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THE IMPACT OF TEACHER ATTRITION ON EQUITABLE EDUCATION FOR STUDENTS FROM UNDERSERVED COMMUNITIES.

A MASTER'S THESIS SUBMITTED TO THE FACULTY

OF BETHEL UNIVERSITY

BY

MARIAN WILLIAMS

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF ARTS IN SPECIAL EDUCATION

AUGUST 2023

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APPROVED

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AUGUST 2023

ACKNOWLEDGEMENTS

Writing my thesis has been both an enlightening and daunting task. Learning about the effects that teacher attrition has on some of our most vulnerable students, those coming from underserved communities, has been revealing for me as an educator to say the least. I am grateful for this knowledge and how it will inform my future practices and decisions as a teacher. Nonetheless, writing this paper has required the constant encouragement of my thesis advisor, Chuck Strand, and the support of my family. I'll be forever grateful for the patience and support that my husband, Nelson, and children, Emma and Sam, have given me throughout this journey. I'm most of all grateful to God for opening every possible door to help me complete this thesis despite multiple life events that could have prevented me from doing so.

ABSTRACT

The current teacher shortage has created a looming crisis in education in the United States that most frequently impacts students from underserved communities. Receiving an equitable education in our country should not be assumed because the data tells us a different story. Too often, students from underserved communities are taught by less qualified teachers who lack both experience and expertise. The research paints a picture of primarily children of color living in urban settings who don't receive the same level of education as their suburban counterparts. Much research has been done to determine the cause of these inequities and has uncovered a myriad of reasons for the high rates of teacher attrition we're currently experiencing. What has been gleaned throughout the research being conducted for this thesis is that the primary factors impacting teacher turnover appear to be working conditions and a lack of administrative support. This thesis provides a tool for schools to use for implementing their own support systems for teachers, as well as improving their success at retaining them.

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CHAPTER I: INTRODUCTION

UNDERSERVED COMMUNITIES

Underserved communities in American schools typically refer to students who are located in low-income areas or with a higher percentage of Black or Latinx students (Mehrotra et al., 2021). Other vulnerable groups of people can be immigrant communities and, at times, students from rural areas. According to Wylie et al. (2013), underserved communities exist "if there are no services, if services are inaccessible or if the service distribution in question fails to meet the population needs" as cited by Zahir et al. (2022, p. 104). Unfortunately, schools located within these communities are often the hardest hit by teacher turnover, which can be at much higher rates than for schools residing in non-poverty areas. For example, a research study recently conducted in Texas noted that teacher turnover in that state in urban schools is twice as high as the national average (Moore et al., 2018). Given the cost of replacing teachers and the impact that attrition has on both classrooms and the entire school community, teacher turnover has an especially detrimental impact on underserved communities.

THE VALUE OF RECEIVING QUALITY INSTRUCTION

Multiple research studies have revealed that teachers have a profound impact on student outcomes. In fact, it has been determined that "teachers are the No. 1 predictor of student success inside the classroom" and that "teachers are estimated to have two to three times the effect of any other in-school factor" on students (Mehrotra et al., 2021, p. 4). A recent study in Forsyth County, North Carolina further validated this fact by determining that the quality of a student's teacher can even influence their future upward economic mobility (Blizard, 2021). The author of this study stated that not only does the quality of schools and teachers produce long-term benefits for students, but the absence of these factors is especially detrimental to economically disadvantaged children. Moreover, research studies have repeatedly suggested that experienced teachers raise student performance more than early career teachers and that high-quality teachers are the most critical factor in influencing student achievement (Moore et al., 2018).

TEACHER SHORTAGES

A major factor that hampers our ability to provide quality instruction to all students is the ongoing teacher shortage being experienced in our nation. In the United States, teacher shortages have been hovering around 8% for several decades (Carver-Thomas & Darling-Hammond, 2017). According to the authors of a study regarding urban Texas teacher retention, "Since 1989, the national teacher attrition rate in the United States has increased 50% and remains steady" (Moore et al., 2018, p. 2923). The authors of *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.* shared that there has been a 35% reduction in enrollments in teacher education programs between 2009 and 2014, amounting to 240,000 fewer teachers. They also estimate that by the year 2025, 316,000 additional teachers will be needed to fill the demand in schools (Sutcher et al., 2016).

