Middle School Grow Your Own Teaching Program

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ABSTRACT

MIDDLE SCHOOL GROW YOUR OWN TEACHING PROGRAM

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Northern Illinois University, 2023
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This dissertation addresses the teacher shortage in the United States of America. The profession of education has struggled to find teachers to fill vacancies and it is being felt throughout the country. This is not just in the rural areas or areas of low socioeconomic status. Even high paying districts are feeling the squeeze. Many school districts are trying to combat this problem in different ways, especially Grow Your Own teaching programs. Many of these programs run by school districts are focused on high school students, although there has been a lack of information on the thoughts of middle school students. The methods that are used in this research were about middle school students and the expectancy value theory (EVT) about the teaching profession. Over fifteen hundred middle school students were surveyed to understand their thoughts on the profession of teaching including the barriers that they face. The results showed that many students have already made up their minds about a career in teaching. While many feel that they can do the career, it is not worth it to them. There are obvious spots of misconceptions that middle school students have about the profession of education. The conclusion of this research proves that there is a need for a middle school elective that would be an introduction to teaching.
MIDDLE SCHOOL GROW YOUR OWN TEACHING PROGRAM

BY
ANDREW VONDRAN

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A DISSERTATION OF PRACTICE SUBMITTED TO THE GRADUATE SCHOOL
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE
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AND FOUNDATIONS

Doctoral Director:
Benjamin Creed
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The first and easiest person to dedicate this to is Dr. Benjamin Creed. I was lucky enough to have Dr. Creed as a teacher for one of our classes. He was a great teacher who did an excellent job of explaining our project. I was very excited that he agreed to research and write this dissertation. I was fortunate to get to have meetings with him to work on this project. Without Dr. Creed sharing his wisdom, his leadership, and his patience, I would not be able to complete this.

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accomplish. My parents are the people that inspire me the most to always strive to accomplish more. They are the best role models anyone can have.

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Dr. Pilkington is currently the Principal at Hubble Middle School. He was very encouraging about me following in his footsteps in obtaining the Ed.D. Dr. Pilkington has been a wonderful leader to learn from and has allowed me to work on becoming a better educator. I am lucky to have worked with such a great leader but also a teacher and mentor.

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CHAPTER 1
INTRODUCTION

Education is important. That might be an understatement but we put so much emphasis on education that it seems strange that there is a teacher shortage. Teachers are laying the foundation for our future generations by helping mold their minds and help them achieve what they want. Unfortunately, there is a lack of people that are going into the field of education. If this trend continues, our education system will not be the same, and will have to adapt to overcome it.

Across the United States, there are almost 50,000 teacher vacancies (Balingit 2023). Illinois is not immune to this shortage as almost 80% of school districts reported having a shortage in the Fall of 2022. There are over 2,700 open teacher, support staff, and special education positions unfilled or filled with someone less than qualified for the position (Illinois Association of Regional Superintendents 2023).

When a teacher shortage comes up, there is always a question of where the teacher shortage is. What subjects need the most support? What is the greatest area of need for teachers? There is a reason why students are choosing to go into different career paths instead of becoming educators. There are assumptions that students have created for themselves before they have thought of a profession to pursue as a career.

School districts that are struggling with the teacher shortage would benefit from developing a Grow Your Own teaching program. Programs like these allow high school students
to learn about the profession of teaching and in some cases be able to shadow or even teach a lesson. This is a great start for districts that are struggling to fill vacancies that they have. Looking over the research there is a missing piece that has been overlooked and needs to be explored further.

To address this issue, a dissertation could explore the reasons for the lack of diversity in the teaching profession and propose strategies to increase minority participation in this field. The focus of this dissertation will be viewed from the lens of a middle school student. The research questions engaged within this dissertation are:

1. What are middle school students’ perceptions of the teaching profession?
   a. What are students' perceptions of whether they can become teachers. How does this differ by different student characteristics (e.g., grade, race/ethnicity, gender, etc.)?
   b. What are students' perceptions of whether they value becoming teachers? How does this differ by different student characteristics (e.g., grade, race/ethnicity, gender, etc.)?
   c. What are students' perceptions of the barriers to becoming a teacher? How does this differ by different student characteristics (e.g., grade, race/ethnicity, gender, etc.)?

2. What areas of teaching are our students interested in?

   In the review of the literature, I will explore the definition of teacher shortages, where there are teacher shortages, and what has been done to address the shortages. Also, I will be looking at why there are not more BIPOC students going into the field of teaching.
Structure of the Dissertation

This two-product dissertation consists of an empirical study, grounded in the literature, and the application of the study to the development of a middle school level component to a Grow Your Own teaching program. The first product includes a review of the current literature identifying what we know and need to know about teacher shortages in the United States of America. This sets up the empirical study of middle school students’ perspectives of the teaching profession. The second part of the dissertation uses the empirical results, and the literature reviewed, to contribute to the development of a Grow Your Own teaching program that is focused on students at the middle school level.

The literature review defines what a teacher shortage is. Then it looks at where teacher shortage exists in the United States. This is followed by a discussion on the different subject areas that are in a deficit of educators. Finally, we discuss the shortage of teachers and the lack of BIPOC teachers in those fields.

The empirical study looks at what our middle school students view about the career of teaching. The students were surveyed to see if they thought about becoming a teacher in the future. This was used with the expectancy value theory (EVT). The EVT component states do the students believe that they can become a teacher if they want to. Finally, there is a breakdown of the points to see if middle school students are interested in a particular subject to teach or to teach at a certain level.

The final product of the dissertation is a Grow Your Own Teachers model that is focused on middle school students (Appendix A). Community Unit School District 200 already has a teacher preparation program that is in place in the high school (Appendix B). This program will
be extended down to the middle school. The middle school students have the opportunity to enroll in an elective course that will help them understand what a career in education can be. The District has been looking to continue the stable, quality teacher force that it has but to also make sure that the workforce reflects the diversity and needs of District 200.

Purpose and Significance

The purpose of this dissertation is to explore avenues on how to solve the teacher shortage crisis while looking at a potential resource that has been overlooked. Middle school students are a group of people who are starting to think about what they would like to do for a career. Students might not have explored the option of becoming a teacher. This could be a stepping stone for students to get involved earlier than they previously thought. Furthermore, when looking at the population of students in the schools, BIPOC students are grossly underrepresented in the classroom teachers. More students targeted from underrepresented groups could be a dramatic change for the future teacher population.

Theoretical Framework

Expectancy value theory is a way to understand student decision-making. This will be applied to the decision to become a teacher/educator. Students at the middle school level sometimes make assumptions about different careers from their observations. EVT is an educational psych theory designed to help understand the choices that students make. There are reasons why some students do not want to become teachers or that they do want to become teachers. Different students perceive different barriers that they must overcome to achieve their career choice.
Definition of Key Terminology

EVT: is a theory of motivation that describes the relationship between a student’s expectancy for success at a task or the achievement of a goal in relation to the value of task completion or goal attainment.

Expectancy: how confident an individual is in his or her ability to succeed in a task.

Value: how important, useful, or enjoyable the individual perceives the task.

Cost: time and opportunities the student gives up for the task.

Grow Your Own: Recruit and train teachers from within communities to bring racial, ethnic, and cultural diversity and skills into schools.

BIPOC: Black, indigenous, and people of color.
Teacher Shortages and their Impact on Education Systems

As one searches “teacher shortage” pages of Google hits plague the screen. “Teacher shortage” has become a buzzword to describe the staggering and growing reality of a lack of qualified teachers. Teacher shortages exist when the number of teachers demanded exceeds the number of teachers willing to supply their labor at the current wage (Sanderson, 2022). While the working definition narrowly describes it through the lens of teacher production about the demand according to population predictions, that definition does not encompass how the word “teacher shortage” feels on the ground in our pre-K-12 education system. This is at best, a simple summary of what the teacher shortage looks like in the field.

Teacher supply and demand is in a critical moment in our country, with some areas of the country suffering more than others, and some certification areas being more difficult to obtain than others. We must also consider teachers leaving the field, student-to-teacher ratios, inability to attract teachers to certain school districts based on geographic location/inequitable pay/high needs, and lack of teachers certified to work with our most vulnerable populations.

Ten years ago, in Community Unit District 200, when a teaching position was posted, there were over 80 applicants for a position. Five years ago, there would be 30 to 40 applicants. During the past year of hiring, schools have noticed that they only have one or two applicants for some positions. Other districts have noticed this as well. According to a report from the Illinois
Association of Regional Superintendents of Schools (2023) the 2022 – 2023 school year saw that 79% of school districts indicated that they had a shortage of teachers for the Fall of 2022. There were 2,728 open teacher, support staff, and special education positions unfilled or filled with someone less than qualified for the position. This problem is felt nationwide. At the start of the 2022 – 2023 school year, there were 49,000 vacancies in the United States of America. That is up 35% from the previous year’s report which had 36,500 vacancies (Balingit 2023). The problem is here and it is affecting all schools.

While the teacher shortage is currently gaining national attention, the concern is not new. Certain certification areas have been reporting shortages as of the 1960s, including special education. In 1983, “A Nation at Risk” report brought this discussion to the public eye, and in the 1990s many school districts struggled to fill classrooms with appropriately qualified teachers, especially for the most vulnerable populations, including special education and multilingual learners, children that are gifted, and students that are deaf or hard of hearing. This continues to be the case in 2020-21, according to the U.S. Department of Education (Nguyen 2022). However, the list of shortage areas has grown, adding the following as common areas of shortage: elementary education, general science, 6-12 language arts, world languages, mathematics, art and music, at-risk pre-K, and career and technical education (CTE).

Although early education is often considered separate from K-12 compulsory education, it should be noted that all states that offer Universal Preschool, meaning a configuration of free preschool for all four-year-olds in their state, currently have early childhood educators also listed as a high-need area by the department of education (U.S. Department of Education, 2021). This shortage list does not even begin to describe the critical need in early education because it does not account for community-based early childhood educators, who are also bachelor-degree
earning education majors. When you factor in community-based early childhood teachers, including those needed for Head Start programs, it is estimated through data collected by the National Association for the Education of Young Children (NAEYC) that approximately 80% of current community-based programs cannot serve the maximum capacity of children in their center because they do not have enough teachers (Tate, 2021).

There have been many contributing factors to the teacher shortages such as teacher attrition, the COVID-19 pandemic, the allocation of teachers, and the teaching licenses and certification or lack thereof. Each of these factors has put a different strain on the problem and will be discussed further. Once the obstacles are defined, this project plans to explore different solutions to teach shortages with a particular focus on GYO programs and how they can address some of the obstacles. The literature will discuss what GYO is, what we know about GYO, and how GYO can be expanded.

Although the teacher shortage is nationwide, even, worldwide, the exact location and demographics of the school district or building, significantly define teacher shortage. Factors such as equitable and fair compensation, working conditions, benefits, and levels of secondary trauma all come into play when considering the wide variances of teacher shortages across the United States.

A shortage of teachers harms students, teachers, and the public education system as a whole. Lack of sufficient qualified teachers and staff instability threaten students’ ability to learn and reduce teachers’ effectiveness. High teacher turnover consumes economic resources in school districts and across other state funded programs that could be deployed in other high impact service areas. The teacher shortage makes it more difficult to build a solid reputation for teaching and to professionalize it, which further contributes to perpetuating the shortage.
Although teacher shortage areas and severity vary by state, and even regions within states, there are common themes that emerge on the reasons for the expanding teacher shortage. According to Sutcher et al. (2019), most teachers leave the field for the following reasons: funding allocation formulas, salary, teaching and working conditions, licensure policies, and concentration of the overall population. A recent op-ed by Weaver and Ndiaye (2021) also presented themes in common with Sutcher et al.’s study but also revealed that a significant number of teachers who leave the field left due to mounting expectations, lack of planning and collaboration time, as well as lack of autonomy.

**Teacher Attrition**

A less common theme in reasons for teacher shortages is the attrition of educators with specified skill sets, such as speech and language therapy, occupational therapy, data analysis, and mental health qualifications, to the private sector and/or health arena (Sutcher et al., 2019: U.S. Bureau of Labor Statistics, 2022). The most common reasons found across everyday news outlets and teacher blogs also mirror themes found by Sutcher et al. Approximately 55% of former teachers have poor working conditions as a primary reason for them leaving the profession. Unreasonable out-of-classroom expectations, poor student motivation and discipline, paperwork, lack of stakeholder support, and inadequate resources, facilities, and equipment are specific examples of the working conditions that had teachers leaving the teaching profession (Gist, 2021; Jotkoff, 2022). Research also indicates that personal characteristics, educational preparation, the initial commitment to teaching, quality of the first teaching experience, external influences, and the levels of social/professional integration into the education profession may influence career satisfaction among teachers, as well as their resilience to continue long-term in
the field (Kutsyuruba et al., 2019). Researchers also determined that adequate educational training results in increased retention rates (Ingersoll, 2014).

Within systems, there needs to be increased pay or additional benefits for teachers working within our neediest and most trauma-surrounded educational environments, which are oftentimes where systems place inexperienced and BIPOC educators. From accrediting and evaluating systems, they need human resources offices that welcome them with anti-racist practices, diverse voices as parts of accreditation and training systems, recognition for international education degrees and programs, and peer evaluators and mentors that are also BIPOC educators (Carver-Thomas, 2018).

