AN ANALYSIS OF THE TEACHER SHORTAGE FROM MULTIPLE PERSPECTIVES: WHY IS IT DIFFICULT TO RECRUIT AND RETAIN HIGH-QUALITY TEACHING CANDIDATES?

A Doctoral Capstone Project Submitted to the School of Graduate Studies and Research

Department of Education

In Partial Fulfillment of the

Requirements for the Degree of Doctor of Education

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ANALYSIS OF THE TEACHER SHORTAGE

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Dedication

I dedicate this work to the ones who have supported me throughout this lengthy and challenging journey. I was able to achieve this goal thanks to the love, encouragement, and understanding they provided.

To my wife, Heather, who has been my constant source of strength and inspiration. Your unwavering belief in me and your unyielding support has driven my pursuit of knowledge. Your love and sacrifice have been the foundation upon which I have built this academic achievement. Thank you for always being there, encouraging, and cheering me on, even during the most demanding times.

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Abstract

The severe shortage of teachers is a critical concern in education today. This project investigates this complex issue by delving into its root causes from diverse angles. The study explores the difficulties that hinder the recruitment and retention of competent educators, impacting the overall educational landscape. Employing a mixed-methods approach, this research employs qualitative and quantitative data to probe the teacher shortage phenomenon. Through an extensive review and analysis of existing literature, the study identifies and examines factors dissuading potential educators from joining the profession and obstructing the continuity of experienced teachers. Factors like low morale, excessive workloads, limited career advancement, inadequate compensation, insufficient professional growth opportunities, and challenging work conditions are thoroughly examined. Policies, institutional practices, and the teacher shortage are examined in the study. By scrutinizing educational policies, licensing requirements, and teacher training programs, the research underscores systemic issues unintentionally deterring capable candidates from pursuing and staying in teaching roles. It also explores effective strategies educational institutions and school districts use to attract and retain quality educators, proposing potential remedies to alleviate the shortage. The study's findings underscore the imperative for an inclusive, collaborative approach to tackle the teacher shortage crisis. It emphasizes the necessity for reforms in recruitment, compensation, professional development, and fostering supportive work environments. In conclusion, this research provides insights into the teacher shortage by examining it through diverse lenses.

Chapter I

A teacher shortage has intensified exponentially in Richland School District and its surrounding schools in the past several years due to the lack of qualified teachers. My experience as a school administrator has been that this shortage of quality employees has impacted both the quality of education students receive in our schools and the school system at large. Besides the shortage of qualified teaching candidates, schools have also struggled to fill vacancies such as substitute teachers, paraprofessionals, secretaries, custodians, and bus drivers, all of whom are in high demand. As a result of these vacancies, many schools have faced major disruptions, and some have been forced to take drastic measures, such as closing the school because there is a lack of staff members to keep the school open for the students.

Several times in history, teacher shortages have affected different areas of the United States. The Richland School District, as well as most of the schools in the westcentral region of Pennsylvania, have, up until now, been able to avoid this issue since it has yet to occur in most of the region's schools. The recruitment and retention of highly qualified teachers have become increasingly difficult as the years have passed. Richland School District, for example, recently advertised an English Language Arts teacher position in our high school, and only ten candidates applied for the position. In previous years, compared with the current pool of candidates, we had over fifty potential candidates.

When it comes to the retention of teachers, many young teachers have been lost to other careers that are more flexible and allow for the possibility of working from home. Many of our younger teachers who have taken time off for parental leave have never returned to the classroom, choosing jobs in cyber schools and private industry instead. Another factor has been a change in teachers' perceptions regarding the workload in recent years. Peetz's (2022) research indicates, "Teachers' job satisfaction is at its lowest level in 50 years, with 42 percent of educators saying the stress of their job is worth it, compared to 81 percent in the 1970s" (para 8).

The school district's pool of substitute teachers has never been more depleted. In prior school years, many certified teachers would substitute for a few years to gain valuable experience. According to Peetz (2022), the number of new teachers entering the field of education has declined by 33 percent over the past decade, with the number of newly certified teachers declining from 320,000 in 2006 to 215,000 in 2020. Having certified substitute instructors is no longer the norm, as most of our substitute teachers work on emergency or alternative certifications. The school faces daily shortages of substitute teachers if it were not for a population of retired teachers who fulfill this need. As a result, retired teachers make up most of our substitute teachers certified in a specific area of instruction.

We have undertaken this study to find solutions that can be applied to improve K-12 teacher shortages and employee shortages in school districts currently suffering from teacher shortages and K-12 employee shortages. As the director of educational services at Richland School District, one of my responsibilities is to assist our building principals in recruiting and retaining the best teachers in our district. This is a duty that the researcher takes seriously and one of the most important duties assigned. The findings from this research will enable me to support our principals and mitigate the labor shortage within our school district. This research question has been developed as part of my effort to gain a better understanding of the factors contributing to the teacher shortage and to find solutions to the problem.

Research Questions

- What are some of the unique factors that discourage prospective teachers from considering K-12 teaching careers? Why are fewer high school students entering teacher preparation programs in college?
- 2. Which factors contribute to the growing number of K-12 teachers leaving the classroom before retirement age?
- 3. What short-term and long-term solutions can be provided to increase the number of available teacher candidates?

As a result of this research, the researcher wants to understand better the unique factors discouraging prospective teachers from entering the teaching profession. Also, the researcher looks forward to learning more about the factors leading teachers to leave education before retirement. As an outcome of this research, we hope to provide shortand long-term recommendations that can be used in our district to increase the number of potential candidates for vacancies in the teaching and support staff departments.

The results of this study may have an impact on the school district financially as a result of its findings. Based on the analysis of the data presented, increasing the starting salaries of teachers, substitute teachers, bus drivers, and other support staff will create an anticipated benefit to the school district and reduce labor shortages in these areas as a result. A possible solution to this issue would be to find a sustainable funding source for future years of salary increases and incentive programs. Financial incentives have been an effective means of retaining and recruiting teachers. Although new teachers are often

attracted to the profession because of the other, less tangible rewards, inadequate pay frequently keeps qualified candidates away and contributes to turnover and shortages.

This research study is focused on discovering solutions for the teacher and school labor shortage problem within the Richland School District by exploring the factors influencing the shortages. Upon completion, my research is likely to provide me with the capacity to make recommendations to our school superintendent and board of directors to alleviate the shortages within our school district. As the next chapter looks at the literature and documented trends in this area, we understand the reasons for today's teacher shortages.

CHAPTER II

Literature Review

School districts are facing unprecedented challenges in staffing schools with highly qualified teachers. These challenges negatively impact students' educational opportunities, especially populations of historically underserved students. Many teachers feel their workload has increased in recent years, that they are spending more time addressing students' mental health, and that they have less planning time due to staff shortages and other factors. This literature review examines teacher shortages and how it has evolved in the United States.

The Issue of Teacher Shortages

In recent years, educational researchers and journalists who cover educationrelated topics have raised concerns about the shortage of teachers in the nation's K-12 schools. Garcia and Weiss (2019a) cite a variety of indicators for the shortage, including state-by-state subject area vacancies, personal testimonials and data from state and school district officials, and declining enrollment in teacher preparation programs. A shortage of qualified teachers harms students, teachers, and the public education system. Students are unable to learn due to a lack of qualified teachers, and staff instability reduces teachers' effectiveness, while high teacher turnover consumes economic resources that could be used elsewhere (Allegretto & Mishel, 2019). Garcia and Weiss (2019a) noted that "It is important to acknowledge that the teacher shortage results from multiple and interdependent drivers working simultaneously to cause the imbalance between the number of new teachers demanded and the number of individuals available to be hired" (p. 11). A shortage of capable educators may result in bigger class sizes, the cancellation of available classes, or the appointment of under-educated or out-of-field teachers (Darling-Hammond et al., 2016). No single measurement of teacher shortages exists, so we rely on multiple indicators of it. Some teacher shortage indicators are the number of vacancies, number of applicants per vacancy, pupil-teacher ratios, number of emergency certificates issued, number of preparation program enrollees, number of (new) teachers certified, (total) number of teachers certified, number of teachers leaving the profession, and the perceptions of shortages by district superintendents or human resource directors (Behrstock-Sherratt, 2016).

Tanya Garcia, a deputy secretary at the Pennsylvania Department of Education, said that the supply of new teachers had reached a "breaking point" because of the plummeting numbers of young adults entering the field and the stresses of the COVID-19 pandemic. She informed legislators there had been a 66% decline in newly issued in-state teaching credentials over 11 years. The number of undergraduate teaching majors in Pennsylvania also decreased by 66% over the last decade (Turner, 2022).

History of the Teacher Shortage Problem

The shortage of highly qualified educators is common in the United States. Some scholarly articles from the mid-1930s articulate the staffing difficulties after the Great Depression (Sherratt, 2016). A significant increase in the student population occurred in American schools after World War II. The impetus for this increase in student population reflected a notable rise in the general population during and since World War II (Martin, 1957). Before the beginning of the COVID-19 pandemic, educational leaders increasingly were concerned about the shortage of competent, trained educators, particularly in our lowest-income communities and hardest-to-staff roles (Rosenberg & Anderson, 2021).

The COVID-19 pandemic has had a disproportionate impact on working women. An analysis of the US Census Current Population Survey found that "women have accounted for nearly 56 percent of workforce exits since the start of the pandemic, despite making up just 48 percent of the workforce" and in February 2021, it was reported that "the urgent need for childcare at home has pushed many working mothers to withdraw from the workforce to take over childcare responsibilities." (Rosenberg & Anderson, 2021, p. 6)

Why Do Teachers Enter and Leave the Classroom?

A shrinking pool of applicants and disproportionate teacher attrition creates a situation where it is difficult for schools to recruit and retain staff. With the total number of students finishing teacher preparation programs declining dramatically and with considerable rates of attrition and turnover in the profession, it should be surprising that schools report difficulties while attempting to fill vacancies.

The difficulties are even more significant in high-poverty schools (Garcia & Weiss, 2019a).

"The current national estimates of the teacher shortage likely understate the magnitude of the problem because the estimates consider the new qualifications that teachers need to meet new demand. However, not all current teachers meet the education, experience, and certification requirements associated with being a highly qualified teacher" (Garcia & Weiss, 2019a, p. 4).

Garcia and Weiss (2020) report that "teachers report being frustrated,

demoralized, and dissatisfied due to the combination of underfunding, challenging working environments, disrespect for their profession, and generalized distrust between teachers and administrators" (p. 8). Garcia and Weiss (2020a) also indicated that another substantial reason teachers are leaving the profession and fewer people are interested in becoming teachers is the substandard pay compared to other professions. Unfortunately, inadequate teacher pay is compelling many teachers to accept second jobs on top of their full-time jobs at school.

Teacher Preparation and Credentialing

Several factors have led to a decrease in the number of people entering teacher preparation programs in the United States. Finances are a significant obstacle to entrance into the teaching profession. Numerous school districts now offer grow-your-own programs, allowing candidates to earn a paycheck while working to become teachers (Will, 2022). K-12 schools have difficulty finding qualified teachers, especially in specialty areas such as Mathematics, Science, and Special Education. Some university teacher preparation programs are developing creative methods to lead students into these specialty areas. "For example, the University of Maryland College of Education awards in-state students who pursue education majors in critical shortage areas a two-year \$2,000 scholarship" (Will, 2022, para. 27).

As educator discontent continues and teacher shortages amplify, universities are sounding the alarm. "Enrollment has been steadily declining for the past decade, and the pandemic has likely made things worse" (Will, 2022, para. 1). In the time period "between the 2008-09 and the 2018-19 academic years, the number of people completing a teacher-education program declined by almost a third" (Will, 2022, para. 3).

In addition to the decreased number of people entering colleges and universities, teacher credentialing has significantly declined. According to the Pennsylvania Department of Education's (n.d.-a) report on Educator Preparation and Certification, the number of issued teaching certificates has decreased from 25,728 in 2012-2013 to 7,695 in 2020-2021. In STEM areas such as 7-12 Mathematics, credentials issued decreased from 554 in 2012-2013 to 147 in 2020-2021. A sharp increase in the allocation of temporary permits, waivers, and intern credentials issued by the California Commission on Teacher Credentialing indicates that more students are being taught by teachers who have not completed, or sometimes even begun, their preparation for teaching (Darling-Hammond et al., 2016). The process for teacher licensure and certification can be cumbersome. According to the Pennsylvania Department of Education, Pennsylvania has over 100 colleges, universities, and providers that deliver teacher education programs authorized by the Pennsylvania Department of Education (nd-b). The Pennsylvania Department of Education also states that students who secure the recommendation for certification by the college or university must meet all the requirements of the approved preparation program, achieve the qualifying scores on the mandatory examinations, and complete any other requirements specified by Pennsylvania's State Board of Education.

There is a recommendation that the Pennsylvania Department of Education "systematically identify and remove barriers in the certification process that are not clearly correlated with educators' future success" (Commonwealth of Pennsylvania, 2022). The report recommends that PDE review internal procedures and systems to provide an efficient and customer-service-oriented experience for credential applicants and ensure that the system is producing candidates to fulfill the workforce demands of schools (Commonwealth of Pennsylvania, 2022).

Another change that has occurred is the meaning of the term "highly qualified teacher." In 2006, No Child Left Behind (NCLB) required all teachers teaching core academic subjects to be highly qualified by the end of the 2005-2006 school year (Commonwealth of Pennsylvania, 2006). In Pennsylvania's Highly Qualified Teacher Guidelines released in 2006, the NCLB core content areas include English, Reading/Language Arts, Mathematics, Sciences, Foreign Languages, Music and Art, and Social Studies (history, economics, geography, civics, and government). To satisfy the definition of a Highly Qualified Teacher, teachers must:

1) Hold at least a bachelor's degree; 2) Hold a valid Pennsylvania teaching certificate (i.e., Instructional I, Instructional II, or Intern certificate but not an emergency permit); and 3) Demonstrate subject matter competency for the core content area they teach. (Pennsylvania Department of Education, n.d.-c)

The Every Student Succeeds Act (ESSA) eliminated the Highly Qualified Teacher (HQT) provisions commencing with the 2016-17 school year. However, all educators in commonwealth public schools must meet Pennsylvania's certification statutory and regulatory (Pennsylvania Department of Education, n.d.-d). After this change, any teacher who fulfills state certification requirements is deemed "highly qualified." Under ESSA, states have exclusive authority to determine all teacher certification requirements.

According to the Pennsylvania Department of Education (n.d.-c), various types of certifications are available for future teachers. The Pennsylvania Department of

Education Division of Certification Services manages the educator certification process statewide. In addition to awarding standard certifications, the Pennsylvania Department of Education also manages an emergency certification process. A Pennsylvania public school entity, also known as a Local Education Agency (LEA), can request an Emergency Permit to fill a vacant teaching position when the LEA is unable to find a "fully qualified and adequately certified educator holding a valid and active certificate" (Pennsylvania Department of Education, n.d.-d). Except for career and technical instructional areas, school nurse, and dental hygienist, a minimum of a bachelor's degree is required before an emergency permit is granted (Pennsylvania Department of Education, n.d.-d). The Pennsylvania teacher shortage impacts some districts and schools more than others, some subject areas, and some demographic groups more than others. A recent Pennsylvania Department of Education assessment indicates substantial teacher shortages, requiring emergency permits for teachers in Philadelphia, Pittsburgh, Erie, Harrisburg, and other urban areas (Keefe, 2018).

There are multiple credentialing pathways for potential teachers, both traditional and non-traditional.

The traditional process to become a certified educator, intended to guarantee elevated standards for educators first entering the profession, too often serves as a cumbersome and inefficient barrier to entry to the profession while failing to serve its intended purpose (Commonwealth of Pennsylvania, 2022).

