teaching because they have to work." Another extension of their university partnerships involve hiring, on provisional certification, "an IA [Instructional Assistant] . . . if they agree to take certain classes, we will hire them as a teacher." Key Personnel 2 stated their partnership enables aides to get provisionally or temporarily certified and take classes through an agreement with local universities.

Interview question eight. Describe the demographics of your student population. Does your district attempt to recruit teachers of similar

racial/ethnic/socioeconomic status as that of your students? If so, have you seen this be a successful method of aligning student and teacher demographics?

Key Personnel 2 described the demographics of District 2 as "about 50% African American." They are considered a Title One school with all buildings over 50% free and reduced meal rates. She reported, "Some are as high as 80% to 90%." According to Key Personnel 2, the goal of the Grow Your Own Teacher loan forgiveness program is to "recruit more teachers that are demographically like our students." She stated, "That is what we're hoping to do, to tap that resource" and provide a greater parity between students and teachers in their district. When asked if this approach was a successful method of aligning student and teacher demographics, Key Personnel 2 responded that District 2 did not have any graduates yet. She went on to say, "We have had difficulty still having students of color go into education." It was too early to tell if this program was helpful towards those ends.

The demographics of District 2 were described by Key Personnel 2 as being largely rural, predominantly White, and "about 65% free and reduced lunch." She stated the 10% minority population is composed of "African American, Hispanic, Laotian, and Hmong. Very, very few of the latter there, but that's our general makeup." According to Key Personnel 2, their Grow Your Own Teacher program does not purposefully attempt to recruit teachers of similar ethnic and socioeconomic status as their students. Though this is not an implicit goal of the program, they currently have "four individuals now, and hopefully a fifth, that are all of minority origin that are pursuing education degrees." He explained this will be "a huge benefit for us in meeting our ELL needs" as they look to be more representative of their student population.

Interview question nine. Which Grow Your Own Teacher program practice do you find to be the most effective in meeting the needs of your district's recruitment goals? How so?

Key Personnel 2 was unable to fully answer the question, as she shared, "We just haven't, . . . we haven't gotten there yet." Following up on this comment, she mentioned, "What I'm thinking is that we might get more of the hard-to-fill positions… We may get a few more candidates of color." Overall, it was still too early in the program at District 2 for her to respond accurately.

In District 1, Key Personnel 1 began by stating, "I guess the popular answer would be all of them." He clarified his response by first starting with the district's Teach and Train program, which spurred the development of other educational internship and year-long student teaching experiences that "are all very integral… We believe we're better recruiting and better preparing future teachers." An important practice mentioned by Key Personnel 1 about how to most effectively meet the needs of his district's recruitment goals was to "be careful that we are not having friendly fire, which means we are our own worst enemy in education." He remarked teachers need to avoid complaining about the standards, assessments, paperwork, and pay, and instead focus on teaching as "an honorable profession" and a good job that well-serves the community.

Interview question 10. In what ways does your district provide a specific mentor to students interested in the Grow Your Own Teacher program? Is there a mentorship program in place?

Both Key Personnel 1 and Key Personnel 2 responded there is not an intentional mentorship process involved with their Grow Your Own Teacher programs. The

mentorship piece in both districts came about through teacher placements in high school programs. Key Personnel 2 stated, "The CAPS program serves as this [the mentor role]. [The CAPS teacher] does an excellent job mentoring these kids." In District 1, Key Personnel 1 brought up his district's Teach and Train program, and how the sponsor "does a mentoring experience and partners with certain teachers for each of those students." According to Key Personnel 1, each placement is designed specifically so the "teacher is in a supportive role for that [mentorship opportunity]." He added their district is now utilizing four instructional coaches to serve as mentors for new teachers. This ensures a "design program" and consistent message and training for all new teachers.

Interview question 11. Do you find it easier to retain teachers who have gone through your district's Grow Your Own Teacher Program? What are the risks and benefits of hiring a "homegrown" teacher?

Key Personnel 2 replied they have yet to have enough former students go through their program to really determine the outcomes on teacher retention. She did state, "Statistically, teachers tend to stay in and teach in areas where they grew up and went to school." She followed up by saying, "The research shows that, so that's why we're trying to tap into that as well. A lot of our teachers went to school here."

Key Personnel 1 replied he did find it easier to retain teachers who completed the district's Grow Your Own Teacher program. He followed up by stating, "Especially now with the Educational Internship, they are so much more attuned to the building or grade level operation needs, and the transitions that occur, knowing where things are at, the building." He asserted, "I think that this is a huge recruitment and retention piece" for prospective teachers entering the field of education.

One potential risk reported by Key Personnel 1 is “when you have an alumnus or non-alumnus that struggles or has professional areas that need improvement.” He clarified, “It’s never easy if you don’t have upfront conversations.” Not having the tough conversations about specific areas of improvement can “make it worse for them, and their students, and their parents,” according to Key Personnel 1. Being in a small, interconnected community “does your building an injustice” if these conversations are not conducted.

Interview question 12. In what ways does your district’s Grow Your Own Teacher program have an impact on those teachers’ standardized assessment scores?

Key personnel in both districts responded it was too early in their programs to make any correlation between Grow Your Own Teacher programs and assessment scores. According to Key Personnel 1, teachers who came from their home school district rather than another school district “would be more leveled” and have a greater propensity to be retained in the educational career field due to the strong supports provided by their program. Both of these districts were unable to accurately demonstrate this connection, due to the lack of teachers who have successfully completed the programs.

Summary

In summation, this chapter was comprised of the findings of focus groups with Grow Your Own Teacher program participants and interviews with key personnel from districts with established programs as recognized by the MODESE. Focus group questions and responses were analyzed to clarify perceptions of program participants regarding best practices in each district’s Grow Your Own Teacher program. Similarly,

interview questions were developed and responses examined to determine key personnel's perceptions of best practices in their Grow Your Own Teacher programs.

This chapter was comprised of data collected from 13 Grow Your Own Teacher program participants ranging from homegrown teachers with 24 years of experience to high school juniors involved in their district's CAPS programming. Two key personnel contributed to interviews from their districts about the perceptions of the superintendent or designee of the program. The focus group and interview responses were transcribed, examined, and analyzed to develop major findings and conclusions found in Chapter Five.

Chapter Five includes the analysis of the focus groups and interviews into findings for the three guiding research questions of this study. Similarities and differences between the perceptions of best practice from both program participants and key personnel are analyzed. An analysis is also presented as to the differences and commonalities between geographical areas to answer the third research question. Major themes developed from the findings are provided in the conclusion portion of the chapter. Implications for practice were carefully considered and are presented along with recommendations for future research.

Chapter Five: Summary and Conclusions

Grow Your Own Teacher programs have risen across the national landscape as a primary means to combat large-scale and acute teacher shortages (Aragon, 2016; Espinoza et al., 2018, Sutcher et al., 2016). Declining enrollment in college and university teacher preparation programs and the high level of attrition among current teaching staff are two broad-level indicators that raise concern for staffing K-12 districts (Berry & Shields, 2017; Dee & Goldhaber, 2017; McHenry-Sorber & Campbell, 2019; Podolsky et al., 2016). While steps and measures are being taken to address the supply and demand characteristics of the system, many districts have greater difficulty in specific certification areas, localities, and demographics (Cowan et al., 2016).

Subject-area shortages exist in specialized fields like science, math, special education, and English Language Learners (Carver-Thomas & Darling-Hammond, 2017; Cowan et al., 2016; Hagaman & Casey, 2018). Rural and urban areas exacerbate the acuity of the teacher shortage by localizing supply issues where teachers generally experience more-difficult working conditions (Aragon, 2016; Miller et al., 2019; Monk, 2007). Concerns over equity and racial disparity are evident as "nationally, in 2013-2014, on average, high-minority schools had four times as many uncertified teachers as low-minority districts" (Sutcher et al., 2016, p. 5). Dee and Golbhaber (2017) shared specific state data:

> For example, in school year 2015-16 school-level data from New York, we find that the share of classes with a teacher lacking conventional certification is 6.5 percent. However, in schools with few to no black students, the rate is 2.5

> percent, and in schools with the highest concentrations of black students, the rate is 13.2 percent. (p. 8)

These challenges have led districts to consider initiatives at the local level in order to meet their unique human resource needs.