Common themes can be identified within the discourse on the teacher shortage including how it is characterized nation-wide and state-wide, implications of those shortages, and potential solutions. Research gaps continue to exist in the impact of professional development on teacher retention, increasing BIPOC teacher mentors, and reaching successful outcomes from Grow Your Own teacher programs, including the use of competency-based education. Common themes in attrition relate mostly to compensation, workload, and professional respect. The implications of the teacher shortage are most felt among children of color, multilingual learners, children with disabilities, and children living in financially insecure households. There is also a common theme coming to light that in-service teachers feel a loss of autonomy and creative freedom with added expectations of paperwork, testing, and managing challenging behaviors (Ramsey & Lowery, 2022)
**Allocation of Teacher**

The teacher shortage in the United States is creating a crisis across the country as schools are heading back to in person learning understaffed. Nationwide, the ratio of hires to job openings has hit a new low at .57 hires for every teacher job opening. According to the Bureau of Labor Statistics, there are approximately 560,000 fewer than there were before the pandemic (Jotkoff, 2022). The literature review seeks to explore the current teacher shortages and the correlating teacher pipeline initiatives across the country. Teacher staffing shortages are especially critical in specialized areas such as CTE, secondary math and science, early childhood, ESL/bilingual, and middle school endorsed (U.S. Department of Education, 2022). A congressional hearing occurred on May 25, 2022, to address the critical, nationwide shortage. It was addressed in the Labor, Health and Human Services, Education, and Related Agencies Subcommittee. Ideas presented included investment in the teacher pipeline, removal of barriers to attaining educational endorsements, as well as potential changes in funding structures to prioritize teacher salaries (Burke et al., 2022). It is important to understand the scope and dimensions of the teacher shortage. Advocates, policymakers, higher education, and PreK-12 administration must understand the root causes and possible ways to address opportunity gaps and barriers to effectively increase the diverse teacher education pipeline.

On a local level, Illinois also lists driver’s education and health/fitness as areas of shortage. Special education has been a field that has had a dire shortage. In the 2020 - 2021 academic year, 44 states indicated special education as a high need area across disability types, even offering tuition reimbursement to attract teachers to and keep teachers in the field (Kelly 2020). This is concerning when we consider the context and history of teacher shortages. Five
years ago, outside of those studying trends in teacher education enrollment and those serving valiantly in our most vulnerable school districts where hiring teachers is never easy, most people would not have imagined elementary education is an area of high need, with plentiful candidates in most locales across the country, however, that endorsement area is now on the list in the state of Illinois (U.S. Department of Education, 2021).

Given the continued focus of state legislatures (Illinois State Board of Education, n.d.) and the federal government (White House, 2021) towards enacting universal preschool, early childhood teacher shortages are on the verge of growing significantly in contexts where universal pre-K is not yet in place.

There is evidence to support that some districts are fortunate to have larger supplies of teachers to choose from, while others sit in devastating teacher shortages. Some will say that there is not a teacher shortage but instead, there are staffing deficiencies in certain geographical locations. Sutcher et al. (2019) reviewed the sources of and potential solutions to teacher shortages in the United States. It describes the sources of current and projected increases in teacher demand relative to enrollments, shifts in pupil-teacher ratios, and attrition. It places these about recent declines in teacher supply and evaluates evidence of shortages in fields like mathematics, science, special education, and educators for English learners. It also relates the shortages to certain demographics and geographic locations. The study analyzed national databases through 2016 and it predicted an estimated annual teacher shortage of approximately 112,000 teachers in 2017-2019 and over 109,000 educators who would not hold the correct certifications for their teaching positions in the U.S. in 2017. The study predicted that teacher shortages will continue to grow over the next decade (Sutcher et al., 2019).
When shortages across geographic regions and demographic make-ups were analyzed within the study, certain themes came to light. Teachers will travel within a reasonable distance to teach for districts with more attractive rates of pay and benefits packages, with approximately 25% of teachers crossing state lines from their homes to teach (Barnum, 2021). This is a geographic issue for some states that are larger than others and areas that are close to other states’ borders. Certification is also difficult for teachers as many states do not offer reciprocity for licenses (Barnum, 2021). Teachers will travel to work in districts perceived to be more resourced and have less difficult teaching scenarios. Schools serving high percentages of financially insecure and culturally diverse families and students tend to have the most intense teacher shortages regardless of state and tend to have the highest percentages of new staff and emergency certified staff.

California’s recent teacher shortages led to a tripling in the number of emergency and temporary permits in the last three years. In 2014–15, when demand outstripped supply by more than 25%, fully 7,700, or just over a third of the credentials and permits issued that year, went to teachers who were not fully prepared for their teaching assignments. The greatest increase was in permits issued to individuals without preparation who were not even in an internship pathway that would support their training. Permits to underprepared teachers were most plentiful in special education, mathematics, and science, and schools serving concentrations of low-income and minority students. California’s recent teacher shortages, with high concentrations in urban and rural low-income areas, led to a tripling in the number of emergency and temporary permits in the last three years. At this time, approximately 83% of classes are taught by certified teachers, with Los Angeles public schools showing the highest disparities (Hong & Yee, 2022).
Rural, lower paying school districts with less school community pool to draw from also show significant understaffing and underqualified staffing concerns across the nation.

Another factor that contributes to teacher shortages is that teachers do not move around the country. An analysis discovered that a small percentage of applicants for teaching positions across the country were from out of state (Sutcher, 2019). It was around only a quarter of the applications were from out of state. States prepare their teachers for the state in which they are located. Each state has their specific credentials while they are preparing their teacher candidates. To go to a different state to teach is accompanied by that state’s specific guidelines. Unfortunately for teachers, no license allows them to teach in every state. Another factor that keeps teachers from going across the country to different states is the fact that many teachers want to teach around where they grew up or went to school. Others will want to work in the school that the student taught at as well (Sutcher, 2019).

When it comes to first year teachers, prospective teachers appear to search very close to their hometowns and in regions that are similar to where they grew up (Boyd et al., 2005). There is also a strong correlation between teachers’ preference to teach something similar to what they grew up with such as suburban teacher candidates wanting to stay in a suburban setting. Many times, schools that are facing a teacher shortage need to reach out to candidates and have them choose a non-preferred location to teach (Boyd et al., 2005). This is another obstacle that stands in the way of the teacher shortage.

While there are vast differences between states in teacher shortages, the most noticeable gaps in qualified teachers are seen in schools that serve high percentages of students in poverty and minority students. As a nation, we tend to funnel our most vulnerable students into isolated schools, even within a given district. In addition, most schools serving high-minority, high-
poverty populations are not receiving equitable funding based on the way states tend to allocate resources (Johnson & Howley, 2015).

Most people think immediately of urban school districts regarding this shortage; however, recent studies indicate that while inequities exist within our urban school districts, rural school districts can be identified as our most underserved, and within that, it can be identified that at-risk, multilingual, and special education students are not adequately served in many rural schools due to inequitable funding structures and lack of qualified candidates applying to rural school districts. Demographic composition has been shown to correlate directly with school district finances (Johnson & Howley, 2015). It is evident that districts with mostly White residents, especially those in wealthier suburbs often receive more funding through tax dollars than districts in areas with more non-White residents. Although our overall country is highly diversified, rural areas of the country continue to be highly segregated, creating extreme disparities in high-poverty, high-minority school districts.

Also, contributing to the wide variance of teacher shortages by location is the availability of new teachers based on where they attend school, student teach, and live. States with significantly higher needs than others are offering sign-on bonuses, moving expenses, and other incentives to attract teacher candidates, but school districts in these states continue to see a high need for teachers. Some states and districts are also restricted in their ability to offer incentives like this due to collective bargaining agreements, and contracts, making that need even more difficult to meet (Barnum, 2021). There tends to be a desire for teachers to teach where they grew up or went to school, as well as where their student teaching took place, provided it was a positive experience. In states or demographics that do not have high numbers of teacher preparation programs available, this can be limiting to their teacher candidate pool. For example,
according to data from the U.S. Department of Education, North Dakota imports approximately 100% of its teachers from other states (U.S. Department of Education, 2021). Some teachers move for desired careers or other life related reasons, however, the inconsistencies among states in certification practices create barriers for people who choose to relocate outside of the state where they were certified (Sutcher et al., 2019).

Although monetary compensation is not the only factor contributing to the teacher shortage, a study by Buttner (2021), indicated that it is one of the top three reasons. Although teacher pay varies greatly from state to state and increases over time, the beginning salary for teachers without additional education beyond a bachelor’s degree is low in comparison to other quickly growing and expanding careers. Public school teachers earn approximately 20% less than non-teacher college graduates, and for men, due to the already existing inequities between compensation amongst males and females across most career fields, that percentage tends to be even higher. Although it seems that this solution could be solved by districts with lower pay structures raising their base salaries, most districts are already spending approximately 80% of their overall budget on salaries and benefits, meaning there is little room for adjustment (Allegretto & Mishel, 2019; Buttner, 2021).

Impact of COVID-19 on Teacher Shortages

In addition to the already consistent shortages in specialized areas of education, we are also now seeing an increased shortage due to the stressors of COVID-19. Even some of the most respected teachers are reporting exhaustion, lack of respect, low wages, high cost of student debt, and intense student needs as reasons they feel a loss of love for their profession. Substitute teachers are extremely difficult to find and it is leaving existing teachers and administrators
feeling overworked. The U.S. teacher attrition rate is approximately double that of other high-achieving countries, with average increases of 15-25% of teachers leaving the field in response to COVID-19 (Gibson, 2021; Zamarro et al., 2021). There is not enough research yet, including opportunities for long-term research to fully understand the scope of how COVID-19 will impact the teacher shortage, but it will need to be considered as part of the larger conversation as we continue the work of educator workforce development.

According to 2021-22 data from the U.S. Department of Education, two-thirds of school districts nationwide had teacher shortages before the pandemic, and they are currently reporting that those positions are more difficult to fill in the current post-pandemic teacher recruitment and retention climate. Specific positions are also more frequently reported as shortages: 48 states and Washington, DC, reported having shortages of special education teachers; 43 states and DC reported math teacher shortages; and 41 states and DC had shortages of science teachers. Bilingual/ESL education, early childhood, foreign language, and elementary education teachers are also making the list in several states, including Illinois, especially in high-poverty districts (U.S. Department of Education, 2022).

Illinois alone had over 1,703 unfilled teacher positions and over 1,200 unfilled paraprofessional positions, with the most crucial areas as follows: special education; elementary education, science; math; ESL/bilingual; middle school math, science, and language arts. When the shortage numbers are considered in the classroom context, the impact can be visualized. For example, considering elementary education, that shortage means there are over 3,000 students without a classroom teacher if classes are serving appropriate numbers of students. When considering the special education number, it means that over 7,000 students identified with a disability are likely not getting their needs met as outlined in their individual education plan.
(IEP), or special education teachers are being exploited to serve students far beyond the recommended caseloads and potentially being stripped of plan times, observation times, etc. which are all essential for individually designed instruction (Illinois State Board of Education, n.d.).

For multilingual learners, the shortage of EL/bilingual means that teacher caseloads are increased, potentially leading to more isolated service options and less authentic language practice opportunities for students. That shortage leaves approximately 450 students with less than recommended services (Illinois State Board of Education, n.d.).

Further evidence shows that general staffing challenges are likely similar to those affecting the current teacher labor markets in the wake of the COVID-19 pandemic. Results from Tennessee Educator Surveys show that the percentage of schools reporting any vacancies increased by approximately one-third between fall of 2019 and fall of 2021 (Edwards et al., 2022). The patterns suggest that there is wide variation in the severity of teacher shortages across schools exist in a labor market experiencing increased teacher vacancies, further illustrating that teacher shortages and surpluses likely coexist (Edwards et al., 2022).

Another issue related to teacher recruitment and even more key, retention magnified by the pandemic is workload and lack of support services in rural school districts. Non-teaching positions, which in rural schools are often pitifully underpaid, create a difficult working environment for teachers, affecting the overall school climate, which is a highly considered factor when teachers are choosing where to work. The lack of cafeteria workers, paraprofessionals, and safety support often creates additional duties for teachers that they would likely not need to do in a larger, more resourced district (Barnum, 2021).
A benefit of having high-quality teachers is equity in educational outcomes. When children attending schools considered high poverty receive instruction from consistent, highly qualified teachers, opportunity gaps are narrowed (Goldhaber, 2016). Increases in foundational literacy and math skills, graduation rates, and higher employability can be correlated to high quality teachers in schools that qualify under district and/or school-wide Title I, as indicated by the Coleman report.

The Coleman report compared teacher quality with other factors within a school when it comes to student attainment (Goldhaber, 2016). This is also backed up by research indicating that not only is teacher quality one of the most impactful interventions in eliminating opportunity gaps, but this also has the opposite effect and shows that the lack of high-quality teachers was damaging. Even when students were assigned high quality teachers in later grades, they were unable to compensate for the earlier gaps (Looney, 2011).

In addition, federal funding for students with identified service needs, such as EL/bilingual identification and at-risk identification comes as a flow-through into states to be distributed equitably. Many states choose to execute this distribution through a per qualified child funding structure. In smaller, rural school districts, this often means that while they get the same per child allocation of federal dollars, the number of students that qualify for specific services is much lower, meaning that the money allocated does not cover the cost of highly qualified staff and is often spent instead on ancillary services and support (Johnson & Howley, 2015).
While it doesn’t appear that is a “teacher shortage” necessarily when viewed from a supply and demand perspective, it does create a shortage of qualified staff needed to appropriately serve specific populations within a district. A result often seen is part-time positions or positions that serve more than one district through a collective service offering model/consortium. Positions such as these do not tend to be as attractive to teacher candidates, especially those in high-need across the country, including in higher-paying districts with more elite working conditions and resources (Kebede et al., 2021).

Career and Technical Education Shortages

Amongst other states, such as California, Nevada, and Wisconsin, Illinois is focused on career and technical education (CTE) as a primary initiative, alongside growing the overall workforce, with an intentional dedication to diversity in the workforce, matching the diverse student demographics in the state. The CTE teacher shortage, specifically, must be embraced through a holistic community-based, solutions-focused approach due to the nature of CTE existing beyond the classroom walls into the larger world of work. CTE stakeholders include educational experts school district leadership and teachers, but also include state officials, higher education program providers, and business representatives from a variety of CTE fields.