The Foundation of Our Economy Report states, "Bureaucratic hurdles and antiquated processes often divorced from reliable measures of educator quality too often serve as unhelpful roadblocks that keep or drive good people out of the profession" (Commonwealth of Pennsylvania, 2022, p. 6).

Another method universities use to credential teachers is the Intern Certification method. The Tennessee Department of Education has created an apprenticeship program with the U.S. Department of Labor to launch a Grow Your Own program. Tennessee is the first state to support Teacher Occupation Apprenticeship programs between school districts and Educator Preparation Programs (Duncan, 2022). Duncan noted that "apprenticeship programs are high-quality, industry-driven, work-based learning pathways that provide individuals with hands-on work experience while earning a wage that increases during the progression of the program" (2022, p. 6). These programs are making efforts to identify, support, and prepare teacher prospects to earn teaching credentials in the communities in which they reside. These programs encourage students to seek education as a career and identify adults such as paraeducators to assist them in acquiring their education certification (Duncan, 2022).

According to Mezzacappa (2022) acting Pennsylvania Secretary of Education, Eric Hagarty, stated that "a shortage of educators, especially those of color, is the most urgent crisis facing our schools today" (para. 1). His comments were made at the opening meeting of the newly formed state Committee on Educational Talent and Recruitment in Philadelphia. This group met to assess the teacher shortage problem and focused on ways to recruit and retain additional qualified teachers in Pennsylvania. At the same meeting, Philadelphia School District Superintendent Tony Watlington communicated that the school district would increase recruiting efforts (Mezzacappa, 2022). Until recently, the most common path to becoming a public school teacher in the United States was attending college or university. However, nearly 33 percent of new teachers now earn credentials through alternative methods. Some are school-districtbased residency programs, online degrees, a for-profit certificate program, or a hybrid option such as a charter school-based apprenticeship (Fraser & Lefty, 2018). Pennsylvania provides alternative pathways to teacher certification for future teachers not following the conventional path to a teaching credential. Currently, candidates in Pennsylvania must possess a bachelor's degree to pursue alternative teacher certification in Pennsylvania. Alternative certification candidates must still successfully complete the same exams as educators on a traditional pathway. Teacher prospects must also satisfy the requirements of a teacher preparation program approved by the Pennsylvania Department of Education (McPherson, 2023).

Working Conditions

Student behavior has changed over the course of time within the classroom and school environment. In many schools, teachers are overwhelmed with a multitude of responsibilities. Garcia and Weiss (2020) remarked that "they are asked to be first responders, social workers, physicians, counselors, and nurses, especially when schools offer insufficient numbers of these professionals" (p. 19). There are multiple explanations for why learner behavior issues can lead to uneasy relationships and even dangers to teachers' physical and mental health. Students' inappropriate actions may be due to trauma or harmful tensions initiated outside of school (Garcia & Weiss, 2020). For teachers to operate effectively in the classroom, they need additional support and investments in more counselors, nurses, librarians, and paraprofessionals. These positions support students and make schools healthier, often reducing behavioral issues (Garcia & Weiss, 2020).

Another working condition causing people not to enter education is the increase in violent acts on school campuses. Garcia and Weiss (2020) found that "among the factors that make school climates so challenging are widespread barriers to teaching and learning and extensive threats to teachers' emotional well-being and physical safety" (p. 17). Garcia and Weiss (2019d) report that "more than one in five teachers report that they have been threatened by a student at the school where they currently teach, and one in eight reports that they were physically attacked by a student at their current school" (p. 7). These threats to teachers express the lack of safety in some school environments and can contribute to shortages by making the profession less attractive.

A person's working conditions significantly affect not only on job fulfillment, but also on the ability to do the job well, and the desire to remain in the job and the profession. Garcia and Weiss (2019d) write that "this is undoubtedly true for teachers, who spend much of their time interacting with students, fellow teachers, and other school staff, and thus, are immersed in their workplace climate to a high degree" (p. 4). Garcia and Weiss (2019d) note that due to the challenging school climate for many teachers, "it is little surprise that teachers' satisfaction, motivation, and desire to stay in teaching is low and has even dwindled slightly in the past few years" (p. 11).

Unionization or non-unionization is another factor that is influencing the teacher shortage. Hahn (2022) found that:

Teachers' unions are negatively associated with teacher stress: the stress index of teachers in districts with collective bargaining agreements is .07 lower than that of

teachers in districts with no union agreement, a statistically significant difference equal to about 14% of the standard deviation of the teacher stress index. Teachers in districts with higher union density also report lower stress than those in districts with lower union density, and union-member teachers show significantly lower levels of stress relative to non-member teachers. (para. 5)

For many years, Pennsylvania had one of the highest defined benefit pension systems in the United States. This was a major incentive for people to enter and remain in the profession. Over the past several years, there have been reductions in benefits for teachers entering the profession. Keefe (2018) reports that Pennsylvania teachers participate in the Public School Employees Retirement System or PSERS. PSERS administers a defined benefit pension plan for public school teachers and employees in Pennsylvania. PSERS accumulates contributions from teachers and other plan members, school districts, and the state. PSERS invests its assets to fund payments to teachers during their retirement. However, pension legislation enacted in 2010 reduced PSERS benefits for teachers hired in 2011 and later. A few years later, a 2017 law additionally trimmed pension benefits for teachers employed in 2019 and beyond. Keefe (2018) also reveals that Act 5 would mandate new teachers to participate in a pension plan that greatly redirects funding from the state and school districts onto the teachers. The new plan includes 401(k)-style investments, which also divert retirement income risk onto teachers.

Duncan (2022) notes that states can implement loan forgiveness and service scholarship programming that provides educators with the prospect of accumulating wealth and eliminating the significant debt that disproportionally impacts students of color. Duncan (2022) reports that the state of "Connecticut goes further by providing mortgage assistance for teachers, including additional support for teachers of color who enter the profession" (para. 17).

To create a more alluring and sustainable teaching profession, states must continue measures to improve teacher pay and benefits. Duncan (2022) wrote:

Many state budgets have included proposals to increase pay across the board, but states should look at ways to provide bonuses and raises for teachers serving highneeds schools. States can also provide incentives for teacher candidates to ensure they are well-prepared and stay in the profession. (para. 19)

According to Allegretto and Mishel (2019) "...providing teachers with a decent middle-class living commensurate with other professionals with similar education is not simply a matter of fairness. Effective teachers are the most important school-based determinant of student educational performance" (p. 1). To encourage student success, schools must make efforts to recruit and retain certified teachers and guarantee that teaching remains an attractive career option for college-bound students. Allegretto and Mishel (2019) reaffirm that "pay is an important component of retention and recruitment" (p. 1). In their report, Allegretto and Mishel (2019) wrote:

The mid-1990s marks the start of a period of sharply eroding weekly teacher wages and an escalating teacher wage penalty. The average salary of public school teachers (adjusted for inflation) decreased by \$21 from 1996 to 2018, from \$1,216 to \$1,195 (in 2018 dollars). In contrast, the weekly wages of other college graduates rose by \$323, from \$1,454 to \$1,777, over this period. (p. 3) Some school districts have improved teacher compensation through merit pay. Gius (2013) wrote that "although the effect of merit pay on overall job satisfaction was insignificant, teachers in merit pay districts were less enthusiastic, did not think teaching was important, and were more likely to leave for better pay" (p. 1). Nonetheless, the researchers discovered that educators who obtained merit pay were more satisfied overall than teachers who did not (Gius, 2013).

Garcia and Weiss (2020) suggest various reforms to increase compensation to strengthen recruitment and retention—especially in high-poverty schools. The first recommendation is to increase teacher base pay across the board. Garcia and Weiss (2020) asserted that:

Strengthening base salaries by giving every teacher a flat increase would help close the gap in pay between teachers and their peers in other professions, keep more teachers in the school and in the profession, and strengthen the credentials of the teaching workforce. (p. 11)

The second recommendation is to increase teacher base pay in high-poverty schools. Garcia and Weiss (2020) also note that "These kinds of targeted raises could still help strengthen collaboration and other aspects of the teacher workforce in a way that merit pay increases and other incentives-based strategies do not" (p. 11). The third recommendation is to fund adequately pension benefits and remove obstacles to accessing them. Garcia and Weiss (2020) state "that pensions have been a critical factor in both attracting teachers to the profession and retaining them as teachers and improving their retirement security" (p. 12). The fourth recommendation from Garcia and Weiss (2020) is to consider programs that reduce the major financial burdens that are barriers to

entering and staying in the teaching profession. With the increased expense of teacher preparation programs, programs such as service scholarships and student loan forgiveness programs can support recruitment. The fifth and final recommendation is to acknowledge and take steps to address other financial burdens that arise when teachers in under-resourced schools must take on safety net roles. Amazingly, "the nation's K–12 public school teachers personally spend, on average, \$459 annually on school supplies for which the overwhelming majority, more than nine out of ten, will not be reimbursed" (Garcia & Weiss, 2020, p. 14).

Retention of Teachers

Although teachers are unable to climb the corporate ladder and will likely not acquire six-figure bonus pay, there is a quality of life that most teachers acknowledge. Rosenberg and Anderson (2021) write:

Districts and schools can build toward making teachers' jobs more rewarding, collaborative, and sustainable by investing in the kinds of structures and conditions that matter most, such as competitive compensation with opportunities to grow over time, supportive school leadership, sufficient time for collaboration, and teaching loads that make it possible to build relationships with their students and adjust approaches to meet their needs. (p. 2)

Teachers have become exhausted by the strains of the COVID pandemic. School leaders have an opportunity to support educators and help them care for their own and their families well-being through traditional and informal networks and to provide access to physical, mental, and emotional health benefits (Rosenberg & Anderson, 2021). Student loan repayment programs are one incentive that can keep young teachers from leaving the profession. Over 40 states and the federal government offer loan forgiveness and/or service scholarship programs to individuals wishing to become teachers, according to Podolsky and Kini (2016). These programs aim to incentivize people to teach in high-need areas and can have a direct effect on the recruitment and retention of talented educators in those areas. While these programs are typically smaller and less consistently available than those offered in the medical profession, research indicates that well-designed programs can be successful in achieving the desired outcomes.

These programs are typically aimed at those who are in their early career stages and are looking for a way to alleviate the burden of student loan debt or to gain access to other financial incentives. By providing these resources, states and the federal government can encourage more people to pursue a teaching career and help keep them in the profession for the long term. In many cases, loan forgiveness and service scholarships can be combined with other incentives, such as tuition reimbursement or continued professional development. This can help to make teaching a more attractive career option and ensure that talented teachers remain in high-need areas.

According to Sutcher et al., "...well-designed mentoring programs improve retention rates among new teachers, as well as their attitudes, feelings of efficacy, and instruction skills" (2016, p. 28). Sutcher writes that the "keys to success include having a mentor teacher in the same subject area, common planning time with teachers in the same subject, and regularly scheduled collaboration with other teachers" (2016, p. 28). Many young people leave the teaching profession due to professional burnout. State and district governments should prioritize the improvement of working conditions for teachers in order to ensure their success. This is especially critical for teachers who work in high-needs schools, as well as teachers of color who are often subject to harsh working conditions. In order to support the increased social, emotional, and mental health needs of these teachers, state, and district governments should partner with the local community to provide resources and assistance. Making sure that teachers are equipped with the necessary resources to succeed both in and out of the classroom is one of the most important tasks of state and district governments. This can be achieved by providing teachers with access to mental health services, as well as creating partnerships with local organizations and businesses to provide additional resources for teachers. Additionally, state and district governments should strive to provide teachers with flexible working conditions that allow them to balance their workload with their own personal needs (Duncan, 2021).

Recruiting of Teachers

Like most other occupations, supply and demand are important factors in the teacher labor market. The Commonwealth of Pennsylvania (2022) notes that Pennsylvania is facing an educator workforce crisis. While the number of qualified teachers entering the profession continues to decrease, educators are leaving at a higher rate. Due to this issue, schools have more difficulty replenishing critical staff positions than ever. Schools serving the most underserved students suffer the most from these staff shortages (Commonwealth of Pennsylvania, 2022). In the Foundation of Our Economy Report, the Commonwealth of Pennsylvania notes that to meet the educator staffing

needs of rural, suburban, and urban areas, "Pennsylvania must urgently attract more educators into the profession and retain a higher percentage of existing excellent educators to meet the staffing needs of early childhood providers, schools, and libraries in our rural, suburban, and urban settings" (p. 8).

The problems with the teacher shortage are impacting both rural and urban schools. The Commonwealth of Pennsylvania (2022) report that our state and public school population continues to change and become more diverse racially, ethnically, linguistically, and in other ways. Our educator workforce demographics have not kept pace with our changing landscape. The proportion of students of color in Pennsylvania's K-12 population is expected to increase by August 2025. Our entire educational system, from early childhood to K-12 to postsecondary, has struggled to serve these student groups. Without a significant increase in the diversity of our educator workforce, large percentages of our students will go through most, if not all, of their educational careers without seeing teachers, principals, and other school leaders who look like them or who have first-hand knowledge of their cultural and linguistic traditions and assets.

Because urban school districts have proportionally higher numbers of teachers in their first or second year of the profession, the Commonwealth of Pennsylvania (2022) report recommends that the:

Pennsylvania Department of Education must make concerted efforts to ensure that students have access to an educator workforce that represents the incredible diversity and rich histories, traditions, and life experiences across the commonwealth. PDE also must take steps to ensure that early childhood providers, schools, and libraries are equipped to create the working conditions necessary to retain great educators of color. (p. 12)

Duncan (2022) notes:

States and districts should provide targeted incentives to retain teachers and bring new teachers into the profession to build staff capacity and provide consistent, high-quality inperson instruction. State and district leaders should direct funding and resources toward incentives for teaching in schools that have had longstanding challenges with resource inequities. (p. 2)

As an example, the state of Texas provides incentives to teachers to work in highneeds schools via the Texas Teacher Incentive Allotment, while Jefferson County, Kentucky, uses the allotted ESSER dollars to provide teachers with \$5,000 retention bonuses (Duncan, 2022).

Difficult Subject Areas to Hire and Retain Teachers

Recruiting and retaining special education teachers has offered a particularly aggravating challenge for California schools and districts. Reacting to yearly shortages, the state changed the special education certification requirements in 1996, withdrawing the conditions that special education training be added in addition to the preparation needed to acquire a general education certificate. Darling-Hammond et al. (2016) write:

This change has both failed to solve California's special education teacher supply problem and has resulted in a less prepared cadre of special education teachers, who lack knowledge of the range of learning approaches and repertoire of teaching strategies that most teachers possess. (p. 11) Additionally, there is a shortage of qualified teachers in these specialty areas in New York. A study conducted by the Institute of Education Sciences examined certification areas related to shortage areas in New York. Bilingual education, bilingual special education, career and technical education, English language arts, health education, library media specialists, literacy, mathematics, science, and special education were identified as the ten specialized certification areas (Zweig et al., 2021).

Special education is a field with severe shortages of qualified teachers. In 2017– 18, 46 states and the District of Columbia determined special education as a shortage in reporting to the U.S. Department of Education (U.S. Department of Education Office of Postsecondary Education, 2017). Mathematics and science are right behind special education, with insufficient qualified teachers. In 2017–18, 47 states and the District of Columbia reported teacher shortages in mathematics, as did 43 states in science, an increase from the previous year (U.S. Department of Education Office of Postsecondary Education, 2017).

Teacher shortages have even impacted specialty areas such as music education. Hash (2021) examined the music teacher shortage "in relation to K–12 public schools in general, the demand for music teachers in specific states and regions, the declining number of preservice candidates certified in music, and potential strategies for alleviating music teacher shortages" (p. 2).