FACTORS CONTRIBUTING TO TEACHER SHORTAGES

While the demand for teachers increases, there continues to be a shortage of people entering education as a profession. Studies have found that becoming a teacher has a different status than it once did. For example, Samuels & Harwin (2018) determined that the perception of working in education has drastically changed over the last several decades and that fewer people desire to enter teaching, especially as special educators. Given the comparatively low salaries teachers earn for a job that requires working many additional hours after school, the draw towards teaching programs has significantly dropped. In one meta-analysis, the findings of three studies demonstrated that special education teachers identified benefits and salary as prominent reasons for leaving the teaching field (Billingsley & Bettini, 2019). Moreover, in a study that examined teacher shortages, the authors stated that "Evidence continues to mount that current compensation levels are inadequate to attract the best and brightest" (Park & Byun, 2015) as cited by Mason-Williams et al. (2020, p. 51).

TEACHER ATTRITION

The availability of qualified teachers has been diminishing over time, while the high rate of teacher attrition in America has exacerbated this growing trend (Sorensen & Ladd, 2020). Teacher turnover, also known as attrition, occurs when teachers move to a new position within the same school district, move to a different district, or leave the teaching profession altogether. Unfortunately, higher rates of attrition often have an adverse effect on students. According to Lucy Sorensen and Helen Ladd in *The Hidden Costs of Teacher Turnover*, "A high turnover rate of teachers in a particular school may reduce the quality of education the school can offer" (2020, p. 1). Factors that impact student outcomes at a school due to attrition are often tied to teachers being hired to fill positions with fewer qualifications and less experience, which can ultimately disturb the delivery of curriculum and even the cohesiveness of a school (Cardichon et al., 2020). As a result, excessive teacher attrition can impact both individual students and the effectiveness of an entire school community.

SPECIAL EDUCATION TEACHER ATTRITION

According to researchers Billingsley and Bettini (2019), the field of special education has suffered from teacher shortages since 1975, when the inception of IDEA (Individuals with Disabilities Education Act) came into law. Those same authors cited research done by Carver-Thomas and Darlington-Hammond (2017), who found that although the overall U.S. general education teacher and special education teacher attrition rates were similar in the data gathered from a study in 2012-2013, ultimately, attrition for special education educators was second only to English language development teachers. More recent data from 2017 showed that each year 17% to 29% of special educators leave their teaching positions, mostly due to attrition (Mason-Williams et al., 2020) and that for educators with less than five years of experience, that figure rises to as much as 50% turnover (Nadeau, 2019).

Despite teacher turnover being high for all teachers in the U.S., studies reveal that special education teachers statistically face higher levels of burnout and stress. "Burnout" is described by Maslach and Jackson (1981) as occurring "when teachers undergo stress for prolonged periods of time and begin to experience feelings of emotional exhaustion, depersonalization, and a loss of personal accomplishment" (Hester et al., 2020, p. 348). According to special educators, the main factors contributing to burnout are excessive paperwork, unsupportive administrators, and workload manageability (Hester et al., 2020). Unfortunately, ongoing stress can lead to health problems and absenteeism among educators, which is compounded by a small pool of special education substitute teachers, many of whom are less qualified and inexperienced (Samuels & Harwin, 2018).

HIGHLY QUALIFIED TEACHERS

Highly qualified teachers are educators who are both experienced and educationally well-prepared. Researchers have found that students benefit most from teachers with at least two years of teaching experience and completed a university teaching education program (Cardichon et al., 2020). Frequently, students who attend urban schools with a higher concentration of children of color are taught by the highest number of novice teachers. For example, in Rhode Island, the schools that serve the highest percentages of Latino students have 18% novice teachers, whereas, in schools that serve the smallest number of Latino students, 6% of the teachers there are new (Mehrotra et al., 2021). Several studies indicate that having a new teacher every year is subjecting students to a revolving door of educators with less experience, which "disproportionately affects the achievement of students who are most underserved" (Mehrotra et al., 2021, p. 5).