There is a positive movement toward addressing opportunity gaps in CTE as state and federal government priorities. According to a memo to congressional committees from the U.S. Government Accountability Office (GAO) on March 30, 2022, Congress authorized approximately 1.3 billion dollars to support CTE in secondary and post-secondary education spaces, with an emphasis on the importance of removing barriers and providing opportunities for students of all populations to gain skills and education that meets the needs of the labor markets.
Much of this funding is allocated through the 21st Century Act (U.S. Department of Education 2022).

In addition, the Perkins V funding strategies are being reviewed to assist in the challenges stakeholders face in supporting and elevating all populations within CTE. In addition to federal dollars, states can also use state local revenues to provide CTE program providers with incentives and support. Most providers interviewed stated that funds were primarily used to enhance CTE classrooms and labs (Baker, 2019). Reviewing the existing literature, expanding research of best fit practices in the field, and implementing what works can help to combat the opportunity gaps while also growing the teacher pipeline in CTE.

Another niche, but essential area of education that is currently gaining traction through the P21 framework and other CTE education initiatives. The P21 Frameworks was designed for 21st century learning. It was developed with inputs from educators, education experts, and business leaders. The goal was to define and illustrate the skills, knowledge, expertise, and support systems that students need to succeed in work, life, and citizenship (Borowski, 2019). The P21 initiative, Partnership for 21st Century Learning, along with other career and technical programs across the pre-K-12 educational system is working to develop a systematic approach to creating an innovative and critically engaged workforce, putting 21st century skills at the forefront of learning. Oftentimes the work includes school and community stakeholders, including education experts, business leaders, community non-profit organization leadership, and more (Battelle for Kids, 2019). Teams across the country are working to elevate career and technical education to fill gaping holes in our current workforce.

CTE has in the recent past and still in many areas had clear issues with tracking children with race and class divisions coming out loud and clear, with less attention financially and
systematically than should be allocated for such essential programming. No Child Left Behind only intensified this issue. With a stronger emphasis on math, language arts, and reading scores dictating the allocation of federal funds, CTE classrooms were the classrooms that usually were cut from the student’s schedule for more time for interventions (Chadd & Drage, 2006). Academic and CTE teachers must collaborate to engage new students, including diverse learners. CTE work should be embedded across the curriculum to truly address the gaps that currently exist instead of isolated off-shoot programs (Gonser, 2018). Not only are schools needing to adjust to the demands and requests of workforce development, but students are pushing back against the traditional track of pushing 95% of students into the four-year college track when many of the jobs they are interested in, fall in the areas of CTE. Students are seeking good-fit careers that value their skills and areas of enjoyment. This is a positive shift; however, education must be prepared to meet students where they are and help grow their CTE skills.

In addition to the work on the curriculum and program development side, states are putting initiatives in place to add infrastructure for career technical education as part of this overall movement. This includes Title Dollars allocation options, competitive grants, alternative certification options, and teacher education scholarships to attract candidates to CTE positions and licensure programs. Teacher development is one of the key areas to the successful launch and continuation of CTE programs at the high school level, as well as CTE into pre-K-8.

Solution to Teacher Shortages

Potential solutions that tend to be most successful include alternative certification pathways, Grow Your Own teacher programs, and dual credit/dual enrollment programs between high schools and higher education institutions. There is not a quick fix to the teacher shortage but
there are some ideas, policies, and programs that are trying to alleviate the stressors on the teacher shortage.

To start with, it is important to develop BIPOC teacher pipelines as well as maintaining BIPOC educators must be done to increase more inclusive environments where students can see themselves. This also must be done because we are missing out on quality teachers when they don’t feel welcomed to the field or when they leave due to non-inclusive systems. Multiple barriers are contributing to the BIPOC teacher shortage but they fall into basic categories: lack of access to pre-teacher programs, certification and system barriers, and the teaching and learning cultures they encounter once they become teachers (Carver-Thomas, 2018).

Education is a field that is led mostly by White middle-to-upper class males who are currently trying to attract and retain diverse teachers. Oftentimes this goal is enveloped in overall equity work and plans, often still led by those from sources of privilege. While the work may be authentic within those circles, it also lacks an authentic voice from those it is trying to serve in many cases. While the idea of equity work in a district includes improving the work culture for Black, indigenous, and people of color (BIPOC) educators, due to misguided leadership, the burden tends to fall on BIPOC educators. This, although well intentioned, is oppressive. This type of systematic pressure is one of the top reasons that BIPOC educators indicate they are considering leaving the field. Most people, including BIPOC educators, come to the field to empower learners, foster students’ creativity, and grow our future. For some BIPOC educators, there may also be a desire to help children experience a more globalized, equitable learning environment than they may not have experienced, however, the work should not all fall on them and they should not be tokenized within a system the system should not stifle their identities along with their students (Carver-Thomas, 2018; Loewus, 2021).
Diverse teachers in our current system are giving advice but their voice needs to be heard and implemented. While only about 20% of the educator workforce nationwide is non-White, with many areas as a lower percentage, it is estimated that 40-50% of our overall population qualifies as a BIPOC individual (Kaput, 2019). That means our educator workforce continues to be a mismatch to the overall student population that they serve.

BIPOC educators need allies across all three areas of concern. They need their White counterparts and leaders to reflect on their own biases, seek out and learn BIPOC stories but not use them for gain or attention, support humans over institutions even when it isn’t personally beneficial but more globally beneficial, and provide space when marginalized educators and professionals within the system need their own space. They need their BIPOC counterparts and leaders to keep telling stories, amplify the successes of one another, and work as a team to disrupt discriminatory practices collectively (Mahatmya et al., 2022).

From legislation, they need anti-racist policies in place and they need anti-equity legislation to be removed. These are concepts not necessarily steps, but we need to hear the message that BIPOC teachers need to feel financially, professionally, and legally supported within our educational systems to want to stay. They need to be valued but not tokenized or burdened above and beyond their White colleagues (Carver-Thomas, 2018).

White colleagues and leaders within the systems must do their internal work to help create a more inclusive culture (Weaver & Ndiaye, 2021). Without continued and urgent work, our school systems fall into settler colonialism patterns of pedagogy and behavior, and working within such a biased system is taxing for BIPOC educators. As BIPOC teachers work to enact transformational change within this biased system, they must have allies and support. They must be integrated into systems not operating as separate systems in the most impoverished schools.
They must be offered equitable opportunities to share their voices but with sensitivity to their feelings and position. Power structures within schools must be explored and modified to intentionally include racially and linguistically diverse parents, students, and educators. Structural supports, pedagogical approaches, and family partnership strategies need to be shifted to be more inclusive of all families and children. As BIPOC educators work within unchanged systems, they begin to feel disenfranchised and part of the -ism problems in our schools and communities. For BIPOC educators to become more comfortable, the rest of us have to be comfortable with getting uncomfortable so that we can create an inclusive teaching and learning culture and elevate shared leadership and collective anti-isms movements.

Although the culture shift of our system to a more equitable and inclusive system is one of the most important barrier-removing initiatives we can and must take, equity to access educational programs in community colleges and universities also has changes that are necessary to the recruitment of BIPOC educators into the pipeline. BIPOC educators and those who are interested in pursuing careers in education but feel they can’t go up against the systems in place indicate they feel exhausted by assessment and credentialing systems, they cannot afford the education necessary knowing that the pay will not be enough in the long-run to combat student loans and life expenses, and that bias practices within colleges and universities create barriers to successful completion of teacher education programs.

The guidance provided by the Learning Policy Institute in 2018, indicates that the following high-impact strategies could be implemented to turn this narrative around: supported teacher education programs and residencies through intentional mentoring, Grow Your Own programs with BIPOC voice and mentorship, adjustment of teacher licensure requirements considering competency-based systems, anti-bias initiatives with college and university
professionals, removal of remedial courses unless necessary, articulation agreements between community colleges and universities that are student centered, adaptation of teacher licensure exams to decrease bias and increase competency and performance based assessment options, and systems to support financial and family needs while in school, such as tuition assistance, childcare, food security support, and flexible employment partnerships/options (Carver-Thomas, 2018).

Once BIPOC teachers are in the pipeline and entering our schools, beyond culture, we must abolish systems of “isms” and create systems of inclusivity if we want BIPOC educators to stay in the field. Training must be done with leaders and human resource teams to change these practices. Principals need to be trained in culturally responsive evaluation and how to detect quality teaching that may look very different from their own experiences or who they would teach in their classrooms. As systems, we should consider partnering with local colleges and universities to bring coaching from diverse backgrounds into our teacher mentor programs. The need to shift the narrative that only children of color benefit from having diverse teachers when we know that all students, including White students, benefit. When we can shift this narrative, we will likely see less segregation of diverse teachers into only our most income and racially diverse schools, where there tends to be less support and less experienced leadership (Carver-Thomas, 2018).

While the overall teacher shortage is critical and urgent, the BIPOC teacher shortage is both of those things and shameful. We have the power as educator professionals and leaders to change it by being willing to reflect on and change our practices. We must explore our practices and pivot.
Illinois has developed initiatives to combat the barriers for BIPOC educators in our state financially, pedagogically, and through a systems lens. Although there is work to do and we continue to see barriers in our local schools, the charge has been set and work is happening. Financially, there are scholarships specifically available to BIPOC educators, one of the most accessible being the Minority Teachers of Illinois Scholarship Program. The state has developed culturally responsive teaching and leading standards adopted in March 2021 that are targeted at closing the opportunity gaps across our system for students and will be implemented immediately within teacher education prep programs. On a systems level, Title and other state and federally funded grants include diversity, equity, and inclusion work as part of the grant allocation requirements and memorandums of understanding. The equity in Title spending has been revised to allow districts opportunities to more effectively eliminate opportunity gaps, including more fluid use of Title I and Title III dollars to ensure equity for linguistically diverse students that also qualify for Title I services. Districts are also required to have equity plans in development and report equity-based data. Early Childhood has taken a huge step in the development of the Early Childhood Consortium for Equity Act, requiring the removal of barriers to a Professional Educators License. As a state education system, they have also allocated leadership opportunities at the state level specifically for guiding intentional equity work and plan development.

On the teacher recruitment side, Illinois is taking a multipronged approach, including opening more parameters within their Title dollar allocation guidelines and assisting in the quality use of Perkins dollars. In 2020, five million dollars was allocated specifically toward building a pipeline in career and technical education through the CTE Education Career Pathway State Grant (ISBE, 2020). They are also offering alternative certification options. There are
currently two different educator licenses with stipulations (ELS) endorsements in CTE. These CTE programs target the following occupations: agricultural education; business, marketing, and computer education; family and consumer sciences; health science technology; and technology and engineering education (ISBE, 2020). CTE programs approval for federal and state grant funding requires appropriate teacher licensure with either a) a professional educator license (PEL) endorsed in a CTE area, b) an educator license with stipulations (ELS) endorsed in CTE, or c) an educator license with stipulations for career and technical education provisional. (ELS-CTEP). The pathways allow for an easier route for existing teachers to add CTE education options, by passing the specific content area test and those outside of education in CTE fields to acquire a license with stipulations and then work to fulfill requirements while in a teaching residency. Alternative master programs (MATs) and fellowship programs are some of the most successful options for this kind of pathway (Jeffery & Zirkle, 2020). While CTE teacher shortages are a high priority due to workforce data and the need for a viable and quality workforce, the overall teacher shortage continues to be critical.

ESL/bilingual teachers have been on the high need list for the Department of Education for the last five years and continue to remain on that list. Finding native speakers that align with the languages of our multilingual learners served in our designated bilingual sites across the country is even more difficult than finding an ESL certified teacher. This urgency is echoed in Illinois, where approximately 10% of Kindergarteners are identified as multilingual learner.

Many states, including Illinois, have legislation in place that requires children who qualify to receive native language instruction. While this is the right and equitable thing to do, the teacher shortage for bilingual educators, especially native speakers, is truly a crisis in many districts, with administrators struggling to find enough teachers to be compliant, let alone offer
best-case services. A high burnout rate of bilingual teachers leaving positions of ESL/bilingual teachers to work in a different education area or a higher paying position outside of education is also a crucial problem to solve that contributes to the shortage (Amanti, 2019).

In the last ten years, there have been many programs developed to recruit bilingual teachers for ESL/bilingual/dual language programs, including partnerships with parent mentor programs and bilingual parent advisory councils to develop viable teacher pipelines to equitable support for multilingual learners. The federal government elevated this movement in 2015 with the White House’s Educational Excellence for Hispanics Initiative, which included a call to action for long-term capacity building for a bilingual educator pipeline. This initiative began in Texas but the commitment and action have spread (U.S. Department of Education, 2015).

One example that has been highly successful and continues to develop in Illinois is Chicago’s bilingual teacher residency program. With 40% of the teacher vacancies in Illinois falling within Chicago Public Schools (CPS), with an even more acute need for bilingual education, this pipeline was essential. While they are working to just have “enough” teachers, CPS is simultaneously working to address a racial and linguistic gap between the demographics of their teacher and student populations. They decided to approach the problem from both angles by developing a teacher residency program in partnership with National Louis University, with support from the National Center for Teacher Residencies. The program was designed to supply more bilingual teachers who will help children maintain their native language while also nurturing their English language development. By using bilingual data for the languages needed and by pulling from current paraeducators who indicated the dedication and desire to become teachers, they found a solution to not only get more certified bodies in classrooms but also help
fill the need for more linguistically and racially diverse teachers that more closely aligned to their student demographics.