Shortages in Support Roles

Substitute teachers have become more difficult to recruit and retain, especially after the pandemic in 2020. Duncan (2022) reports that:

State and district leaders should be creative and strategic when building the pool of substitute teachers available to schools to ensure that students have access to high-quality instruction and that full-time teachers can take breaks and utilize their planning periods throughout the day. (p. 2)

In some districts, such as in Houston, Texas, community-based organizations are partnering with school districts to identify and train community members to become long-term substitute teachers, while in Oklahoma, newly retired teachers are coming back to the classrooms in order to offer short-term assistance (Duncan, 2022).

While teacher shortages have a tremendous consequence on student achievement, school support staff shortages also impact the different ways that schools benefit students. According to Duncan (2022), "Some districts have been forced to return to remote learning because they do not have the staff necessary to transport students to and from school or prepare and serve food to students who need it the most" (p. 3). "School bus driver shortages are having a ripple effect on schools, students, and families across the country and have already forced schools in at least nine states to request assistance from the National Guard" (CBS News, 2022, para. 1).

Unionville-Chadds Ford Superintendent John Sanville stated that "the need for substitute teachers has greatly increased, and the competition for substitutes has become fierce" (Turner, 2022). The shortage of substitute teachers increases stress on teachers because all classrooms require a teacher or a substitute. When a shortage of substitute teachers exists, teachers must fill in when called upon. To maintain a competitive position in the labor market, the majority of schools have improved the compensation of substitute teachers. Sanville says that it "…becomes a dog chasing its tail, because we raise our rates; neighboring districts, neighboring counties, raise their rates; and it is all just in an effort to recruit from an ever-diminishing substitute pool" (Turner 2022). Sanville attested that you are seeing administrators across the commonwealth serving lunches and driving buses. I have done both myself this year. It is a situation that is not sustainable" (Turner 2022).

Political Impact

Since the 1960s, federal legislation has played an important role in American education. The Elementary and Secondary Education Act, known as ESEA, was part of President Lyndon B. Johnson's Great Society program. After arriving in 1965, ESEA established a role for the federal government in K-12 policy. It contributed more than \$1 billion a year in Title I support to districts to cover the cost of educating economically disadvantaged students. Since the initial legislation, the law has been amended and updated numerous times, with each new version seeking to expand the federal role in education (Klein, 2015).

The 1980s initiated a revolution of testing and accountability reforms that have had a tremendous influence on public education (United States Department of Education, 1983). The No Child Left Behind Act, or NCLB, which passed Congress with overwhelming bipartisan support in 2001 and was signed into law by President George W. Bush on Jan. 8, 2002, is the name for the most recent update to the Elementary and Secondary Education Act of 1965 (Klein, 2015). Since the NCLB law was passed in response to concerns about the lack of international competitiveness of the American education system, the federal government has greatly increased its ability to hold school systems accountable for the academic progress of all students as a result. Along with federal legislation, state legislation has been important throughout the history of K-12 Pennsylvania public schools, with the Pennsylvania School Code being written in 1911. In 1949, an education bill increased the state-mandated teacher salary, re-codified school laws, and enacted a school safety law for school buses. In 2021, a new state law was enacted to alleviate the growing substitute teacher shortage by providing public schools more flexibility to employ suitable substitute teachers (PSEA, n.d.).

Andrew Spar, President of the Florida Education Association, states "...the politically charged environment around K-12 education is one of several factors driving a lot of teachers, especially experienced teachers, out of the profession" (Neuman, 2022, para. 16). As a result of this teacher and staff shortage, it is not just a matter of people not entering the profession, which is a problem, but in some cases, it is the result of a mass exodus of people who have had, for instance, 10 to 15 years, 20 to 30 years of experience in the profession (Neuman, 2022).

Consequences of the COVID-19 Pandemic

The COVID pandemic has impacted our society in a variety of ways. One impact on schools is that many teachers retired early. Duncan (2022) writes:

Nearly half of U.S. schools are facing COVID-related staff shortages that threaten these efforts and have caused school leaders to take drastic measures to provide day-to-day instruction. These shortages, which are due to factors like early retirement, burnout, and teachers exiting the profession in response to attacks on honest teaching of history, are so severe in some districts that district leaders have been forced to send staff from their central offices and even their superintendents to fill in as substitute teachers, while other states are calling on members of their business community to teach certain subjects or, sending the National Guard to fill vacancies. (p. 1)

These pandemic-related educator shortages are worsening several longstanding difficulties. A teacher shortage has likely existed in specific subject areas for the past number of years, such as STEM, special ed, and English as a second language teachers, and in specific locations, such as rural schools and schools with low incomes (Duncan, 2022).

Rosenberg and Anderson (2021) reported that "...being spread thin with technology challenges and various modes of teaching, declining student engagement, fear of contracting COVID, and balancing their own caretaking responsibilities have made teaching this year even harder" (p. 1). Rosenberg and Anderson (2021) note that "84 percent of teachers and administrators say teacher morale is lower than it was before, and one-third of teachers say working during the pandemic has made them more likely to leave teaching or retire early" (p. 2).

Before the COVID pandemic, school leaders faced a number of challenges, including a lack of talent and qualified teachers, particularly in low-income neighborhoods and those with the most difficult-to-fill positions, the top challenges they had to overcome. In the wake of the COVID pandemic, almost half of those public school teachers who have quit their profession in the last half a year have cited the COVID pandemic as the main reason for leaving (Rosenberg & Anderson, 2021).

Doonan and Kenneally (2022) write:

For the public sector education workforce, the pandemic has been extremely challenging. Almost overnight, K-12 teachers and personnel were confronted with

the complex challenge of pivoting to virtual education in 2020. It was grueling and frustrating for the K-12 workforce, for families, and for children. (p. 1)

Doonan and Kenneally (2022) also note that in a national survey conducted in 2021, 52 percent of K-12 educators are stressed and burned out, and more than one-third of them say that due to the pandemic, they are considering leaving the field altogether.

Horace Mann conducted research in November 2020 with a nationally representative survey of 1,240 U.S. educators, including public school K-12 teachers, administrators, and support personnel. The research conducted by Horace Mann (2020) demonstrated that the delivery of online and hybrid learning environments due to the COVID pandemic has significantly increased teachers' work during and after the school day. In addition, 77% of educators surveyed indicated that they spent more time working than they did in the previous year. In addition, more than 60% of educators surveyed noted that they enjoyed their jobs less than in prior years, while 27% contemplated temporarily leaving the field of education due to the COVID pandemic (p. 3).

The Horace Mann (2020) survey also indicates some negative financial implications for educators during the COVID pandemic. According to survey results, COVID has prompted 64% of educators to make fewer contributions to their general savings accounts, 29% to decrease their retirement savings, and 14% to decrease their contributions to health savings accounts because of COVID. Educators have lowered bill payments too. Some of these examples include 39% of the population paying less on their credit card balances, 35% of the population paying less on their student loans, and 12% of the population paying less on their housing costs such as mortgages or rent.

Conclusion

Chapter II of the document focuses on the issue of teacher shortages in the United States and provides a comprehensive literature review on this topic. The chapter highlights the challenges faced by school districts in recruiting and retaining highly qualified teachers, particularly in the context of increased workload, changing demands, and the impact of the COVID-19 pandemic. It also delves into the historical context of teacher shortages, dating back to the mid-1930s, and discusses how the problem has evolved over time.

The chapter emphasizes the negative consequences of teacher shortages on students, teachers, and the education system as a whole. It cites various indicators used to measure teacher shortages, such as subject area vacancies, student-teacher ratios, emergency certificates issued, and teacher preparation program enrollment. The authors emphasize that teacher shortages are driven by multiple interdependent factors and are particularly acute in low-income neighborhoods and high-poverty schools.

The literature review explores the reasons behind teachers entering and leaving the profession. Factors such as low pay, challenging working environments, and lack of respect for the profession contribute to teacher frustration and attrition. The decline in the number of individuals entering teacher preparation programs is highlighted, with financial barriers identified as a significant obstacle. The impact of the COVID-19 pandemic on working women, particularly working mothers, is discussed in relation to teacher attrition.

The chapter also examines teacher preparation and credentialing processes. It discusses various types of certifications available for future teachers and how changes in

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legislation, such as the Every Student Succeeds Act (ESSA), have altered the definition of a "highly qualified teacher." The chapter explores alternative pathways to teacher certification, such as apprenticeship programs and non-traditional methods.

Throughout the chapter, the authors present data and insights from various sources, including educational researchers, government reports, and educational leaders. The chapter highlights the urgent need to address teacher shortages to ensure quality education for all students and proposes recommendations for improving the teacher certification process and recruitment efforts.

Overall, Chapter II provides a comprehensive overview of the teacher shortage issue in the United States, examining its historical context, underlying causes, and potential solutions.

CHAPTER III

Methodology

Pennsylvania is one of the largest and most populous states in the United States. Pennsylvania is a state with an estimated population of over 12 million and has a large and diverse education system serving thousands of students across its many public and private schools. However, the state is facing a significant challenge regarding teacher shortage. Over the past decade, there has been a substantial decline in the number of teachers available to fill vacancies in schools throughout the state. Pennsylvania is not the only state that suffers from this shortage. The problem is particularly acute in Pennsylvania, and the state's policymakers, educators, and other stakeholders need assistance in finding practical solutions to the problem.

A number of factors contribute to the shortage of teachers in Pennsylvania. One of the most important factors is the aging of the teacher population. As many experienced teachers approach retirement age, there is a dire need for more younger teachers to take their places. The shortage is also exacerbated by many new teachers leaving the profession after just a few years due to low salaries, high workloads, and lack of support from administrators and policymakers.

Another contributing factor to the teacher shortage in Pennsylvania can be attributed to the lack of diversity in the teaching workforce. Evidence suggests that students perform better when they have teachers of the same ethnicity or racial background as themselves in the classroom. However, the teacher workforce in Pennsylvania needs to be more diverse, making it challenging to attract and retain teachers of color. Additionally, many Pennsylvania teachers need to reflect on the cultural and linguistic diversity of the students they serve. It can be a significant barrier to effective teaching and learning if this problem is not addressed.

It is also important to note that the state's education funding system plays a part in contributing to the teacher shortage in Pennsylvania. In Pennsylvania, public schools are funded through a complex system of local property taxes, which is heavily reliant on local property tax revenue. As a result, schools that are in low-income neighborhoods often need greater funding and resources than those that are located in wealthier neighborhoods, making it more challenging for them to attract and retain qualified teachers. Additionally, there is a need for the state's funding system to provide more support for teacher training and professional development activities. For this reason, teachers are finding it difficult to keep up with the latest teaching methods and technologies.

The teacher shortage in Pennsylvania has significant impacts on students, teachers, and the education system as a whole. Among the most significant impacts is the high teacher turnover rate, which can cause instability in the classroom and lead to disruption of the continuity of education for the students as a result. The schools have to invest time and resources in finding and training new teachers when they leave their positions. A great deal of time and resources that are diverted from actual teaching and learning as a result of this.

It is also important to note that the teacher shortage in Pennsylvania has a significant impact on the quality of education that students receive. With fewer teachers available to fill vacancies, schools may have to resort to hiring unqualified or underqualified teachers, which can lead to a decline in the quality of instruction. Schools

may have to increase the number of students in their classes or eliminate certain courses and programs, which can limit the opportunities that students have.

A comprehensive solution needs to be developed in order to address the teacher shortage in Pennsylvania, which is a complex and multifaceted issue. Policymakers, educators, and other stakeholders must work together to address the causes of the teacher shortage and implement strategies to attract and retain qualified teachers in the state. This may involve increasing teacher salaries, improving working conditions, providing more support in the areas of professional development, and addressing the state's funding system to ensure that all schools have access to the resources they need to provide a highquality education to their students. Ultimately, the success of these efforts will depend on the commitment and collaboration of all those involved in Pennsylvania's education system.

Purpose/Statement of Problem

The teacher shortage has become a more prominent issue at the national, state, and local levels over the past few years. While other local schools have experienced difficulty finding and retaining teachers over the years, the national teacher shortage has significantly impacted Richland School District for the first time in recent memory. There has been a dramatic decline in the number of qualified teachers applying to teach in recent years, with most newly hired teachers leaving the profession within their first few years of employment.

As a long-time administrator in the Richland School District, the researcher has been involved in teachers' recruitment and hiring processes for over fifteen years. We always have been able to choose from a wide range of highly qualified candidates during this period. It has historically been the case that most teachers who join the Richland School District will stay there for the rest of their careers. Throughout the last few years, there has been a precipitous decline in the number of high-quality candidates applying for full-time teaching positions. Substitute teachers and part-time jobs have become more challenging to fill as a result of the shortage of candidates in these areas. As a result, the district has been forced to hire temporary teachers through an emergency certification process in order to meet the needs of the students. The number of long-term substitute teachers who were employed on emergency certificates during the 2021-2022 school year was over 50%. Additionally, a record number of teachers have left the district for other employment in at-home education positions or have left the field of education altogether. The quality of teachers selected for full-time positions is likely to diminish if this trend continues, and student learning and achievement are likely to be adversely affected if this trend continues.

Research Questions

The research questions that were developed to specifically address the shortage of teachers in our school district are:

- What are some of the unique factors that discourage prospective teachers from considering K-12 teaching careers? Why are fewer high school students entering teacher preparation programs in college?
- 2. Which factors contribute to the growing number of K-12 teachers leaving the classroom before retirement age?
- 3. What short-term and long-term solutions can be provided to increase the number of available teacher candidates?

Settings and Participants

The Richland School District serves students from Geistown Borough and Richland Township in Southwestern Pennsylvania. The United States Census Bureau reports that Geistown Borough has a population of 2,451 residents, while Richland Township has a population of 11,965 residents (n-d). The Richland School District is in Cambria County, Pennsylvania. Prior to the COVID-19 pandemic in 2020, Cambria County was estimated to have a population of 130,000. According to the latest census data, the county's population has decreased by 9% to 143,679 individuals between 2010 and 2020. A total of 94.4% of the county's population is White, 3.6% is Black, 1.7% is Hispanic, while 1.3 % of the county's population is Asian. 14.7% of Cambria County's population is identified as living in poverty, and 21.4% of the population ages 25 or older have at least a bachelor's degree. According to the Future Ready PA Index, there are approximately 1,500 students in grades K-12 in this district, which covers 21.46 square miles. There is one high school in the district, that serves grades 7 to 12, as well as one elementary school, that serves grades kindergarten through sixth grade. The district's current student population is comprised of 30.2% of students from low-income families. There was an exponential increase in this number over the years, tripling from 10% in 2007 to 30.2% currently. In the district, there are 89.3% of white students, 2.8% Asian students, 2.3% black students, 2.3% Hispanic students, and 3.3% multi-racial students. Richland School District has seen a steady increase in the number of English Language Learners (ELL) receiving services, with families moving into the district with various home languages. The district operates life skills, autistic support, and emotional support classrooms to provide the best support and services. Less than one percent of the

students within the district are identified as English Language Learners, while 12.8% of the learners are identified as special education students (n-d).

The school district employs 110 professional staff members. All certificated professional employees were included in the study, including classroom teachers, school counselors, school psychologists, school nurses, librarians, instructional coaches, and specialists. Of the 110 staff members who were offered the opportunity, 45 members of the staff participated. Table 1 provides the descriptive statistics for the 45 professional staff members who participated in the study.

Table 1

Teacher Demographics - How long have you been a full-time teacher?

Years of	Number of Teachers	Percentage of Teachers
Experience	Responding	Responding
0-3 years	4	8.9
4-10 years	8	17.8
11-20 years	17	37.8
20-30 years	13	31.1
31 years or more	2	4.4

In addition to the administrative staff, paraprofessionals, secretaries, and other support staff, the school district also employs outsourced paraprofessionals. As part of its subcontracting arrangements with outside agencies, the school district subcontracts food services, transportation services, as well as some paraprofessional positions. Every aspect of hiring and retaining staff has become more complex and challenging than it has ever been in the modern era.