IMPACT OF TEACHER ATTRITION ON STUDENTS

The impact of teacher attrition on student outcomes can be costly, especially for students from underserved communities. In their analysis of data from the 2012 Schools and Staffing Survey and the 2013 Follow-up Survey, authors Carter-Thomas and Darling-Hammond found that "high turnover rates reduce achievement for students whose classrooms are directly affected, as well as for other students in the school" (2017, p. v). Another study revealed that in schools serving the largest number of students of color, turnover rates were 70% higher than in schools with fewer minority students (Mehrotra et al., 2021). Unfortunately, this inequitable distribution of quality teachers can have devastating results on the futures of children living in economically disadvantaged communities. In researcher Zachary Blizard's analysis of the path towards upward mobility in a North Carolina county that has high rates of extreme poverty, he shared his results stating that "Experienced and high-quality teachers can have significant long-term impacts on elementary school children, especially those who come from underprivileged families" (2021, p. 778).

STRATEGIES FOR ALLEVIATING TEACHER ATTRITION

Recommendations for alleviating special education teacher attrition primarily focus on the feedback provided by teachers who leave their schools. Several studies have reported that the most frequently cited reasons for departing teachers were dissatisfaction with testing and accountability pressures, poor working conditions, and a lack of administrative support (Carver-Thomas & Darling-Hammond, 2017). Another study that focused on retaining teachers in urban schools in Texas echoed the need for strong social support by stating: "Communication, collaboration, and collegiality not only increases urban teachers' desire to remain, it creates opportunities for shared decision making" (Moore et al., 2018, p. 2928). Kim Jihyun, in her study, shared that having a supportive and effective principal also substantially impacts teacher retention. Instead of leaving due to difficult student behaviors. Jihyun stated that: "Teachers who leave high-poverty schools are not fleeing their students. Rather, they are fleeing the poor working conditions that make it difficult for them to teach and for their students to learn" (Jiyun, 2019, p. 106).

Therefore, this thesis will provide research to demonstrate the substantial impact that teacher attrition has on students from underserved communities.

Thesis Questions

- 1) What impact does teacher attrition have on providing an equitable education to students from underserved communities?
- 2) What measures should schools take to improve special education teacher& regular education teacher retention?

CHAPTER II: LITERATURE REVIEW

Research Process

The research in this thesis was gathered from a variety of sources, including scholarly articles found via Bethel's online library. The search engines used were primarily EBSCO and ERIC. Influential journals used when searching the topics "teacher attrition," "the impact of teacher turnover on students," and "equitable education" were the *Review of Educational Research, American Educational Research Journal,* and the *Remedial and Special Education Journal,* among others. The research was also found in books, dissertations, and from a variety of institutes and centers of learning.

First, this thesis will provide information to address thesis question number 1. What impact does teacher attrition have on providing an equitable education to students from underserved communities?

Given the current teacher shortage and its impact on education in the United States over the last decade, the studies surrounding the topic of teacher attrition are plentiful. The purpose of this thesis is to determine the direct impact of teacher turnover on the quality of education provided to students, especially to those who experience the greatest impact from attrition, such as students who live in urban areas or economically disadvantaged communities.

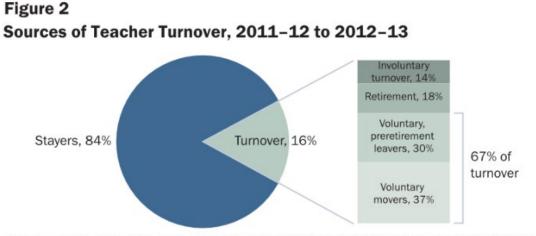
Teacher attrition has become a chronic problem in the United States since the Great Recession (Sutcher et al., 2016). After that timeframe, the demand for teachers increased while the supply of educators diminished. The cause for this reduction of teachers appears to have multiple reasons. Some researchers point to a lack of social standing associated with the teaching profession in general, as well as educational programs no longer drawing highranking students for their candidate pools (Han et al., 2018). When other researchers surveyed 600 college majors regarding their view of the teaching profession, the respondents answered favorably about the social value of teaching. However, they said they would prefer a career that offered them more money, intellectual stimulation, and respect, something they felt a position in education could not provide (Mason-Williams et al., 2020). Similarly, a study involving highly rated college students who were cultivated to pursue a degree in teaching demonstrated a high dropout rate of candidates after being given detailed information about the working conditions and pay that teachers could expect (Mason-Williams et al., 2020). Brittany Bales, a lecturer for Ball State University and former special education teacher, summed up her views about the current state of education when she said that "The perception of education has changed so drastically. It's not really viewed as the profession that it once was" (Samuels & Harwin, 2018, p. 5).