Seen as a high-retention pathway to teaching, Grow Your Own Teacher programs help address these acute teacher shortage needs in a variety of ways (Espinoza et al., 2018; Sutcher et al., 2016). Implementation of these programs has led to increased recruitment and retention of diverse teachers and draws on the "pull of home" many preservice teachers experience as they enter the teaching workforce (Coffey et al., 2019; Espinoza et al., 2018). Utilizing a conceptual framework developed by the MODESE (2016c), four critical areas were studied: teacher shortages, teacher incentives, diverse educators, and urban education.

This qualitative study was designed to analyze the perceptions of Grow Your Own Teacher program participants and key personnel to determine which program features can be considered best practice. Analyzing similarities and differences among rural, suburban, and urban Grow Your Own Teacher programs also provides districts with information to more accurately tailor programs to meet their specific needs. Chapter Five includes answers to the research questions which guided this study through analysis and identification of themes from focus group and interview responses. This final chapter also includes the implications for practice and suggestions for future research regarding perceptions of Grow Your Own Teacher programs.

Findings

Perceptions of Grow Your Own Teacher program participants and key personnel were obtained to answer the three research questions of this qualitative study. Focus group and interview participants were asked questions that corresponded to the research questions and their subpoints. All data were transcribed, reviewed, and coded to uncover themes related to each research question. Themes were analyzed across geographical localities to discover any similarities and differences that may exist among rural, suburban, and urban areas.

Research question one. What do participants of Grow Your Own Teacher programs perceive as best practices to further teacher recruitment in their school districts in the following areas:

a. Teacher shortages

b. Teacher incentives

c. Diverse educators

d. Urban education?

Participants from District 1, a rural district, did not have any knowledge or awareness of broad-scale or specific teacher shortages at the time of their employment. District 2 participants seemed to be much more informed about teacher shortages and indicated they did have an impact on their decisions to choose teaching as a career. Participant 2B stated, “Being in the program, it’s opened up my eyes, and it’s for sure that I’ll have a job once I graduate from college.” Participants 2A, 2B, and 2C were preservice high school students enrolled in Center for Advanced Studies (CAPS) courses

in the Grow Your Own Teacher program at District 2 and indicated their involvement in the program was what led to their awareness of teacher shortages.

As part of their internships, CAPS students meet regularly with human resource staff members in their district and discuss current trends in the field of education. Participants who had already been hired and had begun their education careers, especially those with greater years of total service, seemed to have less knowledge of teacher shortage. Many participants noted the main reason for choosing education had less to do with fulfilling a shortage area and more to do with the opportunity to serve kids and to have an impact on a child's life.

Recruitment strategies were evident in both District 1 and District 2 in the form of teacher incentive components under the Grow Your Own Teacher programs. Financial aid in the form of grants, scholarships, internships, and loan forgiveness programs was provided to participants of Grow Your Own Teacher programs to remove barriers to an education degree (Espinoza et al., 2018; Podolsky et al., 2016). The A+ Scholarship Program was cited by participants in both districts as a financial assistance piece that allowed Participant 1C to "get my first two years, my undergrad for free." Local scholarships provided through teacher organizations can also offset the cost of teacher education tuition. Participants 1B, 1G, and 2D discussed receiving local scholarships that were one-time, non-renewable monies.

Dual credit opportunities for high school students are another financial incentive that decreases the overall expense of teacher education. The CAPS program in District 2 and the Teach and Train program in District 1 include dual credit partnerships with universities to offset the cost of coursework. Participants in both districts did not find

teacher education dual credit courses to be of particular value based on the number of students participating. Participant 2C stated only one student in the entire CAPS program at District 2 was taking part in the dual credit opportunity. Participants stated most of the appeal of dual credit courses was for general education classes.

The Grow Your Own scholarship in District 2 was perceived by participants to be extremely beneficial for its recipients. Participant 2A, who was involved in the CAPS program but was actually enrolled in another high school, was trying to apply for the scholarship without being an actual student in District 2. She stated, "As soon as I get back, I'm going to our counselor's office and saying, 'Hey, what do you got? [District 2]'s looking pretty good.'" She went on to describe how one of her peers who attends her same high school, but also attends the CAPS program in District 2, was ready to apply as soon as the application became open. Participant 1C in the Educational Internship program at District 1 shared a very positive perception of what the district was doing to financially assist preservice teachers. Participant 1G applauded the program's ability to provide financial support alongside the hands-on experience gained as an aide in the classroom.

The early efforts of teacher incentives provided to students in both districts were met with approval from the focus group participants. Participant 1C mentioned that high school clubs like FCCLA and student council held a great deal of value to enhance the interpersonal skills of future teachers. Likewise, participants in District 2 added that any club that provides leadership experience can assist future teachers in having the confidence to enter the profession. Participant 1G brought up the value of other clubs,

like FTA, that provide high school students with hands-on classroom experience through a cadet teaching day.

The most overwhelming approval for early teacher incentives came from activities or coursework designed to get high school students hands-on experience working in a classroom setting. Participant 1G noted that she changed her major to education after realizing how much she "kind of liked the classroom stuff." The experiences Participant 2B had during her time in child development, and CAPS courses helped develop her interest in education.

A commonality among participants in both districts was the important effect mentorship had on them during their formative years. Each participant in District 1 and Participants 2A, 2B, 2C, 2D, and 2F spoke of the value of encouraging words that led them to a profession in which they could positively impact others. Participants 2A and 2B mentioned how teachers who opened up and encouraged them to teach were a major factor in their decision to consider teaching as a career. One component of mentorship that bears mentioning due to the frequency it came up during focus groups was the role parents as educators play when mentoring their children to go into the field. Participants 1B, 1D, 1E, 2A, 2D, and 2F had parents as educators, and parental examples and mentorship to become teachers was something consistently discussed in both focus groups.

The major Grow Your Own Teacher program initiatives in both districts (rural and suburban) were perceived by participants to be more in line with filling the needs of the teacher shortage than creating a more diverse teacher pipeline. Participant 2F spoke of the rapidly changing demographics in District 2, and how it was a "board goal that our

population of employees be more reflective of our student population." In the largely White and rural District 1, participants agreed that some of the Grow Your Own Teacher programs would benefit students in poverty. As Participant 2E stated, "It [the Grow Your Own Teacher program] more focuses on filling the educational void of a subject," rather than trying to create greater racial parity across the district.

Perceptions of urban education were discussed sparingly and only within District 2, the large suburban school district. District 2 is in close proximity to several urban districts and has sometimes experienced similar challenges, according to the participants. While Participant 2D was studying for her elementary education degree, she did point out the rubric used to judge Grow Your Own Teacher Scholarship recipients gave higher preference to those students interested in high-needs content areas, like math or science. When making decisions about moving to a different district, Participant 2F stated she wanted her family to "be in a diverse, in lots of ways, not just ethnicity, but a diverse area" to provide her children a diverse background. An urban district was unable to be secured for focus group participation.

Research question two. What do key personnel who are involved in Grow Your Own Teacher programs perceive as best practices to further teacher recruitment in their school districts in the following areas:

a. Teacher shortages
b. Teacher incentives
c. Diverse educators
d. Urban education?

Each of the key personnel mentioned a teacher shortage of math and science teachers. Key Personnel 1 also noted a need to tailor Grow Your Own Teacher programs to target counselors and English Language Learner teachers. In the suburban district, Key Personnel 2 reported difficulty hiring special education positions. The Grow Your Own Teacher program in District 1 did not have any design systems in place to aid in the filling of subject-area specific teaching assignments. The program in District 2 gave "preference to students that are going into SPED [special education] and the sciences. So, we give a higher rating on the rubric when they're going into that [high-need content areas]."