It is also important to note that our region has never experienced any labor shortages in the field of education in prior history. The Richland School District has been fortunate to have many factors that have mitigated any threat of a teacher shortage in prior years, including the presence of multiple colleges and universities that specialize in teacher preparation programs that are located within an hour of the school district. In this region, you will find a number of higher education institutions, including such schools as the University of Pittsburgh at Johnstown, Saint Francis University, Mount Aloysius College, and the Indiana University of Pennsylvania, among many others.

All participants of the study are volunteers, and they have the right to withdraw from the study at any time if they do not wish to continue to participate in it. It was explained to the employees that their refusal to participate in the study had no adverse effect on the performance of their jobs or their evaluations because they refused to participate. The Institutional Review Board (IRB) approved the study (Appendix I), and Research Study Consent forms (Appendices E, F, G, H) were provided for each participant to review, sign, and return.

Research Plan and Data Collection

The capstone will include an action research component that consists of surveys, interviews, and the collection of data from public sources of information as part of the action research. Qualitative data will be collected through surveys and interviews from non-tenured teachers, tenured teachers, high school counselors, superintendents, and

teachers who have left the field of education. Quantitative data will be collected from the publicly accessible Pennsylvania Department of Education (PDE) website.

For this research project, a single survey was distributed to all full-time teachers within the Richland School District to gain their perceptions of the teacher shortage. Surveys were distributed to staff via email with a link to complete the survey through Google Forms.

The survey questions utilized in the study were reviewed and approved by the Pennsylvania Western University Institutional Review Board (Appendix I). The school district's professional staff were permitted to participate in the study. A link to the survey was included in the email request. The survey was emailed on Tuesday, May 2, 2023, and participants were asked to respond by 11:59 pm on Friday, May 9, 2023 (Appendix A). In total, 45 requests were completed out of 110 sent. As part of the survey process, all questionnaires were completed electronically. Participants were asked questions about their perceptions of the shortage of teachers in school districts and how it affects them. Questions included:

- How long have you been a full-time teacher?
- Are you an elementary or secondary school teacher?
- Are you a non-tenured or tenured teacher?
- Gender
- How satisfied are you overall with your job?
- How satisfied are you overall with the difficulties facing educators today?
- Thinking about the various challenges confronting educators today, how concerned are you about each of the following where you work:

- Shortages of Teachers and Staff
- o Student Behavioral Issues and Mental Health
- o Teacher and Staff Pay and Benefits
- o Verbal and Physical Attacks on Teachers
- Lack of Public School Funding
- Thinking about the challenges facing educators today, how concerned are you about each of the following where you work:
 - o Overemphasis on Standardized Testing
 - o Class Sizes and Caseloads
 - o Gun Violence and School Safety
 - o Lack of Parental Involvement
 - Impact of Covid-19
- Are you experiencing more vacancies in your building than usual for any of the following positions (YES/NO)?
 - o Substitute Teachers
 - o Support Staff (i.e., Paraprofessionals, Bus Drivers, Custodians,

Secretaries, Cafeteria Staff, etc.)

- o Teachers
- o Counselors, Therapists, and Social Workers
- o Administrators
- Within the last year, have staffing shortages caused any of the following problems in your building (check all that apply):
 - Teachers have lost preparation time to cover classes.

- Support staff have acted as substitute teachers.
- Teachers were forced to absorb students from other classrooms.
- School transportation has been decreased or canceled.
- School administrators have been forced to cover classes.
- Below are some recommendations to improve the retention of professional educators. For you, mark how much difference each would make in keeping you from leaving your position over the next 24 months.
 - Increasing salary and benefits
 - A significant bonus for completing another school year.
 - Hiring more staff to reduce workloads.
 - Hiring more support staff to address the physical, social, and emotional needs of students.
 - o Loan reimbursement subsidy for educators with student loan debt
 - Mentoring programs to support new teachers.

The teachers responded to the challenges that are confronting educators. Table 2 provides valuable information regarding teachers' levels of concern, with 100 percent of the respondents indicating they have some level of concern regarding the shortage of teachers and staff in schools.

Table 2

Shortages of Teachers	Number of Teachers	Percentage of Teachers
and Staff	Responding	Responding
Extremely Concerned	12	26.7
Very Concerned	18	40
Somewhat Concerned	15	33.3
Not Concerned at All	0	0

Challenges Confronting Educators

As part of the interview process, three separate groups will be interviewed. As part of my study, the researcher will interview high school counselors about their interactions with students regarding their career exploration activities during high school. During the interview process, the researcher will look for teachers who have been hired full-time but have since left the classroom for other jobs or responsibilities. The interviewing of school leaders, including superintendents and assistant superintendents, will also be a part of my research.

The researcher will interview high school counselors regarding their perceptions of the teacher shortage, specifically, why high school seniors electing to major in education or teaching-related majors in college. The interview questions in Appendix B utilized in the study were reviewed and approved by the Pennsylvania Western University Institutional Review Board (Appendix I). Questions included:

- 1. How long have you been a full-time school counselor?
 - 1. 0-3 years
 - 2. 4-10 years
 - 3. 11-20 years
 - 4. 20-30 years
 - 5. 31 years or more
- 2. Are you a non-tenured or tenured school counselor?
 - 1. non-tenured
 - 2. tenured
- 3. Gender
 - 1. Male
 - 2. Female
- 4. What is your role in the Act 339 process at your school?
- 5. Explain your role in supporting college and career readiness at your school.
- 6. What is your experience working with high school students in preparation for choosing a college major? Can you elaborate on those conversations?
- 7. Have you talked with students about their desire to attend college for education or their concerns about entering the education field? Can you elaborate on those conversations?
- 8. Is there anything else you would like to discuss regarding the questions today?

The researcher will be interviewing Teachers Who Have Left the Field of Teaching regarding their perceptions of the teacher shortage, specifically, what led them to leave

the field prematurely. The interview questions in Appendix C utilized in the study were reviewed and approved by the Pennsylvania Western University Institutional Review Board (Appendix I). Questions included:

- 1. How long did you work as a professional educator before leaving the field?
 - 1. 0-3 years
 - 2. 4-10 years
 - 3. 11-20 years
 - 4. 20-30 years
 - 5. 31 years or more
- 2. Were you an elementary or secondary teacher?
 - 1. elementary school
 - 2. secondary school
- 3. When leaving the education profession, were you a non-tenured or tenured teacher?
 - 1. non-tenured
 - 2. tenured
- 4. Gender
 - 1. Male
 - 2. Female
- 5. What were your motivations for entering the teaching profession?
- 6. Talk to me a little bit about your experiences as a classroom teacher.
- 7. What factors led to your leaving the profession?
 - 1. Lack of support staff
 - 2. Work/Personal life imbalance

- 3. Lack of administrative support
- 4. Changing programs
- 5. Student behavior
- 6. Parents
- 7. Covid concerns
- 8. Healthcare costs
- 9. Quality of life
- 10. Stress
- 11. Other
- 8. Is there anything else you would like to discuss regarding the questions today? The researcher will be interviewing Superintendents or their school designees regarding their perceptions of the teacher shortage, specifically, how it impacts their school district. The interview questions in Appendix D utilized in the study were reviewed and approved by the Pennsylvania Western University Institutional Review Board (Appendix I). Questions included:
 - 1. How long have you been an educator, including time as a teacher and school administrator?
 - 1. 0-3 years
 - 2. 4-10 years
 - 3. 11-20 years
 - 4. 21-30 years
 - 5. 31 years or more

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2. Prior to your role as a Superintendent, were you an elementary or secondary

school administrator?

- 1. elementary school
- 2. secondary school
- 3. K-12
- 4. Other
- 3. Gender
 - 1. Male
 - 2. Female
- 4. What trends can you talk about regarding the teacher recruitment and hiring process?
- 5. Do you have a teacher shortage in your school district? What are some of the challenges that your district faces in regard to the teacher shortage?
- 6. If your district faces a teacher shortage, what steps will you take to remedy the situation?
- 7. Have you noticed an increase in teachers leaving the district for jobs outside the classroom? If so, what are the reasons for these departures?
- 8. Is the district facing difficulties in finding employees to fill support positions such as paraprofessionals, bus drivers, secretaries, custodians, and cafeteria workers? If so, how is the district responding to these issues?
- 9. Is there anything else you would like to discuss regarding the questions today?

Financial Impact

There are several financial implications associated with this research project, even though most of them can be considered indirect effects. Participants' responses were collected using two cost-free platforms: Google Forms and Richland School District Gmail. There is a minimal cost associated with the time participants must spend completing the survey and the researcher's time to manage the study. Schools will continue to face several long-term financial consequences if they cannot reverse the teacher shortage.

- Increased recruitment costs: When schools face a shortage of teachers, they often need to invest more resources into recruiting and hiring qualified educators. The recruitment process may include advertising job openings, attending job fairs, and conducting extensive outreach. All of these activities can negatively impact school budgets.
- Higher substitute teacher expenses: Schools often rely heavily on substitute teachers to fill the gaps left by teacher shortages. Hiring substitute teachers can be more expensive than employing full-time teachers, as they are typically paid daily or hourly. With an ongoing teacher shortage, the need for substitutes increases, resulting in higher substitute teacher expenses for schools.
- Professional development and training costs: To address the teacher shortage, schools may need to invest in professional development programs and training initiatives to attract and retain teachers. These programs could include mentoring, specialized training for teachers in high-demand subjects or underserved areas, or support for new teachers entering the profession. Providing such programs can be

financially burdensome for schools, particularly if they need external trainers or invest resources to facilitate the training.

- Decreased productivity and student outcomes: Teacher shortages can lead to larger class sizes and increased workload for the existing teachers. These working conditions can negatively impact teacher productivity, as they may have less time to provide individual attention to students and effectively deliver instruction. Consequently, student outcomes and academic performance may suffer, potentially leading to additional costs regarding remedial programs or interventions to help students close gaps created by the lack of effective instruction.
- Staffing and administrative adjustments: Schools may need staffing adjustments to manage the teacher shortage, which could involve reallocating existing staff members to teaching positions. A realignment of existing staff members may result in disruptions to their traditional roles and responsibilities. Alternatively, schools might need to hire additional administrative staff or support personnel to assist with managing the increased workload and administrative tasks associated with a shortage of teachers. These adjustments can incur other financial costs for schools.
- Impact on school reputation: Teacher shortages can affect the overall quality of education and, consequently, the importance of schools. Parents and students may choose alternative educational options, such as private or charter schools, which can have financial implications for public schools that experience declining enrollment.

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Validity

An essential aspect of a research dissertation is the validity of the findings, as it provides the basis for reliable and trustworthy conclusions, enables accurate inferences and conclusions, enhances research quality, and enhances one's academic and professional reputation. As a part of this research study, each participant was reminded verbally and in writing that their answers would remain anonymous throughout the process.

Triangulation

Hendricks (2017) notes, "Credibility, dependability, and confirmability can be established through triangulation, a process in which multiple forms of data are collected and analyzed" (p. 71). The study examined data collected from interviews and surveys with four stakeholder groups. The themes expanded upon in the study were found in each of the four stakeholder groups' survey results. Following information collection and careful review, triangulation allowed the researcher to identify themes that converged across the various data collection methods (Bickman & Rog, 2009). As a result of this information, the researcher identified common themes and determined what was needed to improve teacher recruitment and retention.

Summary

This chapter examines the methodology used to study the teacher shortage issue in the Richland School District in Johnstown, Pennsylvania. An overview of the research context, research questions, participants, methodology, financial impact, validity, and triangulation strategies is provided in the chapter. There is a significant teacher shortage problem in Pennsylvania, attributed to factors such as an aging teacher population, a lack of diversity in the teaching workforce, funding challenges, and low job satisfaction among educators. A comprehensive solution involving policymakers, educators, and stakeholders is emphasized in the chapter to address the teacher shortage issue.

Studying the causes and impacts of the teacher shortage in the Richland School District, as well as exploring potential short-term and long-term solutions to increase the number of available candidates, is the purpose of this study. It aims to determine why prospective teachers are discouraged, why fewer students are enrolled in teacher preparation programs, why teachers leave the classroom prematurely, and possible solutions to address the shortage.

The study's participants include professional staff members of the Richland School District, such as classroom teachers, counselors, psychologists, nurses, librarians, instructional coaches, and specialists. The study covers both tenured and non-tenured teachers across different experience levels. Data is collected through surveys and interviews, with survey questions targeting perceptions of teacher shortage challenges and potential solutions. Interviews are conducted with high school counselors, teachers who left the education field, and school superintendents or their designees to gain insights from various perspectives.

The financial impact of the teacher shortage is discussed, highlighting potential costs related to increased recruitment efforts, higher substitute teacher expenses, professional development and training, decreased productivity and student outcomes, staffing adjustments, and potential effects on school reputation.

Validity and triangulation strategies are emphasized to ensure the reliability and credibility of the research findings. To establish credibility, dependability, and confirmability of research conclusions, triangulation involves gathering, analyzing, and comparing data from multiple sources.

This chapter provides a comprehensive overview of the methodology used in the study to address the teacher shortage issue in Richland School District, as well as its causes and impacts.

CHAPTER IV

Data Analysis and Results

The purpose of this chapter is to present the analysis of the data and the results as they relate to the three research questions identified in previous chapters. These results include quantitative and qualitative data from 45 Richland School District teachers, three local school counselors, three area school superintendents, and three teachers who left their brick-and-mortar classrooms to pursue other opportunities outside the classroom. To answer these three research questions, data were collected and analyzed through interviews and survey responses to determine these individuals' perceptions regarding the difficulty of retaining teachers and other personnel in schools.

As a result of this research project, Richland School District will gain valuable data to support new Richland teachers as they start their careers in the district and retain high-quality teachers within the school community. The results of the survey and the trends in the feedback are outlined in the rest of this chapter. This chapter is organized into four sections: Data Analysis, Results, Discussion, and Summary.

Data Analysis

Surveys were conducted and administered to collect qualitative and quantitative data from current teachers in the Richland School District. A detailed analysis of the demographic data collected from the teachers was conducted to classify and understand the participants' responses further. A Google Form was used to collect survey responses, and the charts and graphs that were generated based on the data are shown in the section below-entitled Results. Among the information included in this survey were demographic data and responses to open-ended questions to provide a better understanding of how teachers perceive the teacher shortage in the Richland School District as a whole. A statistical analysis of each of the questions was performed to assess the significance of the results. This analysis will be used in the future to support changes to school district policies that will ensure that high-quality teachers can be recruited and retained. The responses to the questions were reviewed to find similar themes and keywords among the various participants in order to determine similar trends in their responses. In addition to highlighting trends between individual survey participants and between groups of participants, patterns emerged between groups of participants in the survey.

Triangulation of Data

The information in this convergent parallel mixed methods design is used to support the validity of the data. The data is also used to triangulate the quantitative and qualitative information collected from multiple responses from different perspectives. A variety of perspectives are presented, including those of current Richland School District teachers, superintendents of local high schools, high school counselors, and former teachers of the region.

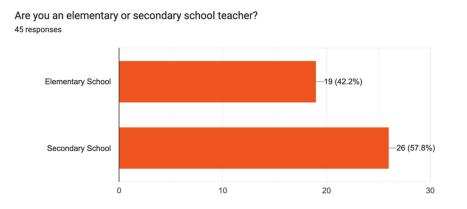
Results

The survey questions were developed with the purpose of answering the research questions that were posed during this study. During this section of the study, the survey results will be used to support the research methodologies that were used as part of the data collection process.

Richland School District Teacher Survey Results

The teacher survey was sent to 110 classroom teachers who are currently working in the Richland School District. Of the 110 teachers who were invited to take part in the survey, 45 of them completed it between the dates of May 1, 2023, and May 31, 2023. Figure 1 identifies how many teachers completed the survey. In addition, 42% of the respondents were teachers from kindergarten through grade 6 teaching in elementary school, and 58% of the respondents were from grades 7 through 12 teaching in high school. Participants in the survey completed the survey using Google Forms, a free service offered by Google.