The idea of recruiting linguistically and culturally diverse experiences into Illinois schools is not new, however, this is the most large-scale program targeted at racially and linguistically diverse teacher certification from within local school neighborhoods and it has been working. The idea was sparked partly in response to the success of the Logan Square Parent Mentor program developed out of the Logan Square neighborhood in Chicago which focuses on the social justice movement and preparing high quality partners for public elementary schools as volunteers and advocates (Garcia & Garza 2019). Logan Square currently serves over 200 school communities. Logan Square Parent Mentor Program is also currently in preliminary discussion with representatives from Western Illinois University’s Early Childhood Program and Northeastern University, Gateways, ISBE, and Latino Policy Forum, and representation from the Governor's Office of Early Childhood Early Learning Council to develop a pipeline into early childhood education, which has a critical shortage of teachers across the nation, that values their learned experiences and training as parent mentors as potential higher institution credit by partnering with the Gateways credentialing system (Meeker, personal communication, December 2, 2021). While this is not part of the Chicago Residency Program, it offers one more potential pipeline to address the teacher shortages beginning as early as infant toddler care teachers that span through the system to the critical need for high school physics teachers (Palermo et al., 2021; Schaack & Stedron, 2021).
Potential Solutions to the Teacher Shortage Crisis

As public officials and school districts scramble to fill positions, innovative ideas are emerging, with varying levels of success. Alternative teacher pathways came into play as early as the 1980s, offering alternative routes to teacher licensure to fill high need areas. They were designed to provide flexible schedules and faster completion (Matsko & Ronfeldt, 2021). They may be more important now than ever as our society is facing a decade of projected increased teacher attrition.

A narrative is the kind of story we tell or the framework in which we view and propel an initiative. Federally and at the state level, there have been financial options put in place to help assist in narrowing the teacher shortage through scholarships, living-expense stipends, etc. There are also alternative certification options and scholarships offered to help. In Illinois, for example, there are scholarships available for teachers going into early childhood and special education, as well as for teachers who qualify as a minority demographic (mostly based on race and language). However, at the end of the day, it is a national issue that ultimately lands on districts to decipher, plan, and execute. The narrative we are currently writing needs cohesion and collective mechanisms.

Dual enrollment is another growing and viable option in which districts are partnering with higher education institutions to prime the teacher education pipeline. The What Works Clearinghouse reviewed research on K-12 CTE-related intervention, including dual enrollment programs that help students with successful transition into college. The Clearinghouse indicates that quality dual enrollment programs tend to improve student outcomes including high school completion, credit accumulation, college access, and enrollment, as well as college degree
attainment (U.S. Government Accountability Office, 2022). Articulated credit can also be an accessible option with similar results to dual enrollment that allows for increased access for all student populations. Although articulated credit ties credit to specifically identified institutions, it does not have the same requirements of assessment and grade points that sometimes accompany dual enrollment (Egbert & Shahrokini, 2019.).

High Schools That Work (HSTW) has identified dual enrollment and credit articulation options as highly successful recruitment and retention of students in high-need areas, including CTE State and Federal grant funds allocated for CTE growth and development can be used to provide professional development, curriculum and support services, and developing/supporting work-based learning opportunities that can help secondary education spaces improve, grow, and enhance dual enrollment programs. Using federal funds has been highly successful in the recruitment and retention of special populations within CTE programs, including students with disabilities, and multilingual learners. This allows for the partnering of funds to reach and support targeted populations in a systematic and surrounding way. One successful example is a particular provider in Ohio in which they partnered with funds from the Language Instruction for English Learner and Immigrant Students Act to provide multilingual learners with culturally responsive career counseling and exploration. They were then able to utilize that information to place students in CTE options, including options with articulated credit to higher education, which came from a place of informed student voice. As a result of this targeted assistance, CTE enrollment for multilingual learners increased from 12 to 20 students in school years 2021-22 and from 0 to 10 the prior year. Ohio is also hosting equity labs for CTE school districts.

Other funding sources that have been successfully dovetailed with funding such as Perkins V include Department of Labor Grants, National Science Foundation Grants, and
Department of Defense Grants. Another example is from Georgia. In Washington, a pathway was created for tribal youth that aligns with the tribe’s major industries in the area. Each pathway included a cultural component. Work was also done in this context to increase tribal influenced leadership across the businesses within the pathway which also helped to amplify student retention and connection to their courses/pathway (U.S. Government Accountability Office, 2022).

Recently, there has been some shifting to a more competency/credential-based system which is somewhat new in the field of education. So far, the results indicate a more applicable, and culturally/linguistically responsive learning experience for the teacher candidate. When alternative pathways are designed in this way, the retention and graduation rate outcomes tend to be improved over nontraditional pathways that force feed traditional curricula into a quicker, more condensed degree plan. In a competency-based teacher education program, the standards are spiraled into logical parts, sometimes also chunked into stackable, thematic credentials. Once a student shows mastery over a section or specific credential area and level, they move on. This creates a more open playing field for additional teacher-education pipeline filler initiatives, such as proficiency testing out of methods courses, prior learned assessment options, exchanging relatable certificates for course credit, and waiving particular courses and practicum requirements based on experiences in the field (Egbert & Shahrokini, 2019).

For example, in the Illinois early childhood landscape at the moment, they are getting ready to release a Gateways Level 2 PLA assessment in which incumbent early childhood workers can take a virtual reality-based assessment and upon successful completion will obtain a Gateways Level 2 credential, as well as exchangeable credits toward their degree pathway in early childhood education. They would be able to pass it in portions based on competency areas,
such as curriculum or program design, and human growth and development. The PAL assessment was piloted this Spring 2023. If successful, there is discussion that similar processes could be easily transferred into the K-12 teacher education space as well (Zinsser et al., 2019).

Grow Your Own Teacher Programs

Grow Your Own teacher programs are not new but have expanded across communities and specific pockets within communities, beyond paraprofessional educators (paraeducators) in one’s district. They continue to expand with increased incentives and recruitment efforts as the impact of the teacher shortage becomes more urgent. Grow Your Own programs are facilitated to recruit and maintain new teachers in the field through a variety of channels including high school students, paraeducators, community organizers, parents, career changers, and even within existing teacher pools for more critical certification areas (Gist, 2021; Ramsey & Lowery, 2022).

While Chicago’s program to increase its racially and linguistically diverse teaching staff, also by default, filling vacancies in the current system is innovative, it is certainly not the only developing program throughout the state of Illinois. Quad Cities schools are currently working on a variety of options, including Grow Your Own programs to help boost the teacher pool in the area. The Quad Cities is an Illinois/Iowa collaborative of cities, including Moline, Rock Island, and East Moline on the Illinois side and Davenport and Bettendorf on the Iowa side of the Mississippi River. It is a growing urban and suburban area surrounded by a rural demographic within just minutes.

The shortage falls out into the surrounding rural areas as well. The Quad Cities portion in Illinois falls within the west central part of the state, which much like Chicago is seeing some of the worst teacher shortage concerns, much more than other parts of the state. The Illinois
shortages vary between the need for hard-to-find certifications and substitute teachers in the more inner-city school settings to general classroom teachers in the rural districts that are less resourced and able to keep up with competitive teacher salaries in next-door urban and suburban school settings. The Quad Cities area is partnering with local universities, such as Western Illinois University to offer teacher residency programs in the form of an alternative Master as well as condensed teacher education pathways with on-the-job student teaching targeted at working paraeducators in districts. Key areas of study that apply to the programs that have been adapted for nontraditional students, include secondary science, secondary English, elementary education, elementary education with ESL endorsement option, special education, and early childhood. They are also currently working to develop an early childhood with ESL endorsement option (Meeker, personal communication, December 2, 2021; Watts et al., 2021).

There are also new efforts in the Quad Cities area to develop a Grow Your Own teacher program through a partnership with Moline/Coal Valley School District #40 (MSD #40) and Black Hawk College/Western Illinois University. The program is a hopeful attempt to create a larger candidate pool for the MSD #40 and surrounding communities, noticing the lack of candidates for teaching jobs in the district, that just five years ago had plentiful applicants. This program creates a three-year course cycle with live observations in active classrooms for high school students to explore their interest in the teaching profession while also obtaining articulated credit viable at Black Hawk College and Western Illinois University.

As the teacher shortage continues to disable districts, especially inner city and rural districts, Grow Your Own teacher programs, including those in high schools are showing promise. The program within MSD #40 is currently full of interest for next year’s starting cohort as well. The current teacher within the pilot program in Moline has indicated students are
currently choosing which educational career track seems like a good fit for them and many of them are looking to diversify their certification areas by adding ESL/bilingual, special education, and reading endorsements along with the general education options (Meeker, personal communication, December 2, 2021; Watts et al., 2021). Programs such as this can nurture opportunities to target the development of a more linguistically and racially diverse teaching pool that matches your student demographic if recruitment for and access to the high school Grow Your Own Program is thoughtful, intentional, and supportive. The current program at Moline High School currently has more diversity than the average Quad Cities school teaching staff, but could also continue to diversify to match its district demographics, which are racially and linguistically diverse (Meeker, personal communication, December 2, 2021). Ideally, a high school’s demographic breakdown of its Grow Your Own program would be a mirror of the overall school population demographics (Venezuela, 2017).

Across the state of Illinois, different Universities are battling the teacher shortage as well. Dr. Brian Reid of Eastern Illinois shared what the program has done to combat the teacher shortage. Eastern Illinois University has started to combat the issue by building a Grow Your Own that focuses on rural communities. Eastern Illinois University saw that the rural communities around them were struggling to fill the teacher positions. The purpose was to develop a regional pipeline for rural communities that have difficulty staffing their schools. Eastern Illinois University developed a consortium made up of 82 school districts in 5 regional offices of education across 21 counties. The primary goal of the EIU/GYO Project is to support paraprofessionals and parent/community leaders from nontraditional backgrounds to become teachers in high need communities. Eastern Illinois University has developed programs to offer off-campus cohorts that are tailored to working adults who want to be licensed teachers. The
program focuses on identifying paraprofessionals who intend to return to a rural community within the regions of the consortium. The program also is looking at career changers who want to get into the teaching profession but do not want to spend four years to get the degree. Eastern Illinois University also has partnered with community colleges from rural communities who intend to return to a rural community within the region. To go along with that, Eastern Illinois University has also encouraged high schools that have a future teacher program where the students earn dual credit for their high school coursework and they also intend to return to a rural community in the consortium’s regions (Reid, 2021).

One of the most important objectives for Eastern Illinois University’s Grow Your Own program is developing a pipeline. Eastern Illinois University is leaving no stone unturned. They are working with high schools, community colleges, and even a new teacher support group that meets weekly to support new teachers. This started during the pandemic but it is continuing to help teachers feel supported in their work (Reid, 2021).

There are some cautions to consider as Grow Your Own teacher programs continue to develop in response to the shortage. Dr. Sheffield, of Western Illinois University (WIU), describes one situation that can develop as high schools work to create pipelines back into their districts. Ideas, thinking, and ways of doing things can become stale or one-sided without new ideas coming into a system (Watts et al., 2021).

Indian Prairie District #204 (IPSD #204) has also put a Grow Your Own teacher program in place. They also have an extracurricular club called “Educators Rising” to engage students in the field of education and teaching. They are currently offering dual-credit courses toward degrees in teacher education (Baker, 2019). Simultaneously the district is working furiously on building equity teams to examine multiple topics related to equity but also including attracting
and retaining a diverse teaching population, including students within their Grow Your Own teacher program. Students will also be involved in this process (Indian Prairie School District #204, 2021). The work of diversifying the teacher population as it grows is also aligned with the district’s equity planning.

Community Unit School District 200 has partnered with the College of DuPage (COD) and Valley City State University in South Dakota to come up with the 1 + 2 + 1 concept. The first year the student completes 24-30 hours of dual credit through COD. In the second year, the student works full or part time as a paraprofessional/tutors in Community Unit District 200. Coursework will be taught at the COD campus. In the third year, the student works full or part time as a paraprofessional/tutors in Community Unit District 200. The students will begin to specialize in their coursework. They will continue COD in a blended format and begin coursework through Valley City State University. In the fourth year, the student will complete the coursework online through Valley City State University. They will continue working full or part time as a paraprofessionals/tutor in Community Unit School District 200. They will have an opportunity to interview for positions that open in the school district upon completion of their degree.

For Grow Your Own teacher programs to be optimally successful though, there are a few guidelines that must be kept in mind that research indicates generate the best academic and financial return on investment. Districts must develop intentional mentor programs, highlighting and capitalizing on teachers of diversity that are currently successful and plenty of high-impact professional development specifically targeted at their teaching positions. For rural districts, this may mean creating a consortium to help one another, but it must be a component of the program. Financial and university partnerships must be developed and well-advertised amongst diverse
potential teacher candidates. Also, teacher residencies and experiential learning through the coordinating colleges and universities need to be robust in hands-on experiences in classrooms from the moment the candidates begin in the program. As Grow Your Own initiatives continue to develop it will be possible for educational organizations and states to better develop high quality, equity-driven programs as we all learn from those doing the work right now.

Given the high need for Grow Your Own programs, there is a gap in the current research field that needs to be addressed, especially in the area of maintaining diverse teachers once they are recruited, which is an area that is currently problematic in the field due to internal and external issues. Continued research is needed in the areas of retaining teachers developed through Grow Your Own programs, successful residencies and mentoring in Grow Your Own programs, and utilizing an equity-based approach to recruit diverse candidates to Grow Your Own programs (Harris, 2020).

Grow Your Own teaching programs and alternative licensure, including teacher residency programs, are likely the most viable in-the-moment solution (for increasing the teacher candidate pool, especially when seeking to increase the percentages of BIPOC teachers serving their communities. However, scholarly research available on creating quality programs that maintain candidates is still a gap in the research field. It is essential to understand not only how to attract candidates into Grow Your Own programs, but also how to retain them and support them in the field through the first five years, which is identified as the most common time in which teachers leave the field, especially teachers of color (Gist, 2021).