The demographics of District 2 created a shortage in the area of teacher diversity. According to Key Personnel 2, 50% of the student population are students of color. She stated the program is intended to "encourage more students of color to go into teaching." While the district encourages this practice, a particular strategy of recruiting students of color to the program was not mentioned.

Several recruitment strategies of teacher incentives were mentioned as best practices for the Grow Your Own Teacher programs in both districts. Key Personnel 2 described the loan forgiveness program, or Grow Your Own Teacher scholarship, at District 2. The district awards four per year and gives recipients $2,500 a year up to a total of $10,000. Upon receiving their education degrees, loan forgiveness recipients are contractually bound to work for District 2 for four years. If teachers either do not finish their degrees or do not stay with the district for four years, they must pay back the total amount of the loan. This program was cited as a district "best practice" by Key Personnel 2.

Key Personnel 1 cited his district's Educational Internship program as a targeted recruitment tool considered a "best practice." By hiring future teachers for 10-15 hours a week during their undergraduate coursework as aides, participants are also provided embedded credit through a partnership between the district and local universities. Key Personnel 1 stated this program was considered a best practice because it allowed the district to know more about a potential teacher candidate and his/her fit in their school and provided financial assistance and hands-on classroom experience for the future teacher.

Smaller scholarships and community awards were also given out in both districts. Key Personnel 2 shared that the [District 2] Education Foundation provides a one-time scholarship to high school seniors who express interest in education. She stated that it was determined by district leadership that the [District 2] Education Foundation would be separate from the Grow Your Own Teacher loan forgiveness program, and "they wanted this [the Grow Your Own Teacher loan forgiveness program] to be something we [district administration] controlled and not the Foundation." Local restaurants and businesses, in conjunction with the chamber of commerce in District 1, give out gift cards and gift bags to future educators. Key Personnel 1 stated this best practice was a way for the local community to express their gratitude for teachers in their area.

Best practices in early efforts to provide teacher incentives for recruitment had been in place for many years at both districts but had limited success in the past. Key Personnel 1 and Key Personnel 2 mentioned FTA as a club for high school students who had expressed interest in education. The FTA organization in District 2 was previously "not well attended," according to Key Personnel 2. Key Personnel 1 agreed with the

downfalls of FTA by saying its success was highly dependent on the motivation of the club's sponsor. Both districts have moved to programs that offer hands-on classroom experience for students through coursework tied into students' academic schedules. Key Personnel 1 specifically mentioned the "more organized effort" the Teach and Train program offers with curricular and extracurricular opportunities for prospective teachers. The CAPS program in District 2 was considered best practice by Key Personnel 2. This program gives high school students interested in education the opportunity to receive hands-on classroom experience.

Efforts to increase teacher diversity to more accurately pair student and teacher demographics were not intentionally addressed by either the rural or suburban district. Key Personnel 1 hoped "that by offering this to our students, we will recruit more teachers that are demographically like our students." While targeted recruitment of minorities was not reported in District 1, Key Personnel 1 reported there to be five participants of minority origin in their district's Grow Your Own Teacher program. He added that their involvement will significantly boost the ability of the district to meet English Language Learner needs.

There was little response to interview questions regarding urban education issues in either district. District 2, a large suburban district with some qualities of an urban district, did report having buildings with up to 90% free and reduced meal status. Although Key Personnel 2 suggested their Grow Your Own Teacher loan forgiveness program was hopeful to bring about greater racial parity, no particular methods were employed specifically to this need.

Research question three. What similarities and differences exist among urban, suburban, and rural school districts that implement Grow Your Own Teacher programs?

Key personnel and Grow Your Own Teacher participants shared the practice of providing a hands-on classroom experience for high school students to build interest in the field of education. Another common practice was moving this experience from an extracurricular club to a curricular part of the student's coursework. The suburban district, District 2, chose to use the CAPS model in place at the local career center, while the rural district, District 1, did not have access and embedded the courses into Family and Consumer Science coursework.

Another major difference between the rural and suburban districts was the heightened awareness of the teacher shortage that preservice teachers revealed in District 2. Preservice teacher participants in District 2 stated an awareness of a broad and specific teacher shortage that impacted their decisions to choose education as a career. None of the preservice participants in District 1 cited a teacher shortage as a primary reason to join the teacher ranks.

Participants in both districts also mentioned the valuable role mentors played in their decisions to become teachers. Express mentorship on the part of the Grow Your Own Teacher programs was nonexistent; however, informal internship was often a determining factor to enter a teacher education program. The admiration and encouragement of former teachers during preservice teachers' K-12 experience was most commonly cited as influential in their decision.

College and university partnerships to provide dual credit were also seen as a common component in both rural and suburban districts. Dual credit programs did not

need to be specific to education courses to be effective as a means of financial assistance. More participants from District 1 responded that A+ Scholarship funds were financially beneficial than in District 2. The suburban district provided financial assistance through a loan forgiveness program that allowed preservice teachers a traditional route to the classroom, while the rural district provided an alternative-track method for paraprofessionals and aides to receive certification and remain employed by the district.

Conclusions

This section includes conclusions to the research questions based on the responses from Grow Your Own Teacher focus group participants and key personnel interviews. The common perceptions of participants gathered during the focus groups and interviews are included in regard to the perceptions of best practices in Grow Your Own Teacher programs. These perceptions were analyzed and synthesized to produce emerging themes about best practices within Grow Your Own Teacher programs.

Relationships and mentoring need to be developed early and persist through teacher preservice. When asked about how a mentor influenced their decision to choose education as a career, focus group participants continually went back to early experiences when they were encouraged by one of their teachers who saw in them the ability to impact others through education. For some, it was a high school teacher who pulled them to the side and stated, “You’re going to sign up and be a teacher” (Participant 1A). Others had an elementary teacher mention to them how even at an early age, they could see the spark of education in them. Early mentorship and building relational capital were all noted as initial factors for students interested in teaching.

These early high school curricular and extra-curricular experiences are taught and sponsored by "skilled teacher leaders" who encourage and invest in future teachers (Brown, 2016, p. 32). Gist, Bianco et al. (2018) pointed out, "There was a need for open and flexible selection to middle and high school programs to be coupled with the creation of scholarship and mentorship" (p. 9). A breadth of research exists about the importance of high-quality mentorship and induction programs for new teachers (Berry & Shields, 2017; Carver-Thomas & Darling-Hammond, 2017; Espinoza et al., 2018). However, little research exists on the important role early preservice teacher mentoring could play on overall teacher recruitment.

Once interested students enter their education coursework in a teacher preparatory program, the role of mentorship becomes even more important (Gist, 2019). These mentors are usually teacher education department faculty or cooperating teachers during student teaching semesters (Lee, 2018). Oftentimes, these mentors provide both an encouraging and evaluative role in the preservice education of teachers (Guillen & Zeichner, 2018). Participant 2D stated, "When you're trying to become a teacher, and yes, being critical but also giving you the feedback that you need that encourages you, for you are here for a good reason." The affirming and encouraging message of mentors during preservice teacher experience was not only mentioned by focus group participants; a great deal of research validates the role mentors play in education (Espinoza et al., 2018; Guillen & Zeichner, 2018; Zeichner et al., 2016).

Combine financial incentives and partner with colleges and universities. Many rural and urban districts lack the financial resources of large suburban districts to provide large amounts of financial assistance to students wanting to pursue their degrees

in education (Coffey et al., 2019). District 1, a rural district, combined several means of financial assistance including local scholarships, A+ scholarships, and an educational internship program where the district hires preservice teachers before undergoing their coursework. Many urban districts must seek state or federal grant funding to offer service scholarships or fellowships to interest students in the profession (Sutcher et al., 2016). Community-based teacher education programs that partner with urban colleges and universities can help with financial assistance and create new pathways for urban students interested in education as a career (Coffey et al., 2019; Valenzuela, 2017).