Figure 1



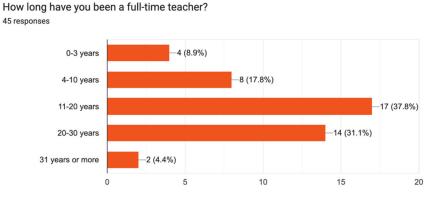
The results of the RSD teacher survey will be used to address the following research questions:

 What are some of the unique factors that discourage prospective teachers from considering K-12 teaching careers? Why are fewer high school students entering teacher preparation programs in college?

- 2. Which factors contribute to the growing number of K-12 teachers leaving the classroom before retirement age?
- 3. What short-term and long-term solutions can be provided to increase the number of available teacher candidates?

Each survey participant was asked to share demographic data. Figure 2 shows results for how long teachers have been employed as a full time teacher. Teachers with a variety of teaching experiences were represented in the survey results, but not evenly. Most respondents (37.8%) have been teaching for 11 to 20 years, while only 6.9% of the respondents have been teaching for 0 to 3 years. The median number was the teachers who worked for 20-30 years (31.1%), 4-10 years (17.8%), and only 4.4% of the respondents have taught for 31 years or more.





When asked about their overall job satisfaction at Richland School District, most teachers indicated that they were satisfied with teaching in the Richland School District. Figure 3 showed that most respondents, 60% (27 respondents), were very satisfied with their teaching job, while 33% (15 respondents) indicated that they were fairly satisfied with their teaching job. Only 6% (3 respondents) indicated that they were only somewhat

satisfied with teaching. Zero teachers (0 respondents) indicated that they were not that satisfied with teaching.

Figure 3

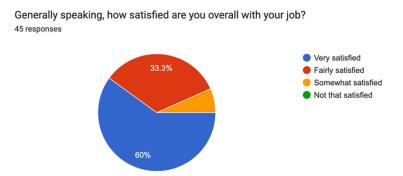
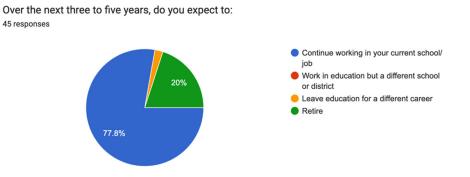


Figure 4 shows that the vast majority of respondents plan on continuing to work in their current school/job or retiring in the next three to five years. 77% (35 respondents) indicated that they planned to continue working in their current job, while 20% (9 respondents) planned on retiring from teaching. Only 2% (1 respondent) indicated that they planned on leaving education for a different career. There were no responses for people who planned on working in education but at a different school district.

Figure 4



In Figure 5, the shortages of teachers and staff are addressed. When asked about the shortages of teachers and staff, 26% (12 respondents) were extremely concerned about the shortages of teachers and staff, while 40% (18 respondents) were very concerned. 33% (15 respondents) indicated that they were somewhat concerned, while zero respondents indicated that they were not concerned at all.

Figure 5

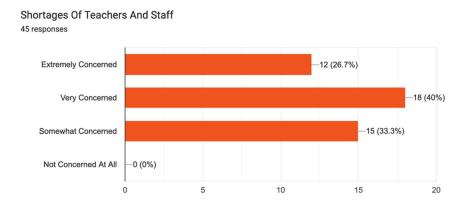


Figure 6 shows how teachers perceived student behavioral issues and mental health, 40% (18 respondents) indicated that they were extremely concerned, while 46% (21 respondents) were very concerned. In total, 13% (6 respondents) indicated that they were somewhat concerned, and 0 respondents stated that they were not at all concerned.

Figure 6

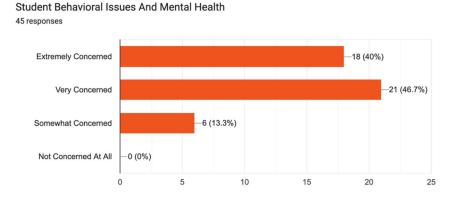
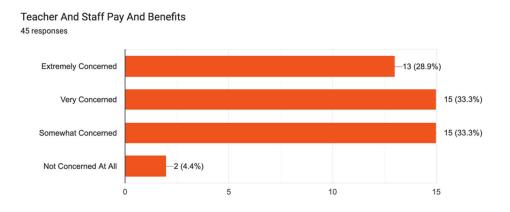


Figure 7 addresses teacher and staff pay and benefits. When asked about their perceptions of teacher and staff pay and benefits, 28% (13 respondents) were extremely concerned, while 46% (21 respondents) showed they were very concerned. Only 33% (15 respondents) were somewhat concerned; there were 0 respondents not at all concerned.

Figure 7



Teacher perception of verbal and physical attacks on teachers is addressed in Figure 8. The use of social media has shown an increase in verbal and physical attacks on teachers at all levels, from local to statewide to national. There were 13% (6 respondents) who were extremely concerned, and 20% (9 respondents) who were very concerned. The surveyed teachers indicated that 48% (22 respondents) were somewhat concerned, and 17% (8 respondents) were not concerned.

Figure 8

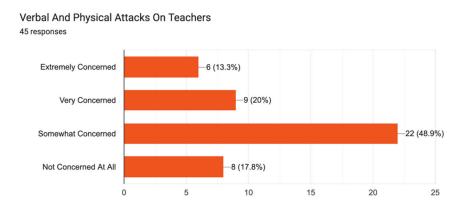


Figure 9 shows that 15% (7 respondents) were extremely concerned about the lack of funding for public schools, while 22% (10 respondents) were very concerned. The majority of respondents, 53% (24 respondents), indicated that they were somewhat concerned, while 8% (4 respondents) were not concerned at all.

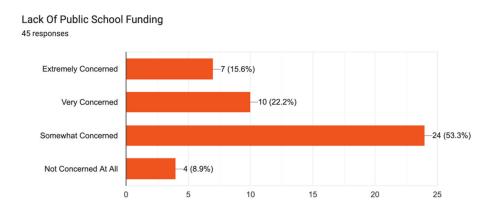
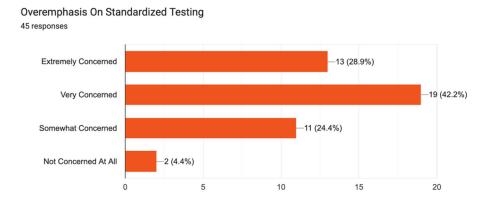


Figure 9

Figure 10 addresses the overemphasis on standardized testing. When asked about their perceptions of the overemphasis on mandatory testing, 28% (13 respondents) indicated that they were extremely concerned, and 42% (19 respondents) were very concerned. 24% (11 respondents) noted that they were somewhat concerned, and only 4% (2 respondents) were not concerned at all.

Figure 10



Teachers' perceptions of school safety and gun violence are depicted in Figure 11. In this survey, 31% (14 respondents) indicated they were extremely concerned, while 24% (11 respondents) were very concerned. 37% (17 respondents) checked that they were somewhat concerned, and 6% (3 respondents) were not concerned at all.

Figure 11

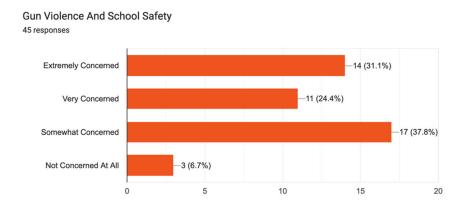
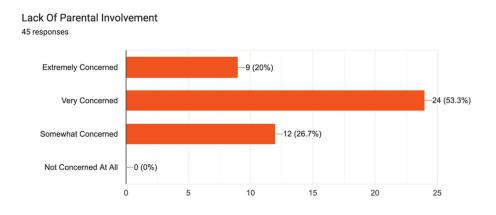


Figure 12 gathered information regarding teachers' perceptions of the lack of parental involvement. 20% (9 respondents) were extremely concerned, while 53% (24 respondents) indicated they were very concerned. There were 26 percent (12 respondents) who were somewhat concerned and zero percent (0 respondents) who were not concerned at all.

Figure 12



The impact of the COVID-19 pandemic is addressed in Figure 13. When asked about the impact of COVID-19 as a teaching challenge, 8% (4 respondents) believed it to be extremely concerning, while 36% (12 respondents) indicated they were very

concerned. 42% (19 respondents) were somewhat concerned, and 22% (10 respondents) were not concerned at all.

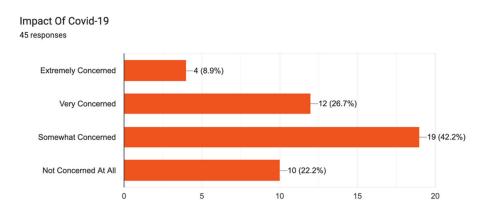




Figure 14 addresses the shortage of substitute teachers. Respondents were asked if they were experiencing more vacancies in their school than in prior years for any of the following positions, substitute teachers, support staff, classroom teachers, counselors, and administrators. Respondents were provided with three choices, yes, no, or I don't know. When asked if there was an increase in substitute teacher vacancies in their building, 91% (41 respondents) indicated yes, while only 8% (4 respondents) said they did not know. The number of responses selecting no was zero.

Figure 14

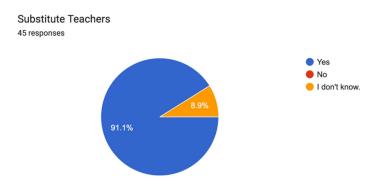
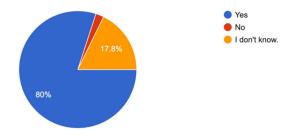


Figure 15 displays information about unfilled support staff positions. When asked if there was an increase in vacancies in the following support staff positions (Paraprofessionals, Bus Drivers, Custodians, Secretaries, Cafeteria Staff, etc.), the vast majority of teachers, or 80% (36 respondents) indicated. Only one respondent, or 2%, selected no, while 17% (8 respondents) were unsure.

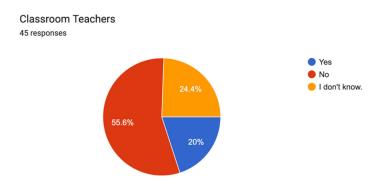
Figure 15

Support Staff (i.e., Paraprofessionals, Bus Drivers, Custodians, Secretaries, Cafeteria Staff, etc.) 45 responses



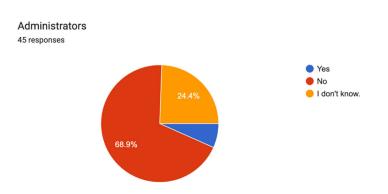
In Figure 16, survey respondents were asked if they thought there was an increase in classroom teacher vacancies, and only 20% (9 respondents) indicated yes. Conversely, 55% (25 respondents) felt that there was not an increase in classroom teacher vacancies. The percentage of respondents who were unsure (11 respondents) was 24%.

Figure 16



In Figure 17, current teachers had a similar perception when asked about a shortage of administrators in their schools. 6% (3 respondents) felt that there was a shortage of administrators, while 68% (31 respondents) answered that there was not a shortage of administrators. 24% (11 respondents) answered that they did not know.

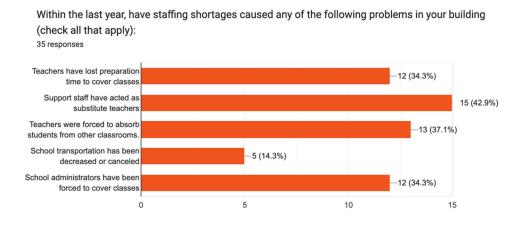




In Figure 18, teachers were asked if the staffing shortages had caused issues within the building. 34% (12 respondents) felt that teachers had lost preparation time to cover classes, while 42% (15 respondents) witnessed support staff acting as substitute teachers. 37% (13 respondents) answered that teachers were forced to absorb students from other classrooms. Only 14% (5 respondents) mentioned that school transportation

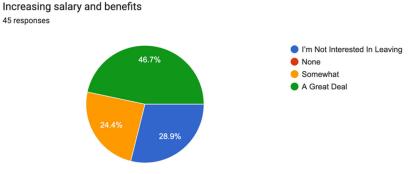
was either decreased or canceled. 34% (12 respondents) noted that school administration had been forced to cover classes in their buildings.





Teachers were asked if they thought increasing salary and benefits would help with the retention of educators in Figure 19. 46% (21 respondents) indicated that they were not interested in leaving teaching. There were zero teachers (0 respondents) who didn't think this would be helpful. 24% (11 respondents) thought this would be somewhat helpful, and 28% (13 respondents) thought it would help a great deal. **Figure 19**





In Figure 20, teachers were asked if they thought adding a significant bonus for completing another school year would help with the retention of teachers. 28% (13 respondents) indicated that they were not interested in leaving. Only one respondent indicated that they did not think this would help with teacher retention. 37% (17 respondents) thought it would help somewhat, and 28% (13 respondents) thought it would help a great deal.

Figure 20

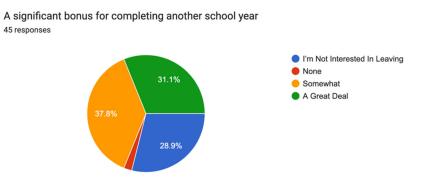


Figure 21 addresses the perceptions of staff regarding hiring more staff to reduce workload. When teachers were asked if hiring more staff to reduce workloads would help with the retention of teachers, 26% (12 respondents) answered that they were not interested in leaving teaching. 20% (9 respondents) felt that this would not be helpful. The majority of respondents, 33% (15 respondents), felt that hiring more staff would be somewhat helpful, while 20% (9 respondents) thought it would help a great deal.

Figure 21

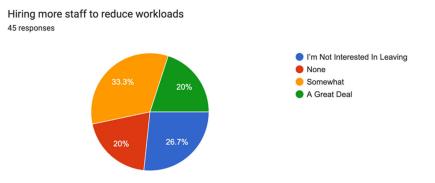


Figure 22 shows results of teachers' perceptions of hiring more staff to address the physical, social, and emotional needs of students. When asked about hiring more support staff to address the physical, social, and emotional needs of the students, 25% (11 respondents) indicated that they were not interested in leaving the teaching field. 11% (5 respondents) felt that this would not have an impact. 22% (11 respondents) noted that it would have some impact, while 40% (18 respondents) thought that the hiring of more support staff would help a great deal with the retention of teachers.

Figure 22

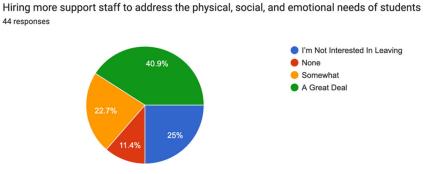
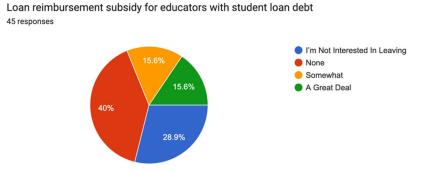


Figure 23 addresses loan reimbursement for educators with student loan debt. When asked if loan reimbursement subsidy for educators with student loan debt would be beneficial in the effort to retain teachers, 28% (13 respondents) answered that they were not interested in leaving the teaching profession. 40% (18 respondents) did not feel that this would have any impact on teacher retention. 15% (7 respondents) indicated that they believed there would be some impact, while an equal number of respondents (15%, seven respondents) believed this would help a great deal.

Figure 23



The perceptions of mentoring program for newly hired teachers is featured in Figure 24. When posed with the question of whether mentoring programs to support new teachers would be helpful in the retention of educators, 28% (13 respondents) indicated that they were not interested in leaving the teaching field. 31% (14 respondents) answered that they believed these programs would have no effect on teacher retention. 28% (13 respondents) thought there would be some impact, while 11% (5 respondents) noted that this would help a great deal.