An additional gap in the research ties back to the lack of understanding of developing Grow Your Own programs. Grow Your Own programs need to be designed with stakeholder input. If we are seeking to develop Grow Your Own programs for teachers of color and linguistic
diversity, people of color and linguistic diversity should be part of the planning process for that program. If school leaders, who continue to be mostly made up of White ethnicity (Illinois Report Card, 2020), are the only demographic at the planning table, likely, the programs will likely not be designed to meet the needs of all potential teacher candidates. While the intention of alternative teacher education programs, including Grow Your Own initiatives was to truly create a different kind of learning experience, often the experiences are similar due to the constraints in state legislation around teacher licensure. Therefore, they are usually done more quickly and sometimes with the option to participate in a teacher residency before licensure is complete.

CPS has worked alongside Chicago's local higher education institutions, including City Colleges, the University of Illinois Chicago, Chicago State University, and National Louis University to implement a dedicated Grow Your Own teacher program for paraeducators and other classified staff to work their teacher certification. This program is beginning to produce promising results, filling much needed gaps in early childhood, special education, elementary education, and ESL/bilingual education (Garcia & Garza, 2019). The Chicago Grow Your Own teacher program is one example of a quality, systematic approach to not only increasing the overall teacher pipeline but also growing the diversity amongst the workforce. Grow Your Own teacher programs with the following attributes have been shown to yield positive outcomes for districts and BIPOC educators: BIPOC mentors for new teachers, flexible options for course attainment, credit provided for relatable prior learned experiences, and authentic and consistent modeling and experiences within classrooms (Kaput, 2019).

Grow Your Own teacher programs have also been increasing in the CTE field, alongside other high need areas of education. Title II funds in the community college arena, along with
other grants and funding options within higher education and across the CTE landscape, including businesses and affiliated organizations. Best practices have been identified in piloted programs across the country, including rural targeted programs in Tennessee and Missouri, that can help nationwide, as well as in Illinois, as CTE Grow Your Own programs launch. The following best practices were identified: experienced mentors in the field that agree to coach and support, new teacher training specifically designed for CTE, and stipends to help those in Grow Your Own teacher programs to travel to places of employment, pay for additional educational expenses, etc., and microcredentialing to increase areas of CTE qualification (Lee, 2020) Grow Your Own programs outside of CTE, especially other areas utilizing credential based and extremely targeted specializations within the field can also be utilized to increase the viability of CTE options.

What We Do Not Know About GYO

As the literature has shown there has been lots of success with GYO programs on many levels. Some areas are focusing on career changers to come to school. Others are partnering with universities to help streamline the process. Some school districts are creating their own at the high school level. There is an overlooked segment of the population that the schools are overlooking and that is the middle school students.

While we know that GYO programs address shortages, the bigger challenge is that many of the GYO programs start too late and lose out on many other possible candidates.
Middle School Students’ Thoughts on an Education Career

While most of the research has shown that there are many benefits to having a Grow Your Own program at the high school level, there is an opportunity for many districts to look at an even younger age. There is a lot of research that shows that middle school students have already come up with many perceived ideas on what career they should pursue.

Evidence dating back to the 1990s shows that middle school students have already made decisions about their careers. There was a push to start identifying if middle school students were aware of their future career opportunities and if they were prepared for them. The studies found that many middle school students were unaware of and unprepared for the requirements of the real world of work, along with being unable to identify careers they were interested in pursuing (Outen, 1995). This directionless thought does not help students make decisions for coursework that would benefit their career choices.

When the need to get more career readiness available for students in the 90s, many districts did not offer career education classes because of the fear that families would be upset if the students wanted to pursue a career that would involve a vocational school or something that would be different from the college path that many wanted for their children (Outen, 1995). Instead of nurturing a middle school student’s mind, information was kept from the student. Middle school students were not identifying career choices that they would be interested in pursuing and were not able to identify the skills they would need to be successful in their future careers (Outen, 1995).

When a spotlight was highlighted on middle school students, there were highlights on what would help middle school students become successful in their career pursuits. According to
Maddy-Bernstein (as cited in Outen, 1995), research about effective career guidance for elementary and middle school students showed that all students:

- are exposed to career awareness and exploration before they make critical choices at the high school and postsecondary levels;
- have continued assistance in identifying their strengths, interests, and aptitudes;
- are helped to view career paths as a broad range of options available to them;
- have a well-planned, structured school program to assist them in understanding the world of work;
- have an opportunity to work/volunteer in business through secondary school programs;
- find curriculum challenging and relevant to their interests;
- work with their parents, counselors, and teachers to select school courses and programs.

This focus on the middle school student shows that they are ready to start developing their thoughts and ideas of what career they would like to pursue.

Middle school students are at an interesting age because they are at the point where there are opportunities for them to start to decide what career they want. Many of the thoughts from middle school students about their future vocation are tied directly to their self-esteem (Kerka, 1994). Middle school students need to think about their future careers and take responsibility for what classes would benefit them (Kerka, 1994). While many programs and curricula are geared towards high school students, it is not a copy and paste that would help a middle school student. Instead, the middle school model should focus more on how their school work affects future career choices. The focus should be on intellectual development, social skills, personal values, and understanding of adult roles in different professions (Kerka, 1994).
Expectancy Value Theory

EVT is one of the most influential frameworks that has been used to investigate students’ motivation and how it relates to academic-related choices, learning behaviors, and achievement (Jiang et al., 2018). The student’s perceptions of the value of a task also have been found to predict reliably their intentions and actual decision to take more courses in specific subjects and to complete activities related to those subjects. The tasks are broken down into three components whether a student thinks a task is interesting, personally meaningful important, or useful to them. The cost refers to the students’ perceptions regarding the negative consequences of engaging in a task. That goes to say what the students will not be able to do if they pursue this task. Students view cost many times as a cost/benefit ratio. If the cost of a task is too high, an individual will not engage with it (Jiang et al., 2018).

EVT is a theory of motivation that describes the relationship between a student’s expectancy for success at a task or the achievement of a goal about the value of task completion or goal attainment (Wigfield et al, 2009). In this study, the expectancy part is students were asked if they could do the task of becoming a teacher. The expectancy is the student feeling confident in their ability to succeed in a task. The value part of this study from the middle school student perspective was “Does the student want to do the task?” Will it be important, useful, or enjoyable to complete so that they can become a teacher? Middle school students have many opportunities in how they spend their time and what to plan for in the future. If becoming a teacher is not going to be useful to them, they will put their time and effort into something else. There is a cost component to go along with the value. For instance, for a student to become a teacher, the student will have to put in time to obtain the certifications to be a teacher. While they
are doing that, they will be unable to do other things or pursue another additional career path. Students will have to give up something to become a teacher as they would have to for any profession so they must be choosing to do something that they will enjoy.

Middle school students can make choices about their future. There are thoughts about different careers that they have already decided on without knowing about the career in general. Middle school students have often been overlooked for too long. Much of the research on middle school students’ thoughts about career choices has been based on the 1990s. There has not been a sustained push to investigate their thoughts and reasoning for their career choices. While there has been a dramatic increase in high school engagement along with programs such as Grow Your Own, middle school students have been left behind. The opportunity to focus on middle school students can provide school districts with a new avenue to expand their Grow Your Own programs. If we understand middle school students with EVT, we will be able to understand their thoughts on teaching and how to address the barriers that they see preventing them from entering the profession of teaching.

Conclusion

We are in a teacher shortage crisis, but one must critically examine their local school district’s needs to approach the problem in context. We must approach the problem with more than money, with that being only one of a variety of reasons for the shortage. Educators, including BIPOC educators, must feel valued, respected, and supported in their jobs. We must stop adding more to the plate and start supporting self-care. We have to examine our approaches to mentorship and professional learning to meet educators where they are and truly give them what they need, including autonomy. We must partner with higher education institutions and our
communities to create systems of support for our educators, including financial compensation, access to education, and emotional/mental health support. The research indicates the problem can be addressed but will take a system-wide approach including legislation and increased financial contributions from the federal and state levels. There is an untapped resource in school districts with middle school students. Research shows that middle school students have already started making career decisions. What we understand about middle school students through the lens of EVT, can help us understand their views on the profession of teaching.
CHAPTER 3

EMPIRICAL PAPER

Problem Statement

The problem that this study looks at is the lack of BIPOC students going to pursue a career in teaching career and technical education (CTE). This will be guided by the following questions:

1) What are middle school students’ perceptions of the teaching profession?
   a) What are students' perceptions of whether they can become teachers? How does this differ by different student characteristics (e.g., grade, race/ethnicity, gender, etc.)?
   b) What are students' perceptions of whether they value becoming teachers? How does this differ by different student characteristics (e.g., grade, race/ethnicity, gender, etc.)?
   c) What are students' perceptions of the barriers to becoming a teacher? How does this differ by different student characteristics (e.g., grade, race/ethnicity, gender, etc.)?

2) What areas of teaching are our students interested in?

Methodology

This quantitative study surveyed middle school students (Grades 6, 7, and 8) in Community Unit School District 200. This was a onetime survey that the students took. It was open to all students in the schools. The survey was broken down into three separate sections. The
first section asked students if they had ever thought about becoming a teacher as a career. If they did, they would ask what level of education they would be interested in teaching as well as any subjects they would be interested in. The second part of the survey was the EVT portion of the survey. This gave an idea of how the students thought about their abilities to become a teacher and if it is a career that they would be able to do. There were questions about the time it would take to become a teacher and if becoming a teacher would be feasible in the future. The final portion of the survey was asked what grade they were in, their race, and their gender.

Study Setting

The study is taking place for middle school students in a unit school district in the suburbs of Chicago. The school district has one early childhood center, thirteen elementary schools, four middle schools, and two high schools. Sixty-three percent of the population are White, 6.3% are Black, 17.4% are Hispanic, 8.5% are Asian, 0.1% are American Indian, 0.2% are Pacific Islander, and 4.6% are two or more. There are around 12,283 students enrolled in the school district. The reason why this district was chosen for the study setting is that there is a large enough population of BIPOC students in the district while at the same time having White students as a good control to the answers of the survey. Twenty-four percent of students live in homes that are categorized as low income. This population could be a good one to focus on because there are strategies to help students decide on careers that could end the poverty cycle that some families are in. All middle school students are taking part in this study which includes students with IEP, all students who are learning English and/or speak multiple languages, and students with different levels of socioeconomic status.
Participants

The school district has a total enrollment of 11,742 students in grades PreK through twelfth grade. Of the enrollment, there are a total of 2,641 students in grades 6-8. All students were allowed to participate in the survey as well as an opportunity to opt out of the survey at any time. Of the 2,641 students, there were 1,609 responses: 501 sixth-grade students, 505 seventh-grade students, and 595 eighth-grade students. Of the 1,609, 738 female students responded and 806 males responded; 62 students did not identify their gender in the survey. The ethnicity of the students who took the survey was 1,036 White students, 145 Black students, 276 Hispanic/LatinX students, and 156 Asian students; 268 students responded other when asked to identify their ethnicity. Students were allowed to check all that applied when answering the ethnicity question.

Data Collection and Methods

The sampling strategy that this study was working with is the four middle schools in the school district. All four schools have students in grades 6-8. All four schools have a special education population and they were involved in the survey. Each school sent out a letter informing the families that the students were going to be taking a survey to find out about middle school students and their perceptions of the teaching professions (Appendix C). Parents were given the ability to opt out of the survey and to view the questions on the survey. The middle school population is similar to the district's overall population. Any middle school student was allowed to take the survey. The original dataset that was used was the overall population of middle school students in the district. Students also had the opportunity to opt out of
participating in the survey at any time. Using district information, the data that we received could be compared to the overall makeup of the school district and middle school students in the school district.

The project was originally proposed to the middle school principals to ask if they would allow their students to take the survey. The school district’s policy is to inform the parents that their child will be taking a survey. Any parent can view the survey questions and can opt their child out of the survey. There was a letter written for principals to send to parents. Each principal sent that letter out a week before the survey was given. The students completed the survey anonymously.

The survey which can be seen in Appendix D, started by asking questions to students that were general thoughts about becoming a teacher such as have you thought of becoming a teacher? It goes further in asking what level of education the student would be interested in teaching. A follow up to that question asked what specific subjects the student might be interested in teaching. The last part of the first section asked students about the barriers that they thought were to become a teacher.

The second part of the survey used a set of 10 questions aligned with EVT to better understand middle school student's perceptions of the education profession. The ten questions were adopted from Kosovich et al.'s 2017 study and included three questions focused on a student's expectancy level for being able to become a teacher, three questions that asked students about the value they placed on becoming an educator, and their perceptions about the costs associated with pursuing education as a profession. Students responded to the ten prompts using a 5-point Likert scale which ranged from X to Y. The instrument is included in Appendix D.
The three expectancy questions asked students if they think that they can become a
teacher. The questions focused on having the students think if they can learn the material to be a
teacher if they can be successful, and if they can understand the material to become a teacher.
When considering the three questions together, these responses give insights into whether a
student believes that they would be successful in pursuing a career in education.

The three value questions focused on the student’s thoughts about teaching. Is teaching a
career that is important to the student? Is the career something that the student values? And
would the career of being a teacher be useful to the student? These three responses give insights
into whether a student values a career in education.

The four questions covering the cost focus on the multiple costs that come with becoming
a teacher. This includes the time it would take to become a teacher and to be successful as a
teacher. The questions ask if becoming a teacher takes too much time if other activities get in the
way of becoming a teacher, if their ability to put in time to do well as a teacher, and if they have
to give up too much to become a teacher. These four responses give insight into whether a
student thinks they can afford to be a teacher.