While suburban districts are sometimes able to partner with local education foundations for loan forgiveness programs, or are able to provide district funds to support a scholarship program, looking for multiple ways to combine financial assistance can be positive (Aragon, 2018). Participants in District 2, a suburban district, also mentioned using local one-time scholarships and their A+ scholarship to combine with large amounts of assistance through loan forgiveness programs. Providing multiple sources of financial assistance to teacher education programs is a best practice for any size district (Aragon, 2018).

Districts are also able to develop interest and lessen the costs of teacher education coursework through partnerships with colleges and universities (Bland et al., 2016). Dual credit courses in high school are available to students in rural, suburban, or urban districts (Garcia et al., 2019). Participant 2D stated she was able to complete several college courses in high school that went toward her general education degree at “a really nice price.” Multiple participants from both rural and suburban districts and differing places in their educational careers spoke to the benefits of going into college with many general

education courses completed at a reduced dual credit cost. Besides the reduced cost, participants who discussed dual credit benefits noted the ability to transfer credits to other institutions was critical to their success. Preservice teachers are also able to take content-specific courses that fall in with their programs of study in the teacher education departments at many universities. Coffey et al. (2019) cited dual credit opportunities as an important pathway for students to be successful in urban environments, but dual credit would be valuable in any district facing a teacher shortage.

Provide early exposure to hands-on experiences in the classroom. Analysis of the focus group participants and key personnel interviews consistently pointed to the importance of providing students with hands-on experiences within the classroom. This movement has been noted at the university level through teacher residencies and additional practicum placement hours prior to the student teaching semester (Hammerness et al., 2016). According to Key Personnel 1, District 1 has partnered with a teacher college to provide year-long teacher residencies. Districts in all types of geographic areas are finding unique ways to partner with local colleges and universities to give preservice teachers at the university level greater access to the classroom (source/year)

Districts are using hands-on classroom experience as a means to attract more and more students to the teaching profession (MODESE, 2019). Grow Your Own Teacher programs capitalize on students' experiences within the classroom to build interest and a love for teaching. According to Quiñones (2018), a student acknowledged "getting her feet wet" during high school classes with classroom observations, involvement in educational seminars, and classroom teaching experiences (p. 629). These experiences

all “positively shaped their decision to become teachers” (Quiñones, 2018, p. 629). When asked about the most beneficial practice a Grow Your Own Teacher program could offer, teachers, preservice teachers, and key personnel within the program relayed the value of providing early classroom experiences. Teachers are overwhelmingly drawn to education as a means to positively impact the lives of children, and providing an experience where early preservice teachers can sample this impact is crucial for program success (Orland-Barak & Wang, 2020).

Implications for Practice

In response to teacher shortages, districts have turned to a local resource and have developed Grow Your Own Teacher programs to enlist personnel from within their communities to meet their needs (Aragon 2016; Sutcher et al., 2016). Understanding the perceptions of both Grow Your Own Teacher participants and key personnel who supervise these programs can provide valuable insight to district administrators, state officials, and educational policymakers (McCollum, 2011). Guidance from *Grow Your Own: A Resource Guide to Creating Your Own Teacher Pipeline* (MODESE, 2016c) provides several examples of best practices and ideas to help implement a Grow Your Own Teacher program; however, missing are best practices that impact implementation for specific geographic regions.

The findings from the focus groups and interviews conducted in this study revealed perceived best practices from participants and key personnel. Upon the synthesis and evaluation of the conclusions of the study, several implications for practice were developed to determine program best practices. These practices were supported by

the current research and literature on Grow Your Own Teacher programs (Dee & Goldhaber 2017; Garcia et al., 2019; Ingersoll et al., 2017; Valenzuela, 2017).

Provide intentional mentorship opportunities for middle and high school students interested in teaching. Mentoring and the relational capital provided by mentors was a consistent theme across geographic areas. Teachers and preservice teachers could name a previous teacher who helped to develop their initial thinking about choosing education as a career. Middle and high schools now must develop programs for their students to receive both positive encouragement and critical feedback from a teacher leader or other assigned mentor, similar to the role of education professors in a college or university setting (Brown 2016). The sooner students receive this kind of mentorship, the more solidified their decisions to become teachers will be (Woods, 2016). In rural and urban districts, where staffing needs are already prevalent, district leadership can assign mentors from curricular and extracurricular programs to encourage and provide feedback to students interested in education (Bland et al., 2016). Suburban districts, with fewer staffing issues, are able to provide a more formal approach to mentorship and create systems by which students are able to receive feedback and support from practicing teachers (Cross & Thomas, 2017).

While mentorship programs may look different from region to region, it is important for district leadership to provide professional development to staff involved in mentoring young, preservice teachers (Roegman & Kolman, 2020). This training needs to include ways to provide developmentally appropriate feedback to students about their experiences and practices within the classroom (Orland-Barak & Wang, 2020). Mentors should first seek to build up the students and encourage them in the early stages of

educational concepts such as curriculum, assessment, instruction, management, and relationships (Stanulis et al., 2019). Any feedback at this point should be provided to offer professional advice and an understanding that the student has no real educational training (Brown, 2016). These strategies would require little to no cost for implementation, while larger districts may need to provide a stipend for extracurricular activities and clubs for these sponsors and teacher leaders (Orland-Barak & Wang, 2020).

Cultivate partnerships among districts, teacher education colleges, and financial aid programs. Participants and key personnel mentioned several individual programs or practices that helped reduce or eliminate financial barriers to teacher education programs. While suburban districts may have the means to provide large amounts of scholarship or loan forgiveness monies, rural and urban districts had to seek partnerships and look to alternative programs to open pathways to the classroom (Miller et al., 2019). Districts need to not necessarily look at a singular approach to reducing financial burdens but should, instead, layer existing financial assistance, scholarships, grants, university partnerships, and curricular pathway programs to provide a more dynamic approach to remove barriers for all prospective teachers regardless of income (Dee & Goldhaber, 2017).

Dual credit agreements with universities remain an untapped source of interest and engagement for students who may aspire to be teachers in rural and urban districts (Quiñones, 2018). The ability to develop these partnerships may seem out-of-reach due to the large physical distance between rural districts and teacher education programs or may appear to be impractical because of high poverty rates within urban schools (Garcia et al., 2019). University partnerships with rural districts can be enhanced by virtual

means, and many local community colleges are expanding programming to include teacher education strands (Aragon, 2018). Urban districts are now able to provide dual credit courses to students of poverty free of charge, especially when partnering with community colleges (Aragon, 2018). Whether these dual credit partnerships provide content-specific education courses or general education opportunities, participants all agreed to the value of dual credit partnerships.

Create opportunities for preservice teachers to receive early classroom experience. Getting students exposed to hands-on classroom experiences early in their teacher education careers was another consistent theme from participants and key personnel. Large suburban districts have the opportunity to embed curricular courses in their master schedules to provide for this time; however, urban and rural districts must be creative in developing these classroom opportunities for students (Brown, 2016). It is important for rural and urban districts to not only provide classroom experience for future students but also find ways to educate and involve students in their local communities (Miller et al., 2019). Rural and urban teacher candidates can develop strong ties to their communities and schools, which are often smaller than those in suburban districts (Miller et al., 2019).

High school students involved in curricular programming, which put them in classrooms, stated how attracted they were to the classroom environment due to relationships with younger students (Roegman & Kolman, 2020). When students realize the educational impact they are making in younger students' lives, they begin to more aggressively take an interest in the field of education (Bristol & Goings, 2019). This foundational component for all teachers can be congealed at very early stages if districts

will look at designing systems to build interest in the teaching profession (Quiñones, 2018). Capitalizing on the bonds between early preservice teachers and young students will yield higher recruitment rates for districts and their Grow Your Own Teacher programs (Brown 2016).

Recommendations for Future Research

This qualitative study involved elicitation of the perceptions of participants and key personnel involved with Grow Your Own Teacher programs and comparison across rural, suburban, and urban districts. After carefully analyzing and synthesizing data, the need for further research in several areas became apparent. The first recommendation is to develop a survey instrument to gauge the effectiveness of Grow Your Own Teacher practices. A quantitative approach would not reach as deeply into the perceptions of participants and key personnel but would rather provide a broader examination of the status of Grow Your Own Teacher programs across the state and nation.