In spite of statistics concerning low enrollment numbers of students entering education programs, the high turnover rates commonly seen in this field are the most concerning. According to Sutcher et al., "The teaching workforce continues to be a leaky bucket, losing hundreds of thousands of teachers each year - the majority of them before retirement age" (2016, p. 2). Turnover rates for teachers have been holding steady at 8% (Moore et al., 2018), and attrition rates for teachers in specific fields such as special education, foreign language, or when teaching in high-poverty areas are much higher. However, teacher turnover rates vary significantly across the U.S., with attrition being highest in Southern states and lowest in the Northeast, where teachers receive higher salaries and greater benefits (Marco Learning, 2023).

Based on data analyzed from 2011-2013, Carver-Thomas & Darling-Hammond (2017) described the breakdown of teacher attrition in schools during that time. They determined that of the 16% attrition that was experienced, 67% of that turnover was voluntary and unrelated to pursuing retirement. Some teachers moved to other schools or districts, while others chose to leave the teaching profession. When surveyed, teachers selected dissatisfaction as the number one reason for their departure. Being held accountable for testing results garnered the largest portion of their dissatisfaction (25%), with

unhappiness with school administrators and teaching careers being the second highest

selection in this category (Carver-Thomas & Darling-Hammond, 2017).



Source: Learning Policy Institute analysis of National Center for Education Statistics Schools and Staffing Survey, 2011–12 and Teacher Follow-Up Survey, 2012–13.

Content: Teacher Turnover: Why It Matters and What We Can Do About It | Learning Policy Institute

Although attrition rates are historically high for teachers in general, the turnover rate for special education teachers is at a near-crisis level. Over the last decade, the amount of available special education teachers has been reduced by over 17%, whereas the number of special education students in the U.S. only dropped by 1% during that same timeframe (Samuels & Harwin, 2018). One study reported that each year between 17-29% of special education teaching jobs are vacated (Sullivan et al., 2017). Another study found that during the 2016- 2017 school year alone, "48 states reported shortages of special education teachers" (Mrstik et al., 2019, p. 28). While these statistics alone are daunting, even more troubling is the fact that 51% of schools and 90% of high-poverty schools are struggling to hire qualified special education teachers (National Coalition on Personnel Shortages, 2015) as cited by Nadeau, D. (2019).

The reasons for special educators leaving the teaching field at such alarming rates involve multiple factors. One of the primary reasons given by teachers for leaving is the demanding job requirements, such as writing Individualized Education Programs (IEPs) and developing Behavior Intervention Plans (Mrstik et al., 2019). Another often listed reason for leaving is workload manageability or time spent outside the classroom to complete required legal documents and deadlines (Hester et al., 2020). A recent study that included 366 participants from 34 U.S. states examined the high attrition and burnout rates of special education teachers. This study pinpointed "burnout," a prolonged sense of stress, as being one of the main factors leading to high teacher attrition. Regarding her feelings of burnout, a teacher from Arkansas stated, "This profession consumes you, it's not a normal job. I am stressed, I feel it physically and mentally. I work late a lot or bring it home. I'm missing out on my family" (Hester et al., 2020, p. 358). An experienced educator from Tennessee shared her workload situation: "My family has always come second to my job. Perhaps I can find something that will allow me more time for my family when at home, instead of working all night and having my husband care for the children" (Hester et al., 2020, p. 359).

In addition to having excessive amounts of paperwork to complete and an overwhelming workload, a multi-state study completed by Hester et al. (2020) revealed that a key reason for high turnover rates in special education is that teachers often feel unheard and unsupported by their school administrators. Social supports, often referred to as social resources, include "anything that employees feel helps them to successfully fulfill job demands" (Bettini et al., 2020, p. 311). These supports can include having strong and supportive relationships with administrators and colleagues, as well as having access to materials for the classroom. Bettini et al. conducted a study to determine how teachers' resources and demands interfaced and ultimately influenced their decision to keep teaching or leave the profession. They confirmed the importance of teacher support by stating that "When demands and resources are balanced, employees feel able to manage responsibilities, feel motivated by their job, and thus are more likely to intend to stay" (2020, p. 311).