The final section of the survey was the demographics section. The questions asked what
grade the student is, what their race is, and what their gender is. The reasoning for having these
questions was to be able to organize the data from the survey to see if there are patterns that need
to be researched further. The grade level question can help define if there is a difference in the
answers of the students as they are older. The race question can help define if there are different
perceptions that different races have about education. Finally seeing the different genders can
provide insight into there are gender views on education that middle school students already
have.
Together, these questions provide the main information for the research questions that are used in this survey. They reflect on the research questions that have been established and should provide an idea of the middle school student’s thoughts about the career of education.

Data Analysis Plan

The data was collected from the students and organized. The qualitative data was taken from the first section of the questions. The barriers that students view to becoming a teacher include different types of barriers, such as cost, time, never thought of it, and not enjoying being at school. This gives an idea of what things are preventing students from becoming teachers. Specifically, this ties back to the second research question of what barriers middle school students feel that are preventing them from becoming teachers.

The quantitative data was gathered from the rest of the survey. The responses to the questions were broken down into different sections. For the first section, the students explained if they did want to be a teacher, what level, and what subjects would they be interested in teaching. This ties back to learning what areas our students are interested in teaching. The data can show what areas of teaching middle school students would be interested in teaching and possibly find opportunities for the students to learn more.

To answer the first research question, the three subquestions are answered individually using the ten EVT survey items. For each subquestion, the average score is presented for each category (i.e., expectancy, value, and cost) and each subcomponent first. This allowed for the identification of baseline patterns or trends to emerge. After presenting the overall averages, the demographic data was used to explore how the overall category and the individual subcomponents varied by gender, race/ethnicity, and by grade level. This was done for each
category. Patterns in the overall category and the subcomponents were explored across demographic groupings by comparing the mean scores.

To answer the second research question, the first section of the survey provides the data. The data is broken down by the different levels that the students are interested in teaching. This allows for the identification of patterns or trends to emerge. The specific subjects that students would be interested in teaching are also answered in the first section of the survey. Once again, this allows for the identification of patterns or trends to emerge. This will help guide the research to see if there are misconceptions about certain levels or subjects of teaching.

The research was broken down first by each student’s responses in general, and then by certain target groups. The first section of the survey will identify if middle school students have thought of becoming a teacher along with what specific subjects and levels they would have thought of teaching. The second part of the survey uses the EVT model to see if the students believe that they can be teachers, that there is value in teaching and the cost it will take them to become teachers. The responses to this will see if there are areas to further explore middle school students and their ability to become teachers.

The EVT part of the survey will give insight into where students at the middle school level view their thoughts on teaching. The results from the survey will tell us if the students believe that they can become a teacher, understand the material to become a teacher, and believe that they can be successful. The second part of the result of the survey will show if middle school students value the profession of teaching. The results will show how middle school students view the importance of teaching to them, the value of the career of teaching, and if the career is useful to them.
Once the EVT data is gathered from the survey, the ten questions will be organized by how they were answered. The data will be organized by the overall answers from the students. Next, the data will be separated by grade level to compare if there is a change in their answer the older they become. Then each grade level will be broken down by their identified gender to their thoughts on their desire to teach and if they believe that they can teach and be successful. It will be separated further into the students’ race. This will help see if there is a major difference between why our BIPOC students might not view teaching as a successful career avenue. This can also help pinpoint if there is a spot where a future Grow Your Own teaching program can start at the middle school level. All methods in this study were approved by Northern Illinois University’s Institutional Review Board.

Results

During the first section of the survey, the middle school students were asked if they ever thought of becoming a teacher. Forty-one percent said yes, they have thought of it and 59% said no. The second question asked what level of education have they ever thought of teaching. This was a question that students could check all that applied. Out of the 1,609 students surveyed, 656 students responded to it. Middle school teaching led the way with 397 responses. Elementary school was second with 381 responses. Early childhood had 123 responses and high school had the least with 116 responses.

The final question asked what subject(s) the students would be interested in teaching. There were 578 responses to this question. This survey question allowed the students to select all that apply. Language arts had the most responses with 251. Art was second with 194 responses. Social studies was third just behind Art with 192 responses. Math followed up with 165
responses. Drama was next with 144 responses followed by music with 142 and physical education/health with 141 responses. Science had 129 responses. Foreign language had 89 responses. Computers had 63 responses. Special education had 55 responses. Woodworking and business each had 49 responses. The shop had 34 responses. Family and consumer science had 22 responses. There were write-in responses that gave responses such as “I want to teach elementary school,” or they were not sure. There were a couple write-in answers that were a nurse or social worker.

The information in the first section of the survey answers our second research question about what areas the students would like to teach. The data showed that students who have already thought about becoming a teacher have thought of many different areas to teach. There are no shortages in the areas that students want to teach. This might expand further in the higher grades due to enrolling and taking higher level courses such as Foreign Language which is only open to eighth grade students.

The last question from the first section was, “What do you think the barrier is to become a teacher.” This was another question where the students could select all that applied. The leading reason for barriers is the amount of time it would take to become a teacher with 823 responses. This was followed closely by low teacher salaries with 803 responses. “I did not think of it as a career choice” had 515 responses were next. 418 students responded that the cost of becoming a teacher was a barrier. 387 student responses said they do not like school. 369 students said they do not know how to become a teacher.
For all middle school students, the expectancy average is similar throughout all three questions (Table 1). The expectancy component was averaging a 4. The numbers were consistent through each component. Looking at the value average, it is consistently the lowest of the three values. The value component two, “I value teaching as a career,” was significantly lower than the other two. This means that the students do not value being a teacher as a career choice. The cost average was the second highest. The component that stands out the most is the value average for teaching. What this means is that middle school students do not think that teaching is a career that will be beneficial for them.

Table 1
EVT for All Middle School Students

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectancy average</td>
<td></td>
<td>1,609</td>
<td>3.992</td>
<td>1.357</td>
</tr>
<tr>
<td>I can learn the material to be a teacher.</td>
<td></td>
<td>1,609</td>
<td>4.053</td>
<td>1.442</td>
</tr>
<tr>
<td>I can be a successful teacher.</td>
<td></td>
<td>1,609</td>
<td>3.965</td>
<td>1.560</td>
</tr>
<tr>
<td>I can understand the material to become a teacher.</td>
<td></td>
<td>1,609</td>
<td>3.956</td>
<td>1.474</td>
</tr>
<tr>
<td>Value average</td>
<td></td>
<td>1,609</td>
<td>3.162</td>
<td>1.363</td>
</tr>
<tr>
<td>The profession of teaching is important to me.</td>
<td></td>
<td>1,609</td>
<td>3.477</td>
<td>1.595</td>
</tr>
<tr>
<td>I value teaching as a career for me.</td>
<td></td>
<td>1,609</td>
<td>2.801</td>
<td>1.503</td>
</tr>
<tr>
<td>Teaching would be useful to me.</td>
<td></td>
<td>1,609</td>
<td>3.207</td>
<td>1.523</td>
</tr>
<tr>
<td>Cost average</td>
<td></td>
<td>1,609</td>
<td>3.568</td>
<td>1.228</td>
</tr>
<tr>
<td>Becoming a teacher will require too much time.</td>
<td></td>
<td>1,609</td>
<td>3.824</td>
<td>1.447</td>
</tr>
<tr>
<td>Due to other things, I do not have the time to become a teacher.</td>
<td></td>
<td>1,609</td>
<td>3.703</td>
<td>1.528</td>
</tr>
<tr>
<td>I am unable to put in the time needed to do well as a teacher.</td>
<td></td>
<td>1,609</td>
<td>3.283</td>
<td>1.476</td>
</tr>
<tr>
<td>I will have to give up too much to become a successful teacher.</td>
<td></td>
<td>1,609</td>
<td>3.462</td>
<td>1.550</td>
</tr>
</tbody>
</table>
Sixth Grade

The sixth-grade students were consistent on the expectancy portion of the questions compared to the overall data (Table 2). On average, they believe that they can learn the material to become a teacher, can be successful as a teacher, and are confident that they can understand the material to be a teacher. Sixth-grade students were lower on the value of the career of teaching, almost half a point lower than the other two components of value. The cost average was consistent as well but the sixth-grade students said that they are unable to put in the time needed to do well as a teacher. Another lower question for sixth-grade students was whether they thought becoming a teacher that they would have to give up too much to become successful teachers.

Seventh Grade

The seventh-grade students were consistent with the overall expectancy area of the survey (see Table 2). The seventh-grade students thought that they could learn the material to become a teacher, they could be successful teachers, and they were confident they could understand the material to become a teacher. When it comes to the value of being a teacher, the seventh-grade students believe that the profession of teaching is important to them and that teaching would be useful to them. The seventh-grade students thought that becoming a teacher would require too much time. This component is higher than the other components. Similar responses to the second cost component which was because of other things to do, they do not have time to be a teacher, Seventh-grade students do not think that they have the time to put into becoming a teacher. The lowest cost component was the inability to put in the time needed to do
Table 2
EVT for All Middle School Students, By Grade

<table>
<thead>
<tr>
<th></th>
<th>Sixth Grade</th>
<th>Seventh Grade</th>
<th>Eighth Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Expectancy average</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can learn the material</td>
<td>4.095</td>
<td>1.258</td>
<td>3.894</td>
</tr>
<tr>
<td>to be a teacher.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can be a successful</td>
<td>4.126</td>
<td>1.321</td>
<td>3.964</td>
</tr>
<tr>
<td>teacher.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can understand the</td>
<td>4.11</td>
<td>1.48</td>
<td>3.83</td>
</tr>
<tr>
<td>material to become a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>teacher.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value average</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The profession of</td>
<td>3.426</td>
<td>1.371</td>
<td>3.078</td>
</tr>
<tr>
<td>teaching is important</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to me.</td>
<td>3.745</td>
<td>1.576</td>
<td>3.323</td>
</tr>
<tr>
<td>I value teaching as a</td>
<td>3.026</td>
<td>1.542</td>
<td>2.78</td>
</tr>
<tr>
<td>career for me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching would be useful</td>
<td>3.507</td>
<td>1.531</td>
<td>3.131</td>
</tr>
<tr>
<td>to me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost average</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Becoming a teacher will</td>
<td>3.499</td>
<td>1.225</td>
<td>3.608</td>
</tr>
<tr>
<td>require too much time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to other things, I</td>
<td>3.762</td>
<td>1.451</td>
<td>3.836</td>
</tr>
<tr>
<td>do not have the time to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>become a teacher.</td>
<td>3.633</td>
<td>1.496</td>
<td>3.737</td>
</tr>
<tr>
<td>I am unable to put in</td>
<td>3.202</td>
<td>1.471</td>
<td>3.319</td>
</tr>
<tr>
<td>the time needed to do</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>well as a teacher.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have to give up</td>
<td>3.399</td>
<td>1.579</td>
<td>3.541</td>
</tr>
<tr>
<td>too much to become a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>successful teacher.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Grade 6 N = 501; Grade 7 N = 505; Grade 8 N = 595

well as a teacher. The seventh-grade students think that they are unable to put in the time needed to be a teacher.

Eighth Grade

The eighth-grade students were consistent with the overall expectancy area of the survey (see Table 2). The eighth-grade students think that they can learn the material to become a teacher, they can be successful teachers, and they are confident they can understand the material to become a teacher. Similar to the other two grade levels, the eighth-grade students put a lower value on the second component, value teaching as a career for me. The cost components again
were similar. The eighth-grade students think the time it will take to become a teacher would be too long. The highest score for a component was the cost of time component. The lowest component was that they were unable to put in the time to be a teacher. This shows that the eighth-grade students think that time is the greatest obstacle that stands between them and becoming a teacher.

**White Students**

For White students, the expectancy components are the highest out of the different races/ethnicities (Table 3). White students think that they can learn the materials to be a teacher, they think they can be successful teachers, and they are confident that they can understand the materials to be a teacher. The value average for white students was in line with the overall data. The White students think that teaching is a profession that is important to them. The White students value teaching as a career component much less than their other components. It came in almost 0.7% lower than the other components. The White students thought that teaching would be useful to them and was in line with the overall average of this component. When it came time for the cost average, the White students were similar to the overall numbers of the survey. The White students think that it will require too much time, which was the highest score of the four components. The lowest score on the cost component was they were unable to put in the time needed to do well as a teacher.

**Black/African American**

For the Black/African American students, the expectancy average was almost a full point lower than the White students (see Table 3). The numbers are consistent between the three
Table 3
EVT for All Middle School Students, By Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black/African American</th>
<th>Hispanic/LatinX</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>I can learn the material to be a teacher.</td>
<td>4.291</td>
<td>1.389</td>
<td>3.238</td>
<td>1.464</td>
</tr>
<tr>
<td>I can be a successful teacher.</td>
<td>4.174</td>
<td>1.537</td>
<td>3.248</td>
<td>1.686</td>
</tr>
<tr>
<td>I can understand the material to become a teacher.</td>
<td>4.175</td>
<td>1.424</td>
<td>3.219</td>
<td>1.611</td>
</tr>
<tr>
<td>Value average</td>
<td>3.222</td>
<td>1.377</td>
<td>2.876</td>
<td>1.285</td>
</tr>
<tr>
<td>The profession of teaching is important to me.</td>
<td>3.537</td>
<td>1.581</td>
<td>3.21</td>
<td>1.621</td>
</tr>
<tr>
<td>I value teaching as a career for me.</td>
<td>2.871</td>
<td>1.531</td>
<td>2.581</td>
<td>1.399</td>
</tr>
<tr>
<td>Teaching would be useful to me.</td>
<td>3.259</td>
<td>1.519</td>
<td>2.838</td>
<td>1.507</td>
</tr>
<tr>
<td>Cost average</td>
<td>3.485</td>
<td>1.228</td>
<td>3.61</td>
<td>1.224</td>
</tr>
<tr>
<td>Becoming a teacher will require too much time.</td>
<td>3.705</td>
<td>1.4</td>
<td>3.99</td>
<td>1.554</td>
</tr>
<tr>
<td>Due to other things, I do not have the time to become a teacher.</td>
<td>3.699</td>
<td>1.521</td>
<td>3.657</td>
<td>1.61</td>
</tr>
<tr>
<td>I am unable to put in the time needed to do well as a teacher.</td>
<td>3.153</td>
<td>1.438</td>
<td>3.305</td>
<td>1.612</td>
</tr>
<tr>
<td>I will have to give up too much to become a successful teacher.</td>
<td>3.383</td>
<td>1.541</td>
<td>3.486</td>
<td>1.606</td>
</tr>
</tbody>
</table>

Note: White N = 898; Black/African American N = 105; Hispanic/LatinX N = 213; Asian N = 101
components. Equally, Black/African American students think they can learn the material to be a teacher, can be a successful teacher, and are confident that they can understand the materials to be a teacher. For the value component average, Black/African American students rated the value lower than White students. Once again, the drop off from the first component, that the profession of teaching is important to me, is almost 0.7%. Similar to the White students, Black/African American students thought that teaching would be useful for them right between the first two components. When it comes to the cost average Black/African American students scored these categories higher than the White students. It shows that Black/African American students think that the cost of becoming a teacher is much higher than it is for White students. Black/African American students think that the time required to be a teacher will be too much.