The next suggestion would be to evaluate and study the effectiveness of teachers who participate in Grow Your Own Teacher programs compared to those teachers who did not. The concept of "teacher effectiveness," while difficult to quantify, could be comprised of administrative evaluations, student achievement data, and student surveys. Such a study could provide districts and administrators with information regarding the return on investment of their Grow Your Own Teacher programs.

Another suggestion would be to conduct a longitudinal case study of one district's implementation process with a Grow Your Own Teacher program. Currently, few districts have programs established for long enough to shed light on their ability to recruit students from an early age. As the teacher shortage begins to widen across the country,

and the needs of hard-to-fill positions become more acute, more districts will turn to such programs for assistance. A longitudinal study would allow a researcher to demonstrate a district's successes and failures within the program over time, and ultimately provide conclusive data on how effective the program was in terms of meeting the district's recruitment and retention needs.

The final suggestion would be an equity-based approach to study the unique challenges of Grow Your Own Teacher programs that explicitly seek to recruit a more diverse teaching force to better match student and teacher demographics. A great deal of research is available about existing programs that attempt to diversify teaching staff. However, this research is largely void of the specific challenges and solutions these districts find in their attempt to achieve greater racial parity. As student demographics in the United States become more diverse, the need for additional teachers of color will become more apparent. A study of these districts' Grow Your Own Teacher programs would be valuable to local, state, and national educational institutions.

Summary

The intent of this qualitative study was to gain perceptions of Grow Your Own Teacher program participants and key personnel regarding program best practices in rural, suburban, and urban districts. Focus group and interview questions were designed to gather data on teacher shortages, teacher incentives, diverse educators, and urban education. A comparison of participant and key personnel perceptions across geographic regions was also conducted as a part of this study. The data were used to develop themes of best practice that could be provided to educational leaders at the building, district, and state levels to inform decision making when implementing future programs.

Participants included high school and college students who were pursuing education as a career, as well as practicing teachers who had graduated and returned to their home districts. Key personnel for this study consisted of Grow Your Own Teacher program supervisors who had the most direct oversight of district programming. The focus group and interview discussions were recorded, transcribed, and thematically coded to provide data and findings.

Chapter One included a background of the study, the conceptual framework, and a statement of the problem. Chapter One also included the purpose of the study and research questions. The significance of the study, the definition of key terms, and the delimitations, limitations, and assumptions of the study were provided to complete the chapter.

Chapter Two contained the review of literature and conceptual framework. The four components of the *Grow Your Own Resource Guide* (MODESE, 2019) were explained as the conceptual framework of the study. The acute and global demands the teacher shortage places on districts and state education departments was examined in the literature review (Dee & Goldhaber, 2017; Sutcher et al., 2016). Also, teacher incentives, including recruitment strategies and early efforts, were examined across the literature in Chapter Two (Aragon, 2018). Teacher diversity and the need for greater racial parity was another component reviewed (Goldhaber et al., 2019). The fourth section of Chapter Two included an analysis of the recent literature pertaining to the unique challenges and opportunities of urban districts (Coffey et al., 2019).

The outline of the methodology for the study and how the data were collected were presented in Chapter Three. The problem and purpose of the study were outlined,

and the research questions for the study were restated. Qualitative research design was chosen to analyze the perceptions of participants and key personnel. A purposive sample was selected, and focus groups and interview questions were chosen as the instruments involved in gathering data for the study. Strategies related to ensuring reliability and validity for the study were also provided in Chapter Three. The method of data collection and analysis was stated, as well as the ethical considerations taken into account while conducting research.

The qualitative data from focus groups and interviews were presented in Chapter Four. Discussion questions were asked of Grow Your Own Teacher program focus group participants who ranged from high school students in teacher education coursework to veteran teachers who had graduated from their districts. Interview participants included key personnel who held supervisory authority over their district's program.

Chapter Five included findings from this study. The need for relationships and mentoring opportunities throughout the teacher education experience was indicated in the conclusions. The removal of financial barriers from preservice teachers by overlapping existing and innovative partnerships and financial incentives was another conclusion of the research. The final theme from Chapter five was for districts to create hands-on experiences for preservice teachers beginning at the high school level.

Finally, the implications for practice and recommendations for future research were presented in Chapter Five. Recommendations included utilizing a quantitative instrument to measure program effectiveness and also to develop a study that compared teacher effectiveness and Grow Your Own program status. Another recommendation was to conduct a longitudinal case study on the ability to effectively recruit and retain

teachers in districts that have developed their own Grow Your Own programs. The last recommendation was to focus on equity and specifically examine a program that was designed to increase student and teacher parity.

References

Albert Shanker Institute. (2015). The state of teacher diversity in American education. Retrieved from http://www.shankerinstitute.org/resource/teacherdiversity

Allegretto, S. A., & Mishel, L. (2016). *The teacher pay gap is wider than ever: Teachers' pay continues to fall further behind pay of comparable workers.* Washington, DC: Economic Policy Institute. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=ED568892&site=ehost-live

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Lancaster, PA: Author.

Andrews, D. J. C., Castro, E., Cho, C. L., Petchauer, E., Richmond, G., & Floden, R. (2019). Changing the narrative on diversifying the teaching workforce: A look at historical and contemporary factors that inform recruitment and retention of teachers of color. *Journal of Teacher Education, 70*(1), 6-12. Retrieved from http://link.galegroup.com.ezproxy.lindenwood.edu:2048/apps/doc/A568973251/AONE?u=sain20269&sid=AONE&xid=43465c32

Aragon, S. (2016). *Teacher shortages: What we know* (Teacher Shortage Series). Denver, CO: Education Commission of the States. Retrieved from https://files.eric.ed.gov/fulltext/ED565893.pdf

Aragon, S. (2018). *Targeted teacher recruitment: What is the issue and why does it matter?* (Policy Snapshot). Denver, CO: Education Commission of the States. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-

ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=ED582978&site=ehost-live

Arroyo-Romano, J. E. (2016). Bilingual education candidates' challenges meeting the Spanish language/bilingual certification exam and the impact on teacher shortages in the state of Texas, USA. *Journal of Latinos and Education*, *15*(4), 275-286. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=EJ1108896&site=ehost-live

Banks, T. (2015). Teacher education reform in urban educator preparation programs. *Journal of Education and Learning*, *4*(1), 60-71. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eric&AN=EJ1075163&site=ehost-live

Bauml, M., Castro, A. J., Field, S. L., & Morowski, D. L. (2016). Learning from preservice teachers' thoughts about teaching in urban schools: Implications for teacher educators. Education and Urban Society, 48(1), 4–29. https://doi.org/10.1177/0013124513514603

Berry, B., & Shields, P. M. (2017). Solving the teacher shortage: Revisiting the lessons we've learned. *Phi Delta Kappan*, *98*(8), 8-18. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1139976&site=ehost-live

Bianco, M., & Marin-Paris, D. (2019). Pathways2Teaching: Addressing the teacher diversity gap through a grow your own program. *Teaching Exceptional Children, 52*(1), 38-40. Retrieved from https://doi.org/10.1177/0040059919875704

Bland, P., Church, E., & Luo, M. (2016). Strategies for attracting and retaining teachers. *Administrative Issues Journal: Connecting Education, Practice, and Research, 4*(1), 545.

Bloomberg, L. D., & Volpe, M. (2016). *Completing your qualitative dissertation: A road map from beginning to end.* Thousand Oaks, CA: Sage Publications.