Figure 24

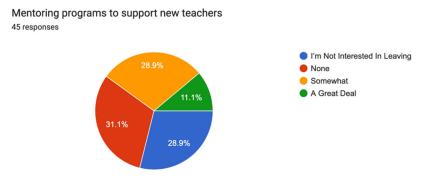
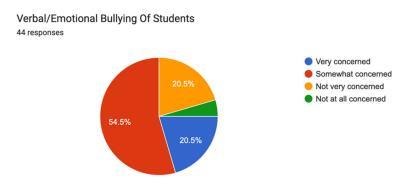


Figure 25 focuses on school safety being a factor in teacher recruitment and retention. Several questions were asked to current teachers at Richland School District about their level of concern regarding school safety. 20% (9 respondents) indicated that they are very concerned about verbal/emotional bullying of students. 54% (24 respondents) are somewhat concerned about this issue. 20% (9 respondents) were not very concerned, while 4% (2 respondents) were not concerned at all.

Figure 25



In Figure 26, most teachers who responded have some level of concern about rumors and threats of violence in schools. 11% (5 respondents) noted that they were very concerned, while 46% (21 respondents) indicated they were somewhat concerned. 28%

(13 respondents) answered that they were not very concerned, while 13% (6 respondents) were not at all concerned.

Figure 26

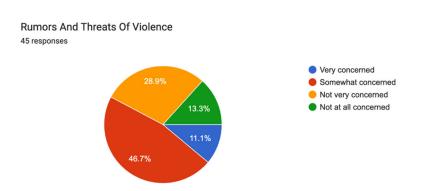
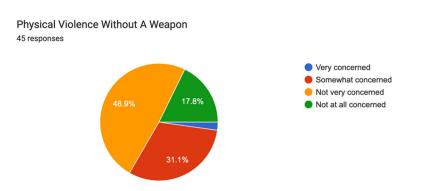


Figure 27 addresses physical violence without a weapon. Only a small percentage of respondents were very concerned about physical violence without a weapon in schools. Two percent (1 respondent) were very concerned, while 31% (14 respondents) were somewhat concerned. 48% (22 respondents) were not very concerned, while 17% (8 respondents) were not at all concerned.

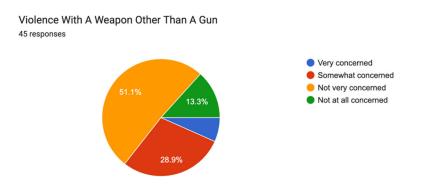




In Figure 28, a relatively similar number of teachers were concerned when asked about violence with a weapon other than a gun. 6% (3 respondents) indicated that they were very concerned, while 28% (13 respondents) showed they were somewhat concerned. The majority, 51% (23 respondents), were not very concerned, while 13% (6

respondents) were not at all concerned.

Figure 28



In Figure 29, about half of the teachers who responded indicated that they were concerned about violence with a gun at school. 15% (7 respondents) were very concerned, while 35% (16 respondents) were somewhat concerned. 37% (17 respondents) were not very concerned, while 11% (5 respondents) noted that they were not at all concerned.

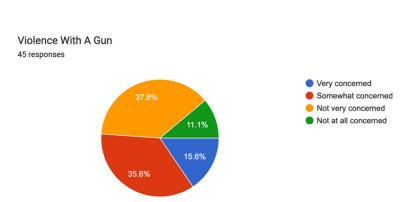


Figure 29

Of the 45 respondents who completed the survey, only 21 participants responded to the open-ended question, "Is there anything else you would like to add regarding the survey?". Some of the themes that emerged from the responses were:

- Administrative support for teachers is very important.
- The hiring of support staff in the district is needed to ensure quality aides and support staff are available, particularly in special education.
- A lot of these things mentioned in this survey are HUGE issues outside of my district, but we are a little sheltered from some of the great difficulties some teachers are facing around the country. Compared to other schools in our area, we have many resources, and most of our students have support at home.
- There has been a shift in the amount of parental support. I think many students require more emotional support now than ever.
- Our students are facing more issues than ever in their personal lives, and I feel like they really struggle to handle these issues that arise. I think that a large majority of them aren't receiving that support from home.

Local Superintendent Interview Results

Data were gathered from three local superintendents regarding their perceptions of the teacher shortage. These superintendents each had over 20 years of experience in education and have worked in multiple school districts during their careers. When asked about what trends can you talk about regarding the teacher recruitment and hiring process, the participants responded:

• "There is clearly an issue regarding the number of potential teaching candidates. Over the years, I have seen a drastic decline in the number of applications received for all positions. Additionally, there is also a certification issue regarding Elementary and Special Education. Finding the correctly certified candidate can be cumbersome. Additionally, looking at teachers acquiring a traditional master's degree can also be an issue when looking through the lens of Dual Enrollment. The local colleges and universities with teaching programs have seen fewer numbers. Recent trends show some growth, but nowhere near the earlier numbers of enrolled teacher candidates" (Superintendent 1, personal communication, April 11, 2023).

• "We certainly are having a more challenging time getting people to apply for jobs. My experience, as you mentioned, is unique because I came from a district where teacher salaries were not where they needed to be. So, we were not having people apply for the available jobs" (Superintendent 2, personal communication, April 19, 2023).

When asked, "Do you have a teacher shortage in your school district? What are some of the challenges that your district faces regarding the teacher shortage?", responses included:

- "We have been fortunate to be able to navigate these issues. Some certs
 (secondary Math, Chemistry, Tech Ed, etc. are really tough to fill right now. We
 have had to wait to hire and have spent a considerable amount of time looking for
 candidates. Several local peer schools have lower pay scales, and these
 candidates are eager to go to bigger districts. As far as finding long-term
 substitutes or substitutes at any level. This is an increasingly challenging task"
 (Superintendent 1, personal communication, April 11, 2023).
- "I think that depends on the curricular area. I am not certain about the specific sciences yet because we have not had any of those positions, but we are having

really no trouble with math, English, science, social studies, and elementary"

(Superintendent 2, personal communication, April 19, 2023).

When the Superintendents were asked, "If your district faces a teacher shortage, what steps will you take to remedy the situation?", responses included:

- "I have actively spoken to upcoming graduates at three local universities. We advertise in several mediums outside of the local newspaper. Ultimately, restructuring staff and/or altering programming may become an issue. Actively looking at creative or alternative solutions. We are looking at improving the mentorship program, customer service/school climate, and other comfort-related ideas" (Superintendent 1, personal communication, April 11, 2023).
- "We've expanded where we're advertising. We are using online resources such as social media, Penn Link, and Linked In" (Superintendent 2, personal communication, April 19, 2023).

When asked, "Have you noticed an increase in teachers leaving the district for jobs outside the classroom? If so, what are the reasons for these departures?", responses included:

- "Yes, a more flexible work schedule, working from home, and increased pay schedules appear to be trigger points. Recruitment from companies looking for educators to help recruit and train staff. The labor market in other sectors has increased the desire of outside companies" (Superintendent 1, personal communication, April 11, 2023).
- "We lost two teachers to the Commonwealth Charter Academy that opened up in Johnstown, and the reason the teacher explained to me was the ability to be home

with her children, young children. Additionally, it was about a significant pay raise (Superintendent 2, personal communication, April 19, 2023).

When Superintendents were asked, "Is the district facing difficulties finding employees to fill support positions such as paraprofessionals, bus drivers, secretaries, custodians, and cafeteria workers? If so, how is the district responding to these issues?" responses included:

- "We have been fortunate in this area as well. However, we are constantly advertising, hiring, and managing this employment sector as well. We take a similar approach to the teachers. This is an area where flexible schedules and workdays can come into play" (Superintendent 1, personal communication, April 11, 2023).
- "Yeah, this is the one that is really destroying us. We have several open positions. This current contract that was signed and is good through 2026 includes all our cafeteria paraprofessionals, custodians, cleaners, and secretaries that are all in one contract" (Superintendent 2, personal communication, April 19, 2023).

When Superintendents were asked, "Is there anything else you'd like to discuss regarding the questions today?", responses included:

• "This has been an ongoing issue for the past several years. Many of the concerns will focus on using available resources to rectify these issues. Yes, the financials of the issue need to be addressed, yet schools are pressed to be more efficient with their operational budgets. Some of the issues, such as the work from home and flexible schedule requests, are problematic when looking at the traditional school

day and school need" (Superintendent 1, personal communication, April 11, 2023).

Local School Counselor Interview Results

The data was collected from three school counselors at local high schools about their conversations with high school seniors entering college to become teachers. It is important to note that each of these counselors has a minimum of 15 years of experience in the field of education. Participants were asked about their conversations with students regarding their desire to attend college for education or concerns about entering the education field. Respondents answered with the following:

• "The number of students who have decided to enter the education field has varied yearly in our district. Still, the district usually averages around 2-4 students per year who decide to pursue a degree in education after high school. Students who connect with the decision tend to share that they love a subject area because a teacher, teaching style, or family member has inspired them to teach Other students have community experiences (working at a daycare, lifeguarding at the pool, or teaching Sunday school at church) and within their homes that encourage the spark. Usually, students light up when they talk about it; for many, it has been what they wanted to do for years. During those conversations, we discuss shadowing, especially in different grades, to pinpoint and confirm their interest area. We discuss marketability and creating platforms where they are dualcertified. We also talk about, as I do with all my students, in any career, the wonderful aspects of the career as well as the challenging aspects. As a counselor, it is not my job to share my personal thoughts on any profession, as

that is not purposeful or appropriate in my discussion with the student. My job is to help the student identify his/her strengths and help connect him/her with every opportunity to solidify their choice. We need great teachers, and I am hopeful some will come from our district someday" (Counselor 1, personal communication, June 26, 2023).

- "So, I have, specifically this year, some students who are on the fence between being educators or doing something else. And so those sorts of things have come up in student interviews this year. Students say they are worried about supporting a family if they do not have a husband. They are worried about college debt coming out and trying to balance it all. Those questions come up when students are trying to figure out if they want to go into the teaching field (Counselor 2, personal communication, April 13, 2023).
- "We've had a lot of students that have gone back into teaching. And you know what? The athletes go back to being teachers because they've had that positive mentor in their lives, and they want to be that positive influence on others" (Counselor 3, personal communication, April 21, 2023).

Teachers Who Have Left the Traditional Classroom Interview Results

Interviews were conducted with three teachers who have left the traditional classroom for other opportunities. The participants' experiences varied as some were teachers for less than five years while others were in the classroom for over 20 years. There were male and female participants and teachers from the elementary and secondary teaching environments. Participants were asked multiple questions about their unique circumstances of leaving the classroom.

When asked what their motivations were for entering the teaching profession, respondents answered:

- "As one of the older siblings in a large family, I was always asked to help my younger siblings with homework and studying. This was something that came naturally to me, and I enjoyed helping others" (Former Classroom Teacher 1, personal communication, June 26, 2023).
- "I enjoy kids. I enjoy working with them, helping them. I like seeing their progress over time. Just overall kid enjoyment" (Former Classroom Teacher 2, personal communication, May 26, 2023).
- "As a young child, I always wanted to be two things, a teacher and a mom" (Former Classroom Teacher 3, personal communication, July 17, 2023).
 When asked to talk to me a little bit about their experiences as a classroom teacher, respondents answered:
 - "I really enjoyed the classroom environment. I taught in the traditional classroom for over 20 years and really enjoyed most aspects of the job, including extracurricular activities such as coaching" (Former Classroom Teacher 1, personal communication, June 26, 2023).
 - "Up until the pandemic, I really enjoyed my time in the classroom" (Former Classroom Teacher 3, personal communication, July 17, 2023).

When asked what factors led to their leaving the profession, respondents answered:

• "Unfortunately, teaching in the traditional classroom did not provide some of the job flexibility that some other opportunities present. As a teacher in a cyber

charter school, I now have the flexibility to spend time with my family, with the bonus of receiving a pay raise".

- "100% Family. My son being with my son more raising him So being able to focus more on family" (Former Classroom Teacher 2, personal communication, May 26, 2023).
- "There were multiple factors that led to my departure. Some of it was the difficulty of teaching during the height of the pandemic. I also was starting a family and wanted more flexibility with my schedule. Finally, other opportunities offer more financial rewards" (Former Classroom Teacher 3, personal communication, July 17, 2023).

Summary

Chapter IV of the research project focuses on presenting the analysis of data and results related to the identified research questions. The data includes responses from 45 Richland School District teachers, three local school counselors, three area school superintendents, and three former teachers who left the classroom. The goal is to address the challenges of teacher retention and gather insights for potential solutions. The chapter is divided into four main sections: Data Analysis, Results, Discussion, and Summary.

Data was collected through surveys administered to current teachers in the Richland School District. Demographic information was analyzed to understand participant responses better. Open-ended questions provided insights into teachers' perceptions of the teacher shortage. Statistical analysis was performed on survey responses to assess significance. The results of the Richland School District teacher survey are detailed.

Demographic breakdowns show teaching experience distribution. Job satisfaction rates are presented, indicating high levels of satisfaction. Future plans of teachers regarding their careers are highlighted. Concerns about teacher shortages, student behavioral issues, pay and benefits, safety, and more are discussed. Superintendent interviews reveal concerns about candidate numbers, certification issues, and recruitment strategies. Counselor interviews explore students' aspirations to become teachers and concerns about the education field. Former teachers' interviews provide insights into motivations for entering teaching and reasons for leaving.

The chapter concludes with a summary of the data analysis and results. The presented information provides valuable insights into teacher perceptions and challenges. This data can be used to support initiatives for retaining high-quality teachers within the Richland School District. The research project aims to address key issues affecting teacher recruitment and retention.

Chapter IV offers a comprehensive analysis of data collected from various sources, shedding light on the perceptions, concerns, and potential solutions related to teacher retention and recruitment challenges in the education system.

Chapter V

Conclusions and Recommendations

In the current era of teacher shortages, one of the biggest challenges our schools face is a shortage of educators. In the United States, throughout Pennsylvania and the region surrounding the Richland School District, there has been a dramatic decline in the number of individuals enrolling in teacher preparation programs. According to the Pennsylvania Department of Education, Emergency Permits, for the first time ever in Pennsylvania, outnumber Newly Certified Teachers (n.d.-a). In the time period "between the 2008-09 and the 2018-19 academic years, the number of people completing a teacher-education program declined by almost a third" (Will, 2022, para. 3).

There is an abundance of reasons for the shortage of highly qualified educators. Financially, young people face rising costs while educator compensation have been stagnant. It has been difficult to recruit and retain educators due to declining interest and the status of the teaching profession. The working conditions for teachers have become increasingly stressful with limited opportunities for advancement and career progression. Teachers often need ongoing support and professional development opportunities to stay motivated and effective in the classroom. Teachers may struggle to deal with changing education policies, test requirements, and other administrative burdens.

A high attrition rate of classroom staff harms the school climate, the quality of the classroom environment, and student learning experiences, all of which adversely affect students' future success. This study aimed to develop and implement research-based strategies to improve employee retention within Richland School District and other surrounding school districts in the region.

The research conducted throughout this study gathered perceptions of the teacher shortage from multiple perspectives, which included current teachers, high school counselors, school superintendents, and teachers who have left the classroom. It provided them with the opportunity to share their experiences and suggestions for improvement through this research study. A key goal of this project was to ensure that the Richland School District had the best possible chance of recruiting and retaining quality teachers.

Conclusions

After analyzing the quantitative and qualitative data collected during this research study, it can be concluded that Richland School District is facing a lesser shortage than other regional schools, schools throughout Pennsylvania, and nationally. During surveys and interviews, a common theme was that Richland School District was experiencing an increase in teacher shortage, but it was not as impactful as other schools. Below are conclusions for each of the three research questions.