**Hispanic/LatinX**

The Hispanic/LatinX students were consistent with the other students in how the expectancy average aligned with the overall data for the three components (see Table 3). The Hispanic/LatinX students scored the expectancy average lower than their White counterparts but higher than the Black/African American students. The Hispanic/LatinX students were around 3.6 in general for thinking that they could learn the materials to be a teacher, thinking that they could be a successful teacher, and that they were confident that they could learn the materials to become a teacher. When it comes to the value, average Hispanic/LatinX students scored lower than their White counterparts but higher than the Black/African American students. The cost component average was higher for Hispanic/LatinX than for White students and African American students.
Asian

Asian students were consistent with the overall average for the expectancy average. This was similar for the three components (see Table 3). While this is the biggest variation of the subgroups, there was only a .1% difference between the scores. The Asian students scored the expectancy average lower than their White counterparts but only by a difference of .1%. The Asian students value teaching as a profession more than the African American/Black and Hispanic/LatinX but not as much as the White students. When it comes to the cost average, Asian students scored higher than their counterparts. This means that Asian students believe that the cost of becoming a teacher is much higher for them when compared to the other subgroups.

Males

The male students were consistent in their expectancy average when compared to the overall data (Table 4). The components only varied by 0.2% in the responses. The male students think they can learn the materials to be a teacher at the highest level. Male students thought the component that they could be successful teachers was the lowest score of the three expectancy components. Male students thought that they would be successful learning the material just not as high as they thought of becoming a successful teacher. Their scores are lower than the female students. Looking at the overall value average this is much lower than the female students. That was the lowest when comparing the male scores to the different races/ethnicities. This trend continued when compared to the cost average. Male students thought that it was a much higher cost to become a teacher when compared to female students.
Table 4

EVT for All Middle School Students, By Gender

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Expectancy average</td>
<td>3.67</td>
<td>1.366</td>
</tr>
<tr>
<td>I can learn the material to be a teacher.</td>
<td>3.759</td>
<td>1.483</td>
</tr>
<tr>
<td>I can be a successful teacher.</td>
<td>3.552</td>
<td>1.574</td>
</tr>
<tr>
<td>I can understand the material to become a teacher.</td>
<td>3.699</td>
<td>1.488</td>
</tr>
<tr>
<td>Value average</td>
<td>2.795</td>
<td>1.276</td>
</tr>
<tr>
<td>The profession of teaching is important to me.</td>
<td>3.115</td>
<td>1.571</td>
</tr>
<tr>
<td>I value teaching as a career for me.</td>
<td>2.403</td>
<td>1.344</td>
</tr>
<tr>
<td>Teaching would be useful to me.</td>
<td>2.865</td>
<td>1.463</td>
</tr>
<tr>
<td>Cost average</td>
<td>3.708</td>
<td>1.254</td>
</tr>
<tr>
<td>Becoming a teacher will require too much time.</td>
<td>3.967</td>
<td>1.48</td>
</tr>
<tr>
<td>Due to other things, I do not have the time to become a teacher.</td>
<td>3.826</td>
<td>1.587</td>
</tr>
<tr>
<td>I am unable to put in the time needed to do well as a teacher.</td>
<td>3.437</td>
<td>1.52</td>
</tr>
<tr>
<td>I will have to give up too much to become a successful teacher.</td>
<td>3.604</td>
<td>1.578</td>
</tr>
</tbody>
</table>

Note: Male N = 868; Female N = 738

The female students rated the expectancy rate much higher than the male students (see Table 4). Female students think that they can be successful as teachers in their careers. Female students value teaching as a profession more than male students and in general than all other races/ethnicities. Finally, the cost average for female students was much lower than the male students and much lower than all the other races/ethnicities.
Discussion

Middle school students think that they can be teachers. There are no barriers too great for them to overcome to achieve that as a career. Middle school students do not value the career of teaching as much. There is information that might make middle school students perceive the job as not good whether that is the monetary value that gets put on teachers or the lack of value of a career that a middle school student perceives that the career entails. Many of the students believed that learning to be a teacher would help them in the future but not enough to value teaching as a career for them. Overall, students think that the cost of becoming a teacher is too great for them to do. It could mean that middle school students thought it would take them too much time to become a teacher. The other reason why middle school students thought that becoming a teacher was not for them is the financial aspect of the teaching profession. The cost of becoming a teacher is too much for them. Students did not think it was worth it to them for it to be their career.

When it is broken down into different genders, the female students were much more likely than the male students to respond that they were considering pursuing a career in teaching. The female students also rated that they value the profession of a teacher higher than the male students. It was almost 0.8% higher. The female students also noted that the cost of becoming a teacher was not as high as their male counterparts.

The White students thought that they could learn how to be a teacher and how to be successful as a teacher. They do not value being a teacher as much as they think that they can be a teacher. The cost is the lowest for the White students compared to the other races/ethnicities. The cost for Black/African American students was much higher than the White students. The
costs for Hispanic/LatinX students were also higher than for African Americans. The highest cost for students was for Asian students.

Limitations

This survey was only given to middle school students who are the focus of this study. There was only one school district that was surveyed. It would be interesting to compare an urban city school district to a suburban school district or even a rural school. The results could show the different needs for different settings. Another limitation of this survey was that it was a self-report survey. Since this was given to four different schools, there was no consistency in how the survey was given. One school had their Science classes take the survey. Another had the students do it during lunch. There is great growth in the adolescent student and their minds can be shaped one way or the other. One piece of information that I wish that I had was the social economic status of the students. I did not ask for the students’ school district identification numbers so I am unable to match up the fact if they are on free or reduced lunch. Also, I do not know what number of students have an IEP. This would be interesting to see if their outlook on education and the career of teaching is different from their race/ethnicity and gender. This survey would have been interesting to have sent at the beginning of the school year and a follow up at the end of the school year to see if there is a change in the students’ thoughts about the teaching profession.

Future Work

The middle school students are an overlooked group when it comes to growing a teaching pipeline for school districts. The data that was collected from the survey gave us a look at what
one school district’s middle school student's perspective on a career in teaching. The survey needs to be done again in different settings in different school districts. Future surveys need to be able to tell the socioeconomic status of the student. The state of Illinois addresses the issue and has provided funds for Grow Your Own teacher programs. In ISBE (2022) announced a $2.1 million Grow Your Own teachers grant for areas of low income. Other districts need to replicate the survey and use the data to create a GYO program for their district. Once the districts have an idea of the misconceptions that middle school students have about the career of teaching, it can be addressed in the middle school course. Middle school students are an overlooked group of people for future teachers.

Colleges and universities need the information that school districts are collecting and look to make connections between the school districts and themselves. Information from our middle school students is valuable for colleges and universities to provide correct coursework for future students.

Conclusions

The data that has been collected helps paint a picture of what middle school students think of the profession of teaching. There are some opportunities to help students decide if the teaching profession is a career that is worth pursuing. Knowing what a student would want to do at an earlier age can help students pick the correct courses to help their career start as soon as they can begin. At middle school, there is a need for a Grow Your Own program that can help students get some experience in education. Also having a direct path to their college coursework is a great way to entice students to start the path to education. The research already shows that many teachers tend to work within 40 miles of where they have grown up. This is a great way to
not only help alleviate the teacher shortage but also help train some of the students as their future teachers.
CHAPTER 4
PRODUCT 3

There is a teacher shortage that is going on throughout the county. While the effects are as dire in District 200, there has been a trickle-down effect that has been felt by our district. What has been noticed is that in that position that would be open, there would be somewhere around fifty applicants for one position. Now some of the positions that are opened are only receiving less than ten applicants. If the district does not act on this now, then the district will be at a disadvantage to other districts that are looking for solutions.

Some schools have been trying to address the shortages by creating some grow your own teaching programs. District 200 has designed a program that is geared toward allowing current students to learn the art of teaching. There are many different ways that school districts have done this but these are focused at the high school level. An area that is overlooked is the middle school students. Schools have not given the idea that students in middle school are already beginning to think of what they want to do with their careers. Slides from the presentation to the school board proposing the middle school teaching elective class can be found in Appendix E.

The literature demonstrates that there is a teacher shortage. There are ways that some districts have attempted to rectify this problem by beginning some of their own Grow Your Own teaching programs. There is a lack of literature showing that middle school students are involved in the Grow Your Own teaching programs. This is an opportunity that schools can use to help them. I have done an empirical study with middle school students to help understand their
thoughts on education and what their careers could be. This information helped shape the new proposed program that is geared towards middle school students as a Grow Your Own teaching program.

This new program is aimed at middle school students to help improve their decision making about a career in education. Many factors go into a student when they decide what career they want to take in the future. Many students believe that they can be successful as a teacher but there are other factors they take into consideration. There are different costs that some students believe are too much for them to overcome or not worth what they would receive out of working on becoming a teacher. This elective course that students can take in middle school can help address all of the issues and help our students make an informed decision on what path they would like to take as they move further into their educational careers.

This class is directly influenced by the literature that shows that there are many shortages of teachers that are coming into the teaching profession. Not only are there fewer students joining the teaching profession but there is a lack of BIPOC students that are applying. As the literature has shown the students in the classroom are not reflective of the people who are teaching them. It is getting further and further as time goes on. This program is going to be designed to make sure that all the students have any misconceptions about the teaching profession and help students make decisions that are best for them.

This new elective program has been influenced by the empirical research that was done with questions that were designed using the knowledge of EVT. The survey results gave information about what students thought about education, what the costs were, and if it was worth it to them to take a career in education. The class is a response to undo the misconception that some students have about education.
The program was created to educate students on what it takes to become a teacher, and the benefits of being a teacher and answer questions to alleviate some of the assumptions students have about becoming a teacher. The program addresses all of the issues that are accounted for in the EVT theory as well as matching it to the empirical results that were taken from the survey.

Middle school students believe that they can be successful as teachers. This class will give students a chance to show that they can do it when they work with a small group of students from the elementary school. Middle school students will have a lesson that they are confident in, they know will work, and they will have an audience that will be excited to work with them. Allowing students to try out the career albeit at a very small level. From the results of the survey, students believe that they will do well as a teacher. This class will allow them to prove it.

The next thing that the class will have will be showing the students different careers that they can take if they go into the education profession. Many of these jobs that are in schools are not noticed by middle school students. Teaching the students that there are different career paths that they can go down will allow students to believe that they can be successful even if they do not want to be in front of students all day long.

The other piece of evidence that the course will allow students to participate in will be working with students in the multi-needs classrooms. This is an opportunity for the students taking the class to practice and work with students that would be similar to some students that they would see in the future. Moreover, it gives the students taking the class another opportunity to gain experience and demonstrate that they can be successful in implementing the lesson under the watchful eye of a special education teacher as well as their teacher teaching the class.
Another piece of working with multi-needs students is the fact that there is some great value in working with multi-needs. It is very difficult to not feel the value it is when working with the multi needs students. It shows how much of an impact a teacher can have on the lives of students. The data shows that many different groups of students do not value the profession of teaching in that way. This is another way that this class can help undo the misconception that some middle school students would have about teaching.

The time that the class would work on looking up the benefits of teaching would be addressing the misconceptions about the value of teaching. The teaching profession will not make a person a millionaire but some benefits are much greater that go unnoticed. Plus, there are other positions in the profession that make more money.

Finally, there is the issue with the cost that goes to the students. The current program that is involved in the district helps keep the cost of getting a college education down. The high school program helps the students get six hours of dual credit with the College of DuPage. Having the students start the course while they are in middle school will help guide them to taking the high school version where the credits can be used for post high school experience. The district has expanded its program by partnering with the College of DuPage and Valley City State University. This partnership can have students earn their bachelor’s degree for $15,000. This can help students who feel that the cost of education is too high for them to achieve a career. Moreover, this new middle school program will also show how the students can use their time to get into a career that will not only benefit them but also not take away time from other things that they are doing. Many of the classes the students will take in high school for this credit will go under the elective credit they need to graduate. The students can use class time that they
were already going to have to do. This can allow them to pursue other hobbies and interests that might have taken away from them.

How the Course Meets the District Needs

The middle school Introduction to Teaching class would be a similar version of the high school Introduction to Teaching class with it being geared toward middle school students. The class would be an elective class that they would choose to enroll in.