Bristol, T. J., & Goings, R. B. (2019). Exploring the boundary-heightening experiences of black male teachers: lessons for teacher education programs. *Journal of Teacher Education, 70*(1), 51-64. doi:10.1177/0022487118789367

Brown, D. (2016). Professionalizing the first steps of the teaching journey. *Phi Delta Kappan, 98*(1), 31-35. doi:10.1177/0031721716666051

Brownell, M. T., Bishop, A. M., & Sindelar, P. T. (2018). Republication of "NCLB and the demand for highly qualified teachers: Challenges and solutions for rural schools." *Rural Special Education Quarterly, 37*(1), 4-11. doi:10.1177/8756870517749604

Buchanan, L. E., & Wilson, K. B. (2017). Free community college and merit scholarships. *New Directions for Community Colleges*, *180*, 67-74. doi:10.1002/cc.20282

Burnett, R., Espinoza, V. H., & Spies, P. (2019). Minnesota grow your own policy spotlight: Organizing a coalition for systems change. *Teacher Education*

Quarterly, 46(1), 87-96. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eft&AN=134084310&site=ehost-live

Carothers, D., Aydin, H., & Houdyshell, M. (2019). Teacher shortages and cultural mismatch: District and university collaboration for recruiting. *Journal of Social Studies Education Research, 10*(3), 39-63. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eric&AN=EJ1229410&site=ehost-live.

Carver-Thomas, D., & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it.* Palo Alto, CA: Learning Policy Institute.

Coffey, H., Putman, S. M., Handler, L. K., & Leach, W. (2019). Growing them early: Recruiting and preparing future urban teachers through an early college collaboration between a college of education and an urban school district. *Teacher Education Quarterly, 46*(1), 35-54. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eft&AN=134084306&site=ehost-live

Cowan, J., Goldhaber, D., Hayes, K., & Theobald, R. (2016). Missing elements in the discussion of teacher shortages. *Educational Researcher, 45*(8), 460-462. doi:10.3102/0013189X16679145

Creswell, J. W., & Poth C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage Publishing.

Cross, S. B., & Thomas, C. (2017). Mitigating first year burnout: How reimagined partnerships could support urban middle level teachers. *Middle Grades Review*, *3*(1). Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eric&AN=EJ1154836&site=ehost-live

Dee, T. S., & Goldhaber, D. (2017). *Understanding and addressing teacher shortages in the United States.* Washington, DC: The Hamilton Project at Brookings Institution. Retrieved from https://www.brookings.edu/research/understanding-and-addressing-teacher-shortages-in-the-united-states/

El-Mekki, S. (2018). Advocacy agenda: The research is in: A diverse faculty makes a difference. *Principal Leadership, 18*(6), 16-18. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eft&AN=128108725&site=ehost-live

Espinoza, D., Saunders, R., Kini, T., & Darling-Hammond, L. (2018). *Taking the long view: State efforts to solve teacher shortages by strengthening the profession*. Palo Alto, CA: Learning Policy Institute.

Farinde-Wu, A. (2018). #Blackwomenatwork: Teaching and retention in urban schools. *The Urban Review*, *50*(2), 247-266. Retrieved from https://link.springer.com/article/10.1007/s11256-018-0449-x

Feng, L., & Sass, T. R. (2015). *The impact of incentives to recruit and retain teachers in "Hard-to-Staff" subjects: An analysis of the Florida Critical Teacher Shortage*

Program (Working Paper 141). Washington, DC: National Center for Analysis of Longitudinal Data in Education Research (CALDER).

Fennel, M. (2016). What educators need to know about ESSA. *Educational Leadership, 73*(9), 62-65. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eft&AN=116361620&site=ehost-live

Garcia, A., Manuel, A., & Buly, M. R. (2019). Washington State policy spotlight: A multifaceted approach to grow your own pathways. *Teacher Education Quarterly*, *46*(1), 69-78. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eft&AN=134084308&site=ehost-live

Gist, C. D. (2017). Voices of aspiring teachers of color: unraveling the double bind in teacher education. *Urban Education, 52*(8), 927-956. doi:10.1177/0042085915623339

Gist, C. D. (2018a). Black educators fight back: Facing and navigating vulnerability and stress in teacher development. *The Urban Review*, *50*(2), 197-217.

Gist, C. D. (2018b). Human resource development for racial/ethnic diversity: Do school systems value teachers of color? *Advances in Developing Human Resources*, *20*(3), 345-358.

Gist, C. D. (2019). For what purpose? Making sense of the various projects driving grow your own program development. *Teacher Education Quarterly*, *46*(1), 9-22.

Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eft&AN=134084304&site=ehost-live

Gist, C. D., Bianco, M., & Lynn, M. (2018). Examining grow your own programs across the teacher development continuum: Mining research on teachers of color and nontraditional teacher pipelines. *Journal of Teacher Education*, 1-13. doi:10.1177/0022487118787504

Gist, C. D., White, T., & Bianco, M. (2018). Pushed to teach: Pedagogies and policies for a black women educator pipeline. *Education and Urban Society, 50*(1), 56-86. doi:10.1177/0013124517727584

Goings, R. B., & Bianco, M. (2016). It's hard to be who you don't see: An exploration of black male high school students' perspectives on becoming teachers. *The Urban Review, 48*(4), 628-646. doi:2048/10.1007/s11256-016-0371-z

Goldhaber, D., Krieg, J., Theobald, R., & Brown, N. (2015). Refueling the STEM and special education teacher pipelines. *Phi Delta Kappan*, *97*(4), 56-62. doi:10.1177/0031721715619921

Goldhaber, D., Theobald, R., & Tien, C. (2019). Why we need a diverse teacher workforce. *Phi Delta Kappan, 100*(5), 25-30. doi:10.1177/0031721719827540

Guillen, L., & Zeichner, K. (2018). A university-community partnership in teacher education from the perspectives of community-based teacher educators. *Journal of Teacher Education, 69*(2), 140-153. doi:10.1177/0022487117751133

Haddix, M. M. (2017). Diversifying teaching and teacher education: Beyond rhetoric and toward real change. Journal of Literacy Research, 49(1), 141–149. https://doi.org/10.1177/1086296X16683422

Haeffele, L., LaSota, R., & Perona, A. (2015). *Illinois grow your own teacher education initiative.* Normal, IL: Center for the Study of Education Policy. Retrieved from https://www.ibhe.org/assets/files/GYO_AnnualReport_2014.pdf

Hagaman, J. L., & Casey, K. J. (2018). Teacher attrition in special education: Perspectives from the field. *Teacher Education and Special Education, 41*(4), 277-291. doi:10.1177/0888406417725797

Hammerness, K., Williamson, P., & Kosnick, C. (2016). Introduction to the special issue on urban teacher residencies: The trouble with "generic" teacher education. *Urban Education, 51*(10), 1155-1169. doi:10.1177/0042085915618723

Hattie, J. A. C. (2003, October). *Teachers make a difference: What is the research evidence?* Paper presented at the Building Teacher Quality: What does the research tell us ACER Research Conference, Melbourne, Australia. Retrieved from http://research.acer.edu.au/research_conference_2003/4/

He, B. Y., Cooper, J. E., & Tangredi, C. (2015). Why do I stay? *Teacher Education Quarterly, 42*(1), 49-66. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eft&AN=113170665&site=ehost-live

Ingersoll, R., & May, H. (2016). Minority teacher recruitment, employment, and retention: 1987 to 2013. *Learning Policy Institute, Stanford, CA.*

Ingersoll, R., May, H., & Collins, G. (2017). *Minority teacher recruitment, employment, and retention: 1987 to 2013.* Palo Alto, CA: Learning Policy Institute.

Jones, R., Holton, W., & Joseph, M. (2019). Call me mister: A black male grow your own program. *Teacher Education Quarterly*, *46*(1), 55-68. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eft&AN=134084307&site=ehost-live

Joshi, E., Doan, S., & Springer, M. G. (2018). Student-teacher race congruence: New evidence and insight from Tennessee. *AERA Open.* doi:10.1177/2332858418817528

Lazarev, V., Toby, M., Zacamy, J., Lin L., & Newman, D. (2017). Indicators of successful teacher recruitment and retention in Oklahoma rural schools (REL 2018-275). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs.