Research Question #1

The first research question was, "What are some of the unique factors that discourage prospective teachers from considering K-12 teaching careers? Why are fewer high school students entering teacher preparation programs in college?" The analysis of the data collected from the surveys and interviews showed that several unique factors discourage prospective teachers from considering K-12 teaching careers. This information was derived from the surveys administered to teachers and interviews. These factors have contributed to the decline in high school students entering teacher preparation programs in college. One of the most significant deterrents is the relatively low pay for teachers compared to other professions that require similar levels of education. A lack of competitive salaries and financial challenges discourage many prospective teachers from entering the teaching profession. It is common for teachers to work long hours, both in and outside the classroom, grading papers, preparing lesson plans, and attending meetings. It is possible for some individuals to feel overwhelmed by the workload, causing them to consider careers with a better work-life balance.

Even though they play a vital role in shaping future generations, they may not always receive the level of respect and recognition they deserve. Potential teachers may be discouraged from pursuing a career in education due to negative perceptions of the profession. Standards-based testing can lead to an emphasis on test preparation rather than creative and effective teaching methods in many educational systems. Those who are passionate about teaching but feel constrained by rigid testing requirements may be discouraged by this shift in priorities.

The opportunities for career advancement and professional growth can be limited in some education systems. It may discourage ambitious individuals from entering the teaching profession due to the lack of clear pathways for advancement and recognition.

It can be challenging to manage a classroom full of students with varying needs and behaviors. Teachers may feel unprepared to handle disciplinary issues and maintain control in the classroom. The lack of administrative support and inadequate resources, such as teaching materials and technology, can make teaching more challenging and less attractive to prospective educators. When students are facing personal and academic challenges, teaching can be emotionally challenging. Some prospective teachers may be deterred from teaching due to the emotional strain of supporting and connecting with students.

Compared to other professions, teaching can appear less stable due to concerns about job security, especially during budget cuts. Teachers who feel bogged down by paperwork and administrative tasks, detracting from their classroom time, may become frustrated with the bureaucracy of some education systems.

These factors require systemic changes in the education system, including better compensation and professional development opportunities for teachers, and a greater emphasis on the value of the teaching profession. Encourage and support young students who are interested in teaching at an early age can also increase the number of people who enter teacher preparation programs in college.

Through analysis of the research, it was found that students in Richland High School have been continuing to enter college to study education and earn teaching degrees. Many members of the Class of 2018 and 2019 have recently completed their degrees and have applied for teaching positions, both locally and nationally. Furthermore, a number of students from the Classes of 2022 and 2023 indicate they will major in education in college. Despite the trend being down statewide and nationally, recent graduates of Richland School District seem not to be affected by it.

Research Question #2

The second research question of this study was, "Which factors contribute to the growing number of K-12 teachers leaving the classroom before retirement age?" The research showed that several factors contributed to the growing number of K-12 teachers leaving the classroom before reaching retirement age.

Teachers often earn relatively low salaries and receive limited benefits compared to other professions requiring similar levels of education and experience. Some educators may seek higher-paying jobs outside teaching due to this financial strain.

The teaching profession can be challenging, requiring long hours, lesson planning, grading, and dealing with administrative tasks and student behavior issues. Overwork and stress can cause burnout in teachers, affecting their physical and mental health. It may be difficult for teachers to feel supported by administrators and parents, or they may lack access to adequate resources and opportunities for professional development. It can be challenging for educators to thrive without support.

It can be stressful and detract from the joy of teaching when standardized testing is emphasized and pressure is placed on students to improve. It may seem that teachers are limited in their teaching methods and forced to "teach to the test."

It may be perceived that teacher evaluation systems are unfair or overly reliant on student test scores, which may negatively affect job satisfaction and retention. Because of strict mandates and policies, teachers may feel they have little control over their classroom environment and curriculum, resulting in frustration and dissatisfaction.

The school population is constantly changing, with increasing diversity and varying learning needs. Teachers may find it challenging to adapt to these changes and

effectively meet all students' needs. It is possible that teachers will reconsider their career choice if they perceive inadequate support from school administrations because of concerns about school safety and violence.

Educators may be discouraged from staying in the classroom long-term due to the lack of clear career paths. Since some teachers have transferrable skills and educational backgrounds, they may consider other employment options that offer better compensation, a better work-life balance, or a greater sense of job satisfaction.

Providing better support and incentives for teachers could help improve teacher retention rates and create a more stable and fulfilling teaching workforce. A multifaceted approach is required to effectively address the factors contributing to teachers leaving the classroom, which can be complex and interrelated.

Two of the teachers who were interviewed for this research project indicated that the overwhelming reason that they left the traditional classroom for other opportunities was that they were young mothers and wanted the opportunity to raise their children and not send them to daycare. They both indicated that they loved teaching and they may come back in future years once their children are older. Another interviewed teacher left the brick and mortar classroom to work in a cyber charter classroom environment. After over 20 years in the classroom, he left for an increase in compensation and the freedom to work at hours that fit his parental responsibilities. As part of the interviews for this research project, it was alarming how many teachers locally were leaving the brick and mortar classroom for a cyber charter environment.

Research Question #3

The third research question of this study was, "What short-term and long-term solutions can be provided to increase the number of available teacher candidates?" It is crucial to address teacher shortages and ensure the quality of education in the long run by increasing the number of available teacher candidates. The following are some short-term and long-term solutions.

Some short-term solutions include incentives and scholarships. Financial incentives, grants, and scholarships can be offered to encourage individuals to pursue teaching as a career. Loan forgiveness programs, tuition assistance, and stipends during teacher preparation programs can all be part of this.

Through targeted recruitment campaigns, you can promote the advantages and rewards of being a teacher by showcasing their benefits and rewards. Social media as well as educational fairs, community events, and other media can be used to contact potential candidates for these campaigns.

There is a growing interest in alternative certification programs. Provide alternative routes to teacher certification for individuals with degrees or relevant work experience. This will make entering the teaching profession easier for former career changers. By creating accelerated teacher preparation programs that provide intensive training to candidates with solid content knowledge but lacking formal education training, fast-track training programs can improve the problem. Schools can partner with colleges and universities to identify potential teacher candidates and encourage them to consider teaching as a career path. School presentations, workshops, and internships can all be used to accomplish this goal. Long-term solutions include teacher pipeline programs. Collaborate with schools, districts, and universities to develop comprehensive teacher pipeline programs. Through mentorship, internships, and early exposure to the teaching profession, these programs can nurture future teachers early.

Improved working conditions and salaries are essential. By improving working conditions, offering competitive salaries, and providing opportunities for professional advancement, we can enhance teacher retention and attraction. It is important to invest in ongoing professional development for teachers to attract candidates who value continuous learning and growth.

It is essential to cultivate a positive public perception. Highlighting the positive impact teachers have on society through public awareness campaigns and promoting the teaching profession as a rewarding career. Long-term solutions include encouraging and supporting the recruitment of teachers from diverse backgrounds to better represent the student population. In order to attract and prepare teacher candidates, collaborate with non-profit organizations that focus on education and teacher development.

Long-term solutions to the teacher shortage can be found through research and data-driven strategies. Utilize data to inform targeted strategies to increase the number of teacher candidates by continuously monitoring and analyzing teacher workforce trends.

To create an environment that fosters professional growth, attracts high-quality educators, and ultimately improves the quality of education they provide to their students, schools can combine short-term strategies to address immediate staffing needs with longterm strategies to build a robust and contented pool of teachers. Teachers' well-being and development is an integral part of a virtuous cycle, where improved education leads to greater opportunities for students and further enhances the school's appeal to prospective teachers.

Action Plan and Recommendations

Based on the findings of the surveys and interviews, the researcher suggests the following action plans. As a result of the suggested action plans, Richland School District should be able to minimize the impact of teacher shortages. Components of the action plans and corresponding recommendations include the following:

The Richland School District needs to improved recruitment strategies. This can be accomplished by collaborating with universities and colleges to establish strong partnerships for teacher preparation programs. The school district can offer incentives such as signing bonuses, loan forgiveness, or housing assistance to attract prospective teachers. To ensure representation and inclusivity in the school district, it would be beneficial to recruit from a diverse pool of candidates.

The school district should focus on teacher development and retention. The school district can provide professional development opportunities to enhance teachers' skills and keep them engaged in their profession. The district can work with current teachers to create mentorship programs where experienced teachers support and guide new educators. For teachers who want to take on leadership roles, the school can implement career advancement pathways, allowing teachers to take on leadership roles or specialized positions.

The school district should remain competitive with compensation and benefits by offering competitive salaries and benefits packages to attract and retain highly qualified

teachers. The school district should consider performance-based pay increases to reward teachers for exceptional work.

A supportive work environment is important for many school employees. The school district must foster a positive and supportive school culture that values and appreciates teachers' contributions. Building principals should address concerns about excessive workload and provide resources to alleviate stress for teachers.

When possible, flexible scheduling can be implemented and workload reduced. District administrators can explore options for flexible scheduling or part-time teaching positions to accommodate teachers' personal needs and preferences.

The school district can implement and utilize educational technology to streamline administrative tasks and reduce the burden on teachers. If technology is incorporated, it is imperative to invest in professional development to ensure teachers are proficient in using technology effectively.

The district should attempt to increase community engagement by collaborating with the community to create partnerships that enhance the learning environment and provide additional support for teachers.

The school district should invest and develop a "grow your own" initiative that identifies and supports promising local students who have the potential to become future teachers.

It is important that the school district launches an awareness campaign to highlight the rewards and impact of teaching as a career.

An Alternative certification program can be promoted within the district. One way to achieve this is by implementing alternative certification programs to attract individuals from diverse backgrounds who may not have followed traditional teaching pathways.

Addressing teacher attrition must be addressed. First and foremost, building principals should conduct exit interviews and surveys to understand the reasons behind teacher attrition and implement strategies to address them.

The school district leadership must advocate for education funding and policies. All stakeholders (School Board, Superintendent, Administration, Teachers, Students, Community, etc...) should encourage policymakers to invest in education and create policies that support teacher recruitment and retention.

Addressing a teacher shortage is a long-term process, and these action plans require collaboration between schools, districts, policymakers, and the community. By combining these strategies, schools can reduce the impact of the teacher shortage and ensure a stable and skilled teaching workforce in the future.

Fiscal Barriers

The financial implications of any organization are always a concern. In order for school districts to allocate resources effectively, they must make sound financial decisions. Most of the recommendations have a minimal impact or zero financial impact. However, the recommendation of offering competitive salaries and benefits packages to attract and retain highly qualified teachers can potentially be very costly. Richland School District is currently competitive with the surrounding districts regarding competitive salaries and benefits packages.

Further Research/Planning

This study has provided several recommendations to reduce the impact of the teacher shortage, but there are still many areas for future research. The following is a list of areas for future consideration:

- Teacher Preparation and Training: Determine the effectiveness of teacher preparation programs and professional development initiatives. Teachers' ongoing support needs should be examined, as well as how well these programs prepare them for success in the classroom.
- Recruitment Strategies: Conduct an analysis of the success of various teacher recruitment strategies, such as scholarships, loan forgiveness programs, and alternative ways to become a teacher. Identify the most effective recruitment approaches for attracting and retaining high-quality educators.
- Comparative Studies: Analyze teacher shortage strategies across regions, states, or countries to identify successful ones. Educators and policymakers can gain valuable insights from analyzing international best practices.
- Technology and Education: Investigate the role that technology plays in alleviating the teacher shortage. The integration of educational technology, such as online teaching platforms or artificial intelligence-based tutoring, can support teachers and expand educational opportunities.
- Teacher Burnout and Well-being: Examine teacher burnout and the impact it has on teacher shortages. Identify factors contributing to teacher burnout and explore interventions that might promote well-being.

As a result of conducting research in these areas, policymakers and education stakeholders can gain valuable insights into the complex issue of teacher shortages and develop evidence-based strategies to attract, retain, and support highly qualified teachers in the future.

Summary

Chapter V addresses the critical issue of teacher shortages in the Richland School District and surrounding regions. The chapter draws conclusions from the research conducted on the factors contributing to the shortage of educators and provides actionable recommendations to mitigate the shortage and improve teacher recruitment and retention.

There are significant challenges posed by teacher shortages in the current era, as this chapter acknowledges. It highlights the decline in enrollment in teacher preparation programs, particularly in the Pennsylvania region, and underscores the detrimental impact of high attrition rates on school climate and student learning experiences.

The study examines the shortage of qualified educators from multiple perspectives, including current teachers, school administrators, counselors, and former teachers who left the profession. The chapter concludes that while the Richland School District experiences a teacher shortage, it is relatively less severe compared to other schools in the region, Pennsylvania, and nationally.

The research identifies several unique factors that discourage individuals from pursuing K-12 teaching careers. These include relatively low pay, lack of respect and recognition, standards-based testing pressure, limited opportunities for career advancement, classroom management challenges, and emotional strain. The conclusions emphasize the need for systemic changes in education, better compensation, professional development opportunities, and early support for prospective teachers.

The chapter also concludes that despite a statewide and national trend of declining interest in teaching, Richland High School students continue to pursue education degrees, suggesting a positive outlook for addressing the shortage.

The chapter identifies areas for future research, including the effectiveness of teacher preparation programs, successful recruitment strategies, international best practices, technology's role in addressing shortages, teacher burnout and well-being, and interventions to promote well-being.

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APPENDICES

Appendix A

Survey Questions for Non-Tenured and Veteran Teachers

- 1. How long have you been a full-time teacher?
 - 1. 0-3 years
 - 2. 4-10 years
 - 3. 11-20 years
 - 4. 20-30 years
 - 5. 31 years or more
- 2. Are you an elementary or secondary school teacher?
 - 1. elementary school
 - 2. secondary school
- 3. Are you a non-tenured or tenured teacher?
 - 1. non-tenured
 - 2. tenured
- 4. Gender
 - 1. Male
 - 2. Female
- 5. Generally speaking, how satisfied are you overall with your job?
 - 1. very satisfied
 - 2. fairly satisfied
 - 3. somewhat satisfied
 - 4. not that satisfied

- 6. How satisfied are you overall with the difficulties facing educators today?
 - 1. very satisfied
 - 2. fairly satisfied
 - 3. somewhat satisfied
 - 4. not that satisfied
- 7. Over the next three to five years, do you expect to:
 - 1. Continue working in your current school/job
 - 2. Work in education but a different school or district
 - 3. Leave education for a different career
 - 4. Retire
- 8. Thinking about the various challenges confronting educators today, how concerned are you about each of the following where you work:

Extremely Concerned

Very Concerned

Somewhat Concerned

Not Concerned At All

- a. Shortages Of Teachers And Staff
- b. Student Behavioral Issues And Mental Health
- c. Teacher And Staff Pay And Benefits
- d. Verbal And Physical Attacks On Teachers
- e. Lack Of Public School Funding
- 9. Thinking about the challenges facing educators today, how concerned are you about each of the following where you work:

Extremely Concerned Very Concerned Somewhat Concerned Not Concerned At All

- a. Overemphasis On Standardized Testing
- b. Class Sizes And Caseloads
- c. Gun Violence And School Safety
 - d. Lack Of Parental Involvement
 - e. Impact Of Covid-19

10. Are you experiencing more vacancies in your building than usual for any of the following positions (YES/NO)?

- 1. Substitute Teachers
- Support Staff (i.e., Paraprofessionals, Bus Drivers, Custodians, Secretaries, Cafeteria Staff, etc.)
- 3. Teachers
- 4. Counselors, Therapists, and Social Workers
- 5. Administrators

11. Within the last year, have staffing shortages caused any of the following problems in your building (check all that apply):

- 1. Teachers have lost preparation time to cover classes
- 2. Support staff have acted as substitute teachers
- 3. Teachers were forced to absorb students from other classrooms.
- 4. School transportation has been decreased or canceled
- 5. School administrators have been forced to cover classes

12. Below are some recommendations to improve the retention of professional educators. For you, mark how much difference each would make in keeping you from leaving your position over the next 24 months?