The course will be divided into different sections. One section would look over different types of opportunities in education. Education is not just teaching. There are counselors, social workers, school psychologists, principals, librarians, technology directors, etc. Some of the classes will have the opportunity for other educators who are not teachers to come in and discuss what they do and how they help the school. They would also explain what degrees or certifications that are needed to obtain this career. Opportunities for different professionals such as school psychologists, counselors, and department chairs would be able to come in and discuss what they do on a day to day. There are many different opportunities in schools for students to take part, and it is good to know the different options that are available for them to do in their careers.

There will be a breakdown of the structure of a school. It is a good idea to show who is in charge of what different parts of the school building. The district can make it specific to how they run their hierarchy and go into generalizations about how a smaller or bigger district might be run. This would work for elementary and community school districts. The course will also be going over the jobs from paraprofessional up to superintendent.
This is important to give the students a better understanding of what it takes to succeed as a teacher. Going into a career in education is not just teaching. It can showcase some of the other areas that require different skills that some students have. Middle school students might feel that their talents would better be served in an administrative role or a counselor role. This can be beneficial to any student who is interested in a different career that is not just centered around teaching.

An important part of this course will be to go over the benefits of teaching. There are benefits that students know about such as the vacation time that is available to people in education. Then there are the financial advantages of being in education which include teaching but also the overview of the retirement benefits that educators receive for their work. There will also be benefits that do not show up on a benefits sheet. Those are the flexibility that teachers have with their holiday schedule, the being paid over the summer, and the opportunities to coach or do other things around the building that can earn money.

The class will allow students to research and map out how they would reach their desired teaching position and what coursework, school, or schools, they would need to take the achieve their desired teaching position. This program will feed into the high school program in the district. The high school program is aligned with the local community college and Valley City State University of North Dakota.

This is an important part of helping some of the misconceptions our middle school students have about teaching. One thing that the class needs to accomplish is to show students that teaching would be useful for them. There are many great aspects of teaching but our middle school students do not yet know how it is going to benefit them in the future. This is not just some of the financial benefits but also the other perks that get brought up but are not always
highlighted. The ability to show students that learning how to help others learn has other benefits for them in their lives. It helps them when they are in different relationships that they will have during their lives.

Learning some of the basics of teaching would be another focus of the class. Students would learn how to write a lesson plan. Knowing what needs to be included when the teacher is preparing to work with the students in the future. The class would practice writing one together and then implementing it on a small group of students.

Learning some of the basics of teaching would help students feel more comfortable knowing that they can learn the materials to be a teacher and that they can be successful in the profession as well. Completing this would confirm to the students that they can be successful.

The class would also match up with a feeder elementary school that would have the students work on doing a reading lesson with either first or second grade students. The class would practice writing the lesson plan together. The class would then go on a field trip to the feeder school and students would teach the lessons with their small group of students. This would allow the students to try out teaching in front of other students. At the same time, it is promoting the course to future students years ahead of time.

The lesson would help the middle school students show that they can learn the material to be successful teachers. The students work together with a teacher to be able to write the lesson and implement it to other students. The other thing that this task of the class would have would be to show that the students could understand the material to become a teacher. Students would practice developing a lesson, writing it up, and teaching the lesson.

The strength of this part of the class is that the students can learn a variety of ways to implement teaching. While being in person and teaching in a small group, another thing that
could be cost effective is to have the student taking the middle school class run a Google meets with the students from the feeder school. The teacher could rotate into the class at different times to check in on the students get an observation of the student and be able to provide feedback to the student.

Similar to previous parts of the course, this part of the course would allow students to feel successful at teaching. The students would show that they can learn the materials to become a teacher and they would be able to be successful as a teacher.

Another thing that the class can entail is going over how a teacher gets evaluated. This is something that can be used by the students as a rubric for the lesson that they teach to the students from the feeder schools. The teacher can also incorporate someone in the building who does evaluations and they can give their perspective on what they are looking for when they go into the room. This part could even include an administrator explaining what they are looking for from a teacher when they do an observation.

This part of the course would help the students become successful at teaching. They can see what they’ve accomplished and what tool they will use to be evaluated. Students will be able to understand that they can implement the lessons and be successful.

There is an opportunity to help students learn more about special education how it works in a classroom and what different ways it looks like. Teachers could show what are some accommodations that students have that would be put in an IEP. They can explain how a special education teacher works with a classroom teacher to provide the support students need in the classroom.
Working with students with special needs would help our students see that they can be a successful teacher. It will also show how much of an effect that teachers have on students. This could also have a positive outlook on how middle school students view teaching as important.

Another part that the students can use in their class is going to classrooms with multi needs students. This will be an opportunity for students who might not have ever experienced what it is like to work with students with multiple needs. This is a great opportunity for students to see the joy in teaching that comes with working with multi needs students.

This course is designed to allow any middle school student who wants to learn more about what it takes to become a successful teacher. While planning this course, it was important to align the objectives that the course will have with the students’ feedback about teaching in mind. Some course objectives specifically address the different areas that some of the subgroups have stated which shows why they do not believe teaching is a career choice for them.

For Black middle school students, they rated lower than their counterparts in the Value portion of our survey. This means that they do not believe that teaching is important to them or value teaching as a career for them. This particular class addresses those concerns by going over the benefits of teaching. It will go over the different perks of being a teacher and also outline some of the financial benefits, time off, and opportunities that are available to teachers. Another part of the course that will address the African American middle school students' concerns will be showing the different areas of education that students can become. It is not just a particular part of teaching that a student can become. Seeing the different areas of education that are available in the educational field would show how becoming a teacher would be useful for their career.
For Hispanic/LatinX students the part of the course that goes over the benefits of being a teacher. The different perks of being a teacher and the financial benefits are a way to address some of the concerns that the data shows our Hispanic/LatinX students have for the career of teaching. Since this course ties into the current high school course, this also paves the way for the students to earn their degree in teaching without breaking the bank to do it. The current pathway set up for students to become a teacher is less than $20,000. Following this pathway to becoming a teacher gives students the direct path to becoming a teacher when they finish college. The Hispanic/LatinX students have shown concern about the time it takes to become a teacher. This current pathway that they can take can have them complete their degree in four years and have an interview opportunity right when they complete school. This course helps address the cost concerns that our Hispanic/LatinX students have shown.

For Asian middle school students, the data shows that they value teaching but the cost of teaching is going to be too high. The part of the class that goes over the financial aspect will be a very important part of the course. To go along with that, helping the students discover the career pathway is another important part of the course to address the cost of becoming a teacher. The Asian students stated that they would have to give up too much to become a teacher and that the time it would take to become a teacher. The current pathway that is available to students taking this course is the most efficient way to get into a teaching career. Other extracurricular opportunities that students want to pursue can still be done. This course has objectives that are in place to address the concerns that Asian middle school students have voiced about the career of teaching.
REFERENCES


Indian Prairie School District #204. (2021, October 2). IPSD 204: Equity in Action. https://www.ipsd.org/domain/105


INTRODUCTION TO TEACHING 1 (I)

Length: One Semester

Grades: 8

Prerequisite: Completion of 8th Grade Classes and Parent Permission

Entrance Criteria for Dual Credit: None

Qualifies for: Middle School Elective Credit

Cooperating School: Wheaton Warrenville South and Wheaton North High School

Introduction to Teaching provides students with an opportunity to explore the teaching profession, learn the responsibilities and rewards associated with teaching, and work with teachers and students in hands-on situations through site-based field experiences at District 200 schools. Students will examine teaching from a variety of perspectives, including historical, philosophical, social, legal, and ethical. Students will also explore various policies, procedures, and routine activities that are part of the teacher's role. Students will work with a classroom teacher as well as other teachers on site to help guide their learning. Students in this course have the opportunity to enroll in the Introduction to Teaching Course at the high school.
APPENDIX B

HIGH SCHOOL COURSE DESCRIPTION
INTRODUCTION TO TEACHING 1 (I)

Length: One Semester

Grades: 11, 12

Prerequisite: Sophomore English

Entrance Criteria for Dual Credit: None

Qualifies for: Applied Technology Credit

Cooperating School: College of DuPage

Introduction to Teaching provides students with an opportunity to explore the teaching profession, learn the responsibilities and rewards associated with teaching, and work with teachers and students in hands-on situations through site-based field experiences at District 200 schools. Students will examine teaching from a variety of perspectives, including historical, philosophical, social, legal, and ethical. Students will also explore various policies, procedures, and routine activities that are part of the teacher’s role. Students in this course have the opportunity to earn college credit through the College of DuPage’s Dual Credit program.

INTRODUCTION TO TEACHING 2 (I)

Length: One Semester

Grades: 11, 12

Prerequisite: Intro to Teaching 1

Entrance Criteria for Dual Credit: None

Qualifies for: Applied Technology Credit
Cooperating School: College of DuPage

Introduction to Teaching 2 expands upon the classroom teaching and learning skills that are presented in Introduction to Teaching 1, and provides additional opportunities for students to gain real-world experience through assisting in an actual classroom setting in one of our District 200 schools. Weekly seminars will focus on the development of human relations and problem-solving skills that are necessary for an effective classroom. Students in this course have the opportunity to earn college credit through the College of DuPage’s Dual Credit program.
APPENDIX C

LETTER TO FAMILIES ABOUT THE SURVEY
Dear Families:

Your child is going to be given a survey in school for a graduate project from Northern Illinois University. The survey will take approximately five minutes to complete. The survey intends to ask the students about their perceptions of the teaching profession. You are welcome to view the questions on the survey as well as opt out of the survey if you choose. If you have any questions, feel free to contact Andrew Vondran (andrew.vondran@cusd200.org) Thank you so much for your time.
Survey on Education Pathway Interest with Middle School Students.

This is part of a voluntary survey about what level of interest middle school students have in the career pathway of education.

The study is to explore which students might be interested in following a career toward education. This is a copy of the questions that your child will be asked.

1. Have you ever thought about becoming a teacher?

2. What level of education have you thought about teaching? (Select all the apply)
   a. Early Childhood
   b. Elementary
   c. Middle School
   d. High School

3. If you chose Middle or High School, what subjects would you be interested in teaching?
   (Select all the apply)

4. What do you think the barriers are to becoming a teacher?
For each of the statements below, think about becoming a teacher. Please indicate to which level you agree or disagree with each statement as you think about becoming a teacher.

5. I think I can learn the material to become a teacher.
6. I think I can be a successful teacher.
7. I am confident I could understand the material to become a teacher.
8. I think the profession of teaching is important to me.
9. I value teaching as a career for me.
10. I think the teaching would be useful to me.
11. Becoming a teacher will require too much time.
12. Because of other things I do, I do not have the time to put into becoming a teacher.
13. I am unable to put in the time needed to do well as a teacher.
14. I will have to give up too much to become a successful teacher.
15. What grade are you currently in?

16. Which of the following categories describe your race? Please check all that apply:

17. What gender do you consider yourself to be?
APPENDIX E

SLIDE SHOW FOR BOARD PRESENTATION
Middle School Teaching Elective Class

September 26, 2023
## Goals of the presentation

1. Discuss where the district is at with the Grow Your Own Teaching Program.
2. Introduce the Middle School Elective for Grow Your Own Teacher Program.
3. How this program will benefit the district in the future
Current Progress

- High school elective course open to Seniors
- Two semester course called Introduction to Teaching 1 & 2
- Offers Dual Credit to College of Dupage and Valley City State University
1+2+1 Concept

- Year 1: High School Seniors - 24 - 30 hours of dual credit through COD
- Year 2: Students work full or part time as Paraprofessionals in our District while doing coursework on site.
- Year 3: Students work full or part time as Paraprofessionals in our District. Students begin to specialize in their coursework which is continued through COD in a blended format. They will begin coursework the Valley City State University in South Dakota.
- Year 4: Students complete coursework online through Valley City State University in South Dakota. Students continue working full or part time as Paraprofessional in our District.
Need for a middle school program

- Middle School Electives update
- Data shows that middle school students know about teaching but have some misconceptions about the career
- Feed into the high school program
Middle School Elective

- Different types of opportunities in education
- Benefits of teaching
- Funding to become a teacher
- Partner with elementary schools to do some small group teaching
- Partner with high school to continue the program
- Work in the building with different Sped populations
- Field Trip to College of Dupage to show the 1:2:1 program
- Track the students so upon completion, they will be allowed to interview for a position they are qualified for.
Middle School Program

- Open to 8th Grade Students for their elective
- Would allow them to enroll in the high school course during Junior Year
- Track the students for opportunities to come back and work in our schools while at college earning their degree
How this Address our subgroups

- Focus on answering the misconceptions from our middle school survey data
  - African American
  - Hispanic / LatinX
  - Asian
  - Caucasian / White
How this Address our subgroups

- Focus on answering the misconceptions from our middle school survey data
  - African American
  - Hispanic / LatinX
  - Asian
  - Caucasian / White
African American

- Need to address the value of the profession of teaching
- Need to address the costs of school
- Need to address the usefulness of becoming a teacher
Hispanic / LatinX

- Need to address the value of the profession of teaching
- Need to address the costs of school
Asian

- Need to address the costs of school
- Need to address the time it would take to complete the degree
Caucasian / White

- Need to address the value of the profession of teaching
Long-Term Programming

- Start the class in middle school
- Have the students continue in high school
- Students finish their bachelor’s program and return to interview
- Can continue the supply of teachers needed for our school
Next Steps Short Term

- Communicate with families the new class (2023)
- Continue curriculum and programming development with the middle school elective class (2023)
- Schedule the students for the upcoming school year
Next Steps Long Term

- Support implementation
- Overall Grow Your Own review annually in January
- Track our students progress
Revisit the Goals of the presentation

1. Discuss where the district is at with the Grow Your Own Teaching Program.

2. Introduce the Middle School Elective for Grow Your Own Teacher Program.

3. How this program will benefit the district in the future