Lee, R. E. (2018). Breaking down barriers and building bridges: Transformative practices in community- and school-based urban teacher preparation. *Journal of Teacher Education*, *69*(2), 118-126. doi:10.1177/0022487117751127

Lenhoff, S. W., Lewis, J. M., Pogodzinski, B., & Jones, R. D. (2019). “Triage, transition, and transformation”: Advocacy discourse in urban school reform. *Education Policy Analysis Archives*, *27*(31-33), 1–31. https://doi.org/10.14507/epaa.27.4230

Machi, L. A., & McEvoy, B. T. (2012). *The literature review: Six steps to success*. Thousand Oaks, CA: Corwin Press.

Mason-Williams, L., Bettini, E., Peyton, D., Harvey, A., Rosenberg, M., & Sindelar, P. T. (2020). Rethinking shortages in special education: Making good on the promise of an equal opportunity for students with disabilities. *Teacher Education and Special Education, 43*(1), 45-62. doi:10.1177/0888406419880352

McCollum, D. G. (2011). *A mixed methods study identifying reoccurring themes in policies and processes in grow your own teacher recruitment and retention programs* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3515884)

McHenry-Sorber, E., & Campbell, M. (2019). Teacher shortage as a local phenomenon: District leader sensemaking, responses, and implications for policy. *Education Policy Analysis Archives, 27*, 87. doi:10.14507/epaa.27.4413

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. Hoboken, NJ: John Wiley & Sons.

Miller, N. C., Elder, A. D., Seymour, D., Cheatham, D. A., & Brenner, D. (2019). Best practices article: Teacher recruitment for an alternate route program in a rural area: Methods and lessons. *Journal of the National Association for Alternative Certification, 14*(1). Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eric&AN=EJ1218143&site=ehost-live

Missouri Department of Elementary and Secondary Education. (2016a). *Equitable access to excellent educators: Top 10 by 20, Vol. 1.* Jefferson City, MO: DESE Office of Educator Quality.

Missouri Department of Elementary and Secondary Education. (2016b). *Equitable access to excellent educators: Top 10 by 20, Vol. 6.* Jefferson City, MO: DESE Office of Educator Quality.

Missouri Department of Elementary and Secondary Education. (2016c). *Grow your own: A resource guide to creating your own teacher pipeline.* Jefferson City, MO: DESE Office of Educator Quality.

Missouri Department of Elementary and Secondary Education. (2017). *Ensure equitable access to excellent educators.* Jefferson City, MO: DESE Office of Educator Quality.

Missouri General Assembly. (2009). Missouri revised statutes. Retrieved from https://revisor.mo.gov/main/OneSection.aspx?section=160.545&bid=47841&hl=

Monk, D. (2007). Recruiting and retaining high-quality teachers in rural areas. *The Future of Children, 17*, 155-174.

Morales, A. R., & Shroyer, M. G. (2016). Personal agency inspired by hardship: Bilingual Latinas as liberatory educators. *International Journal of Multicultural Education, 18*(3), 1-21.

Moreno, Y. (2018). *Homegrown teacher project: Developing an early intervention pipeline for future teachers of color* (Doctoral dissertation). Retrieved from PQDT Open. (UMI No. 10845352)

Muñoz, J., Harrington, J. R., Curs, B. R., & Ehlert, M. (2016). Democratization and diversion: The effect of Missouri's A+ Schools program on postsecondary enrollment. *Journal of Higher Education*, *87*(6), 801-830. doi:10.1080/00221546.2016.11780888

Okezie, C. E. (2018). The Marygrove College Griot Program: A grow your own program for African American male teachers. *The Urban Review*, *50*(2), 235-246.

Orland-Barak, L., & Wang, J. (2020). Teacher mentoring in service of preservice teachers' learning to teach: Conceptual bases, characteristics, and challenges for teacher education reform. *Journal of Teacher Education.* doi:10.1177/0022487119894230

Parham, J. N., & Gordon, S. P. (2016). Military veterans bring many positives—and some needs—into teaching. *Phi Delta Kappan*, *97*(7), 43-47. doi:10.1177/0031721716641648

Partelow, L., Spong, A., Brown, C., & Johnson, S. (2017). *America needs more teachers of color and a more selective teaching profession.* Washington, DC: Center for American Progress.

Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). *Solving the teacher shortage: How to attract and retain excellent educators*. Palo Alto, CA: Learning Policy Institute.

Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2017). Sticky schools: How to find and keep teachers in the classroom. *Phi Delta Kappan*, *98*(8), 19-25. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-

com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=EJ1139977&site=ehost-live

Quiñones, S. (2018). "I get to give back to the community that put me where I am": Examining the experiences and perspectives of Puerto Rican teachers in western New York. *Urban Education, 53*(5), 621-639. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=EJ1179395&site=ehost-live

Ravitch, S. M., & Carl, N. M. (2016). Qualitative research: Bridging the conceptual, theoretical, and methodological. Los Angeles: Sage Publishing.

Rhodes, D. E. (2017). *Teacher by design, not accident! Partnering with educators rising to prepare tomorrow's teachers, today* (Doctoral dissertation, Harvard Graduate School of Education). Retrieved from http://nrs.harvard.edu/urn-3:HUL.InstRepos:33774656

Roegman, R., & Kolman, J. (2020). Cascading, colliding, and mediating: How teacher preparation and K-12 education contexts influence mentor teachers' work. *Journal of Teacher Education, 71*(1), 108-121. doi:10.1177/0022487119850174

Rogers-Ard, R., Knaus, C., Bianco, M., Brandehoff, R., & Gist, C. D. (2019). The grow your own collective: A critical race movement to transform education. *Teacher Education Quarterly*, *46*(1), 23-34. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eft&AN=134084305&site=ehost-live

Saldana, J. (2016). The coding manual for qualitative researchers. Thousand Oaks, CA: Sage Publishing.

Saultz, A., White, R. S., McEachin, A., Fusarelli, L. D., & Fusarelli, B. C. (2017). Teacher quality, distribution, and equity in ESSA. *Journal of School Leadership, 27*(5), 652-674. Retrieved from http://link.galegroup.com.ezproxy.lindenwood.edu:2048/apps/doc/A552763198/AONE?u=sain20269&sid=AONE&xid=43465c32

Sleeter, C. E. (2017). Critical race theory and the whiteness of teacher education. *Urban Education, 52*(2), 155-169. doi:10.1177/0042085916668957

Smith, D. L. (2018). Coding for success. *Teacher Librarian, 45*(5), 13-16. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=a9h&AN=130291694&site=ehost-live

Stanulis, R. N., Wexler, L. J., Pylman, S., Guenther, A., Farver, S., Ward, A., …White, K. (2019). Mentoring as more than "cheerleading": Looking at educative mentoring practices through mentors' eyes. *Journal of Teacher Education, 70*(5), 567-580. doi:10.1177/0022487118773996

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Palo Alto, CA: Learning Policy Institute.

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States.

Education Policy Analysis Archives, 27(35). http://dx.doi.org/10.14507/epaa.27.3696 T

Swanson, P. B. (2011). Georgia's grow-your-own teacher programs attract the right stuff. *High School Journal*, *94*(3), 119-133. doi:10.1353/hsj.2011.0006

Taylor, M., & Klein, E. J. (2015). *A year in the life of a third space urban teacher residency: Using inquiry to reinvent teacher education*. Rotterdam, Netherlands: Sense Publishers.

United States Department of Education. (2001). No child left behind act. Washington, DC: Author.