I'm Not Interested In Leaving

None

Somewhat

A Great Deal

a. Increasing salary and benefits

b. A significant bonus for completing another school year

c. Hiring more staff to reduce workloads

d. Hiring more support staff to address the physical, social, and emotional needs of students

e. Loan reimbursement subsidy for educators with student loan debt

f. Mentoring programs to support new teachers

13. Regarding school safety, how concerned are you about the following where you work?

Very concerned

Somewhat concerned

Not very concerned

Not at all concerned

a. Verbal/Emotional Bullying Of Students

- b. Rumors And Threats Of Violence
- c. Physical Violence Without A Weapon

- d. Violence With A Weapon Other Than A Gun
- e. Violence With A Gun
- 14. Are you interested in participating in a follow-up interview in the future?
 - 1. yes
 - 2. no

Appendix B

Interview Questions for High School Counselors

- 1. How long have you been a full-time school counselor?
 - 1. 0-3 years
 - 2. 4-10 years
 - 3. 11-20 years
 - 4. 20-30 years
 - 5. 31 years or more
- 2. Are you a non-tenured or tenured school counselor?
 - 1. non-tenured
 - 2. tenured
- 3. Gender
 - 1. Male
 - 2. Female
- 4. What is your role in the Act 339 process at your school?
- 5. Explain your role in supporting college and career readiness at your school.
- 6. What is your experience working with high school students in preparation for choosing a college major? Can you elaborate on those conversations?
- 7. Have you talked with students about their desire to attend college for education or their concerns about entering the education field? Can you elaborate on those conversations?
- 8. Is there anything else you would like to discuss regarding the questions today?

Appendix C

Interview Questions for Teachers Who Have Left the Field of Teaching

- 1. How long did you work as a professional educator before leaving the field?
 - 1. 0-3 years
 - 2. 4-10 years
 - 3. 11-20 years
 - 4. 20-30 years
 - 5. 31 years or more
- 2. Were you an elementary or secondary teacher?
 - 1. elementary school
 - 2. secondary school
- 3. When leaving the education profession, were you a non-tenured or tenured teacher?
 - 1. non-tenured
 - 2. tenured
- 4. Gender
 - 1. Male
 - 2. Female
- 5. What were your motivations for entering the teaching profession?
- 6. Talk to me a little bit about your experiences as a classroom teacher.
- 7. What factors led to your leaving the profession?
 - 1. Lack of support staff
 - 2. Work/Personal life imbalance

- 3. Lack of administrative support
- 4. Changing programs
- 5. Student behavior
- 6. Parents
- 7. Covid concerns
- 8. Healthcare costs
- 9. Quality of life
- 10. Stress
- 11. Other
- 8. Is there anything else you would like to discuss regarding the questions today?

Appendix D

Interview Questions for Superintendents or their administrative designee

- 1. How long have you been an educator, including time as a teacher and school administrator?
 - 1. 0-3 years
 - 2. 4-10 years
 - 3. 11-20 years
 - 4. 21-30 years
 - 5. 31 years or more
- 2. Prior to your role as a Superintendent, were you an elementary or secondary

school administrator?

- 1. elementary school
- 2. secondary school
- 3. K-12
- 4. Other
- 3. Gender
 - 1. Male
 - 2. Female
- 4. What trends can you talk about regarding the teacher recruitment and hiring process?
- 5. Do you have a teacher shortage in your school district? What are some of the challenges that your district faces in regard to the teacher shortage?

- 6. If your district faces a teacher shortage, what steps will you take to remedy the situation?
- 7. Have you noticed an increase in teachers leaving the district for jobs outside the classroom? If so, what are the reasons for these departures?
- 8. Is the district facing difficulties in finding employees to fill support positions such as paraprofessionals, bus drivers, secretaries, custodians, and cafeteria workers? If so, how is the district responding to these issues?
- 9. Is there anything else you would like to discuss regarding the questions today?

Appendix E

Faculty Member Consent Form



Dear Faculty Member,

As a teacher at the Richland School District, you are being asked to participate in a research study regarding the current teacher shortage and the difficulties of recruiting and retaining high-quality teaching candidates. Participation in this study will help the researcher learn more about how you perceive the teacher shortage situation.

What will I be asked to do if I participate in this study?

If you agree to participate in this study, you will be asked to complete one electronic survey questionnaire through Google Forms. The questionnaire will ask you about your perceptions of the teacher shortage and the difficulties that schools are experiencing with recruiting and retaining high-quality teachers. You will also have the opportunity for a follow-up interview if interested.

Where will this study take place?

The survey will be conducted via an online survey tool (Google Forms) using a secure website. For educators volunteering for follow-up interviews, the interview will occur in the teacher's classroom, researcher's office, or conference room.

How long will the study last?

The study is projected to last approximately 15 weeks, which includes a survey and follow-up interviews for those who volunteer. Total participation time will vary. The surveys may take up to 10 minutes, and each interview is expected to last 20-30 minutes.

What happens if I don't want to participate?

Participation is 100% voluntary. Teachers can choose whether they want to participate in the study or not. There will be no penalty if a teacher chooses not to participate.

Can I quit the study before it ends?

You can remove yourself from the study by notifying the researcher anytime. There will be no penalty if you choose to withdraw. The researcher will not question why you opted to withdraw.

What are the risks?

There are minimal risks associated with this study. The survey and interview questions may make you uncomfortable as some people prefer to avoid volunteering information or providing

feedback that could be perceived as unfavorable. However, participants are reminded that they are not required to answer any questions they choose. Participants can also stop their participation at any time.

How will I benefit from participating?

If you decide to be in this study, you will assist the researcher in better understanding the current teacher shortage. The results of this study may lead to more positive results in recruiting and retaining high-quality teachers.

Will my responses be kept confidential and private?

Yes, the survey data and interview responses collected from you will be kept confidential, which indicates only the researcher will see or have access to it. Your survey responses will be anonymous. Names will not be documented in the report. Data will be stored on a secure server, password-protected, and/or stored in a locked office.

Who do I contact if I have questions about this study?

If you have inquiries concerning this study, please contact the researcher, Brandon Bailey, at bai6984@pennwest.edu or via phone at 814-248-5093. If you would like to speak with someone other than the researcher, please contact Dr. Todd Keruskin, Adjunct Professor at Pennsylvania Western University, at keruskin@pennwest.edu.

I have read this consent form. Any questions I have about participating in this study have been answered. I agree to participate in this study and understand that participating is voluntary. I do not have to participate if I do not wish to do so. I can stop at any time for any reason. If I choose to stop, no one will ask me why.

By signing below, I agree to participate in this study. By doing so, I am indicating that I have read this form and had my questions answered. I understand it is my choice to participate, and I can stop anytime.

Signature:

Date:

Approved by the Pennsylvania Western University Institutional Review Board. This approval is effective 08/01/22 and expires 08/01/23.

Appendix F

High School Counselor Consent Form



Dear Counselor,

As a high school counselor in the IU8 Region, you are being asked to participate in a research study regarding the current teacher shortage and the difficulties of recruiting and retaining high-quality teaching candidates. Your participation in this study will help the researcher learn more about how you perceive the teacher shortage situation and why high school seniors are not enrolling in universities for teaching training programs.

What will I be asked to do if I participate in this study?

If you agree to participate in this study, you will be asked to participate in a 20-30 minute interview regarding your perceptions of the current teacher shortage situation. Specifically, you will be asked your perceptions of why high school seniors are not enrolling in universities for teaching training programs.

Where will this study take place?

The interviews will occur in the counselor's office, researcher's office, or conference room.

How long will the study last?

The study is projected to last approximately 15 weeks, which includes a survey and follow-up interviews. Total participation time will vary. Each interview is expected to last 20-30 minutes.

What happens if I don't want to participate?

Participation is 100% voluntary. Counselors can choose whether they want to participate in the study or not. There will be no penalty if a counselor chooses not to participate.

Can I quit the study before it ends?

You can remove yourself from the study by notifying the researcher at any time. There will be no penalty if you choose to withdraw. The researcher will not question why you opted to withdraw.

What are the risks?

There are minimal risks associated with this study. The interview questions may make you feel uncomfortable as some people do not like to volunteer information or provide feedback that could be perceived as unfavorable. However, participants are reminded that they are not required to answer any questions they choose. Participants can also stop their participation at any time.

How will I benefit from participating?

If you decide to be in this study, you will assist the researcher in better understanding the current teacher shortage. The results of this study may lead to more positive results in recruiting and retaining high-quality teachers.

Will my responses be kept confidential and private?

Yes, the survey data and interview responses collected from you will be kept confidential, which indicates only the researcher will see or have access to it. Your survey responses will be anonymous. Names will not be documented in the report. Data will be stored on a secure server, password-protected, and/or stored in a locked office.

Who do I contact if I have questions about this study?

If you have inquiries concerning this study, please contact the researcher, Brandon Bailey, at bai6984@pennwest.edu or via phone at 814-248-5093. If you would like to speak with someone other than the researcher, please contact Dr. Todd Keruskin, Adjunct Professor at Pennsylvania Western University, at keruskin@pennwest.edu.

I have read this consent form. Any questions I have about participating in this study have been answered. I agree to participate in this study and understand that participating is voluntary. I do not have to participate if I do not wish to do so. I can stop at any time for any reason. If I choose to stop, no one will ask me why.

By signing below, I agree to participate in this study. By doing so, I am indicating that I have read this form and had my questions answered. I understand it is my choice to participate, and I can stop anytime.

Signature:

Date:

Approved by the Pennsylvania Western University Institutional Review Board. This approval is effective 08/01/22 and expires 08/01/23.

Appendix G

Faculty Member Consent Form



Dear Faculty Member,

As a teacher at the Richland School District, you are being asked to participate in a research study regarding the current teacher shortage and the difficulties of recruiting and retaining high-quality teaching candidates. Participation in this study will help the researcher learn more about how you perceive the teacher shortage situation.

What will I be asked to do if I participate in this study?

If you agree to participate in this study, you will be asked to complete one electronic survey questionnaire through Google Forms. The questionnaire will ask you about your perceptions of the teacher shortage and the difficulties that schools are experiencing with recruiting and retaining high-quality teachers. You will also have the opportunity for a follow-up interview if interested.

Where will this study take place?

The survey will be conducted via an online survey tool (Google Forms) using a secure website. For educators volunteering for follow-up interviews, the interview will occur in the teacher's classroom, researcher's office, or conference room.

How long will the study last?

The study is projected to last approximately 15 weeks, which includes a survey and follow-up interviews for those who volunteer. Total participation time will vary. The surveys may take up to 10 minutes, and each interview is expected to last 20-30 minutes.

What happens if I don't want to participate?

Participation is 100% voluntary. Teachers can choose whether they want to participate in the study or not. There will be no penalty if a teacher chooses not to participate.

Can I quit the study before it ends?

You can remove yourself from the study by notifying the researcher anytime. There will be no penalty if you choose to withdraw. The researcher will not question why you opted to withdraw.

What are the risks?

There are minimal risks associated with this study. The survey and interview questions may make you uncomfortable as some people prefer to avoid volunteering information or providing

feedback that could be perceived as unfavorable. However, participants are reminded that they are not required to answer any questions they choose. Participants can also stop their participation at any time.

How will I benefit from participating?

If you decide to be in this study, you will assist the researcher in better understanding the current teacher shortage. The results of this study may lead to more positive results in recruiting and retaining high-quality teachers.

Will my responses be kept confidential and private?

Yes, the survey data and interview responses collected from you will be kept confidential, which indicates only the researcher will see or have access to it. Your survey responses will be anonymous. Names will not be documented in the report. Data will be stored on a secure server, password-protected, and/or stored in a locked office.

Who do I contact if I have questions about this study?

If you have inquiries concerning this study, please contact the researcher, Brandon Bailey, at bai6984@pennwest.edu or via phone at 814-248-5093. If you would like to speak with someone other than the researcher, please contact Dr. Todd Keruskin, Adjunct Professor at Pennsylvania Western University, at keruskin@pennwest.edu.

I have read this consent form. Any questions I have about participating in this study have been answered. I agree to participate in this study and understand that participating is voluntary. I do not have to participate if I do not wish to do so. I can stop at any time for any reason. If I choose to stop, no one will ask me why.

By signing below, I agree to participate in this study. By doing so, I am indicating that I have read this form and had my questions answered. I understand it is my choice to participate, and I can stop anytime.

Signature:

Date:

Approved by the Pennsylvania Western University Institutional Review Board. This approval is effective 08/01/22 and expires 08/01/23.

Appendix H

Superintendent or Designee Consent Form



Dear School Leader,

As a school leader within the IU8 Region, you are being asked to participate in a research study regarding the current teacher shortage and the difficulties of recruiting and retaining high-quality teaching candidates. Your participation in this study will help the researcher learn more about how you perceive the teacher shortage situation and why teachers are leaving the classroom in record numbers.

What will I be asked to do if I participate in this study?

If you agree to participate in this study, you will be asked to participate in a 20-30 minute interview regarding your perceptions of the current teacher shortage situation.

Where will this study take place?

The interviews will occur in the researcher's office, via Zoom, or in a school conference room.

How long will the study last?

The study is projected to last approximately 15 weeks, which includes a survey and follow-up interviews. Total participation time will vary. Each interview is expected to last 20-30 minutes.

What happens if I don't want to participate?

Participation is 100% voluntary.

Can I quit the study before it ends?

You can remove yourself from the study by notifying the researcher at any time. There will be no penalty if you choose to withdraw. The researcher will not question why you opted to withdraw.

What are the risks?

There are minimal risks associated with this study. The interview questions may make you feel uncomfortable as some people do not like to volunteer information or provide feedback that could be perceived as unfavorable. However, participants are reminded that they are not required to answer any questions they choose. Participants can also stop their participation at any time.

How will I benefit from participating?

If you decide to be in this study, you will assist the researcher in better understanding the current teacher shortage. The results of this study may lead to more positive results in recruiting and retaining high-quality teachers.

Will my responses be kept confidential and private?

Yes, the survey data and interview responses collected from you will be kept confidential, which indicates only the researcher will see or have access to it. Your survey responses will be anonymous. Names will not be documented in the report. Data will be stored on a secure server, password-protected, and/or stored in a locked office.

Who do I contact if I have questions about this study?

If you have inquiries concerning this study, please contact the researcher, Brandon Bailey, at bai6984@pennwest.edu or via phone at 814-248-5093. If you would like to speak with someone other than the researcher, please contact Dr. Todd Keruskin, Adjunct Professor at Pennsylvania Western University, at keruskin@pennwest.edu.

I have read this consent form. Any questions I have about participating in this study have been answered. I agree to participate in this study and understand that participating is voluntary. I do not have to participate if I do not wish to do so. I can stop at any time for any reason. If I choose to stop, no one will ask me why.

By signing below, I agree to participate in this study. By doing so, I am indicating that I have read this form and had my questions answered. I understand it is my choice to participate, and I can stop anytime.

Signature:

Date:

Approved by the Pennsylvania Western University Institutional Review Board. This approval is effective 08/01/22 and expires 08/01/23.

Appendix I

IRB Approval



Institutional Review Board 250 University Avenue California, PA 15419 <u>instreviewboard@calu.edu</u> Melissa Sovak, Ph.D.

Dear Brandon,

Please consider this email as official notification that your proposal titled "An Analysis of the Teacher Shortage From Multiple Perspectives: Why is it Difficult to Recruit and Retain High-Quality Teaching Candidates" (Proposal #PW22-074) has been approved by the Pennsylvania Western University Institutional Review Board as submitted.

The effective date of approval is 03/01/2023 and the expiration date is 02/29/2024. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

(1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)

(2) Any events that affect the safety or well-being of subjects

(3) Any modifications of your study or other responses that are necessitated by any events reported in (2).

(4) To continue your research beyond the approval expiration date of 02/29/2024, you must file additional information to be considered for continuing review. Please contact <u>instreviewboard@calu.edu</u>

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD. Chair, Institutional Review Board