Valenzuela, A. (2017). *Grow your own educator programs: A review of the literature with an emphasis on equity-based approaches* (Literature Review). San Antonio, TX: Intercultural Development Research Association. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=ED582731&site=ehost-live

Viadero, D. (2018). Teaching shortages: Many answers for a complex problem. *Education Week*, *37*(18), 4. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=f6h&AN=127851365&site=ehost-livev

Warner, S. R., & Duncan, E. (2019). *The diverse and learner-ready teachers initiative vision and guidance paper*. Washington, DC: Council of Chief State School Officers. Retrieved from https://ccsso.org/resource-library/vision-and-guidance-diverse-and-learner-ready-teacher-workforce

Woods, J. R. (2016). *Mitigating teacher shortages: Alternative teacher certification.* Denver, CO: Education Commission of the States. Retrieved from http://www.ecs.org/eccontent/uploads/Mitigating-Teacher-Shortages-Alternative-Certification.pdf

Wright, D. S., Balgopal, M. M., Sample McMeeking, L. B., & Weinberg, A. E. (2019). Developing resilient K-12 STEM teachers. *Advances in Developing Human Resources, 21*(1), 16-34. doi:10.1177/1523422318814483

Wronowski, M. L. (2018). Filling the void: A grounded theory approach to addressing teacher recruitment and retention in urban schools. Education and Urban Society, 50(6), 548–574. https://doi.org/10.1177/0013124517713608

Zeichner, K., Bowman, M., Guillen, L., & Napolitan, K. (2016). Engaging and working in solidarity with local communities in preparing the teachers of their children. *Journal of Teacher Education*, *67*(4), 277-290. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebscohost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=EJ1111016&site=ehost-live

Zhang, G., & Zeller, N. (2016). A longitudinal investigation of the relationship between teacher preparation and teacher retention. *Teacher Education Quarterly*, *43*(2), 73-92. Retrieved from http://ezproxy.lindenwood.edu:2048/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eft&AN=115066898&site=ehost-live

Appendix A

Permission to Conduct Research Letter

(Date)

RE: Permission to Conduct Research in (School District)

To:

I am writing to request permission to conduct research in the (school district). I am currently pursuing my doctorate through Lindenwood University and am in the process of writing my dissertation. The study is entitled *Grow Your Own Teacher Programs: A Qualitative Study of Best Practices to Address the Teacher Shortage.*

I am asking permission to hold a small teacher focus group consisting of teachers who have participated in the district's Grow Your Own Teacher program. I am also asking permission to interview one key person who has a direct supervisory role of teachers or preservice teachers who have participated in the district's Grow Your Own Teacher program.

If you agree, please sign below, scan this page, and email back to Jack Harris ([redacted]).

Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you may have regarding this study.

Sincerely,

Jack Harris
Doctoral Student at Lindenwood University

Approved by:

_____

Print name and title here

_____

Signature Date

Appendix B

Institutional Review Board Approval

Nov 11, 2019 5:28 PM CST

RE:
IRB-20-71: Initial - Grow Your Own Teacher Programs: A Qualitative Study of Best Practices to Address the Teacher Shortage

Dear Jack Harris,

The study, Grow Your Own Teacher Programs: A Qualitative Study of Best Practices to Address the Teacher Shortage, has been approved as Exempt - Limited IRB.

Category: Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

The submission was approved on November 11, 2019.

Here are the findings: **Regulatory Determinations**

- This study has been determined to be minimal risk because the research is not obtaining data considered sensitive information or performing interventions posing harm greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.
- The IRB has performed a Limited IRB review as part of this Exempt determination. The PI is collecting and retaining email addresses and audio data for transcription to facilitate analysis of the focus groups and retaining these identifiers as part of the data set. The IRB has found that this identifiable data will not place subjects at any additional risk or harm as the research is not collecting information provided by subjects which could jeopardize their standing at these institutions. In addition, these data are not be collected for purposes of modeling or reporting such they would be disclosed by the PI and will be adequately protected by the data management plan described by the PI.

Sincerely,
Lindenwood University (lindenwood) Institutional Review Board

Appendix C

LINDENWOOD

Research Information Sheet

You are being asked to participate in a research study. We are conducting this study to analyze the primary components of Grow Your Own Teacher programs to determine which elements lead to the success of state and district teacher recruitment goals. During this study you will participate in a focus group or interview. It will take about one hour to complete this study.

Your participation is voluntary. You may choose not to participate or withdraw at any time.

There are no risks from participating in this project. There are no direct benefits for you participating in this study.

We will not collect any data which may identify you.

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are members of the research team, qualified staff of Lindenwood University, and representatives of state or federal agencies.

Who can I contact with questions?

If you have concerns or complaints about this project, please use the following contact information:
Jack Harris [redacted]
Dr. Shelly Fransen [redacted]

If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu.

Appendix D

Focus Group Questions (Teachers or Preservice Teachers)

1. What grade level/subject area do you teach, and how long have you been in education?
2. In what capacity were you involved with your district's Grow Your Own Teacher program?
3. Were you aware of any general or specific teacher shortages during the time you chose education as a career? If so, how did your knowledge of a specific teacher shortage impact your decision to choose education as a career?
4. Were you involved in any high school programming (clubs, classes, organizations) that helped you make the decision to choose education as a career? If so, how did that involvement help prepare you for a career in education?
5. Were there any community groups (scholarships, grants, etc.) that aided in the completion of your undergraduate coursework in education? If so, what was the group and how did this aid you?
6. Does your district offer to help lessen the cost of teacher preservice training/coursework to teachers who are from their Grow Your Own Teacher program? If so, how does your district provide this opportunity?
7. Did the school district you graduated from partner with any local colleges or universities to provide tuition assistance or credit in your undergraduate coursework in education? If so, who were they, and how did you take advantage of the opportunity?

8. What influence did a mentor have on your decision to choose education as a career? Was that mentor assigned to you as part of a specific program?
9. Which Grow Your Own Teacher program practice would you consider to have been the most beneficial? In what ways was it beneficial?
10. Describe the demographics of your student population. Does your district attempt to recruit teachers of similar racial/ethnic/socioeconomic status as that of your students? If so, have you seen this be a successful method of aligning student and teacher demographics?
11. In what ways has graduating from your current district allowed your district to retain your teaching services (What has kept you in the area to teach)?

Appendix E

Key Personnel Interview Questions

1. What is your current title, and how long have you been in this position?
2. How long have you been associated with your district's Grow Your Own Teacher program?
3. What teacher shortages exist in your district? Is your Grow Your Own Teacher program designed to fill specific personnel shortages?
4. What types of high school programming (clubs, classes, organizations) does your district offer to encourage students to choose education as a career?
5. Does your district offer to help lessen the cost of teacher preservice training/coursework for teachers who are from their Grow Your Own Teacher program? If so, how does your district provide this opportunity?
6. Do community groups partner with your district to enhance the Grow Your Own Teacher program? If so, in what ways? If not, could you foresee any potential groups who could provide this service?
7. Do you know of any colleges or universities that partner with your district to provide tuition assistance or credit for participation in your district's Grow Your Own Teacher program? If so, which universities are involved?
8. Describe the demographics of your student population. Does your district attempt to recruit teachers of similar racial/ethnic/socioeconomic status as that of your students? If so, have you seen this be a successful method of aligning student and teacher demographics?

9. Which Grow Your Own Teacher program practice do you find to be the most effective in meeting the needs of your district's recruitment goals? How so?
10. In what ways does your district provide a specific mentor to students interested in the Grow Your Own Teacher program? Is there a mentorship program in place?
11. Do you find it easier to retain teachers who have gone through your district's Grow Your Own Teacher program? What are the risks and benefits of hiring a "homegrown" teacher?
12. In what ways does your district's Grow Your Own Teacher program have an impact on those teachers' standardized assessment scores?

Vita

Jack A. Harris received his undergraduate degree in History and Education from College of the Ozarks in 2006. He obtained a Master of Arts degree in Educational Administration from Lindenwood University in 2009. Jack furthered his education by earning a Specialist Degree from Missouri State University in 2016.

Jack has spent the entirety of his educational career at Branson Public Schools. He attended Branson Schools from K-12 and graduated from the district in 2001. He returned to teach as a seventh-grade classroom history instructor in the fall of 2006. Jack transitioned to an administrative role during the spring of 2012 to serve as assistant principal at Branson Junior High School. He then made the jump to his current position as principal at Branson High School in 2016. Jack is an active member of the Central Ozarks Conference Executive Team, the Missouri Association of Secondary School Principals, and the National Association of Secondary School Principals. He will continue to learn and grow in educational leadership as he desires to give back to his students, school, and community.