The cost for schools to replace teachers who leave their positions is high. Estimates in 2017, as reported by The Learning Policy Institute, reported that it costs over \$20,000 per

teacher to replace them in an urban district (Carver-Thomas & Darling-Hammond, 2017). In 2004, almost two decades ago, the estimated amount spent for recruitment and replacing special education teachers who left their positions during the first five years was 90 billion annually (Brownell et al., 2004) as cited by Hester et al. (2020). Especially in high-poverty schools, which suffer the greatest levels of attrition, the cost of teacher turnover can be damaging. Not only is there a financial price for losing teachers, but there is also the burden of finding their replacements. Substitute teacher pools are often very small, especially for harder-to-fill positions such as special education teachers (Samuels & Harwin, 2018). Some of the hidden costs of teacher attrition fall heaviest on the "Stayers," referring to the teachers who are left behind. When a teacher leaves a classroom, all of their social capital also evaporates, putting the responsibility for training the new teacher on the remaining educators. This situation is often demoralizing for the teachers who must continually retrain staff when teachers leave their schools, but it also has negative academic implications for the students (Ronfeldt et al., 2013).

Linda Kasarjian shared in her dissertation about the impact of attrition on the teachers who stay by saying, "High teacher turnover is detrimental to the success of teachers and students who remain in buildings, leaving teachers to pick up the pieces, to consider their own longevity, and attempt to make sense of how to curb the cycle" (Kasarjian, 2022, p. 8). Research tells us that when teachers leave a classroom either to transfer to another school or to leave the profession, the entire school community suffers the loss of institutional knowledge that goes with them (Henry & Redding, 2018). Furthermore, this loss of knowledge inhibits the development of culture with the remaining teachers by weakening "their ability to form a cohesive instructional culture" (Henry & Redding, 2018, p. 335). Kasarjian summed up this state of diminished collegiality by saying that "a high turnover rate in teaching faculty results in a lack of consistency in collaboration among

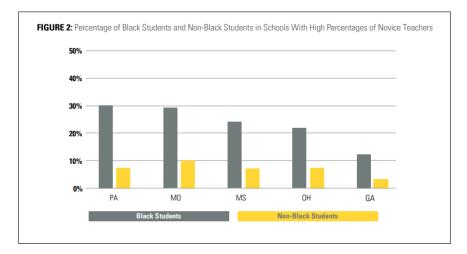
teachers, a lack of clear expectations for students, and a lack of trust within and from the larger school community" (2022, p. 8).

Equitable Education

The term "equitable education," as used in this thesis, refers to access to qualified educators with experience teaching and the proper preparatory training for their positions. It is a well-documented fact that there is a much greater number of less qualified teachers in high-poverty schools or those serving higher percentages of Latino and Black students. (Mehrotra et al., 2021). In The Education Trust's report *Getting Latino Students Better* Access to Non-Novice Teachers, we learn that a continuous turnover of teachers "creates instability, making it difficult for schools to create coherent instruction and to implement new initiatives" (Mehrotra et al., 2021, p. 5). Not only can unqualified teachers create an environment of instability, but their turnover rate is also 25% higher than teachers who completed their education through a traditional teacher program (Carver-Thomas & Darling-Hammond, 2017). Researcher Hua-Yu Sebastian Cherng stated, "The inability of schools as a social institution to foster high achievement for all student groups remains a persistent social problem in the United States" (2017, p. 67). Cherng's sentiments reflect a growing body of research demonstrating the inequitable distribution of qualified educators among various communities in our country.

In a recent study, researchers analyzed two years of data provided by the United States Department of Education's Civil Rights Data Collection (Cardichon et al., 2020). The data gathered confirmed the importance of prioritizing the provision of certified and experienced teachers to all students so that an equitable education is possible for everyone. According to their report, being certified is defined as having met all state requirements for licensure and endorsement by a state, and being experienced is having taught for three or more years. The authors shared that in a recent study in California where multiple family demographic factors were examined, such as race, ethnicity, income, and the education level of parents, they found that "teacher qualifications were the most important school-related predictors of student achievement, with the percentage of teachers holding substandard credentials significantly and negatively associated with student achievement for all students" (Cardichon et al., 2020, p. 3).

Ensuring that all students in America receive a quality education could be an assumed societal goal; however, research reveals a much different reality. In their article *Getting Black Students Better Access to Non-Novice Teachers*, Mehrotra et al. reported that Black students "find themselves more likely than any other group of students to be in classrooms with teachers who are in their first years of teaching or teachers who are uncertified" (2021, p. 6). The authors explained further that Black students currently experience a disproportionate teacher turnover rate compared to their non-Black peers. Due to funding inequities among and even within school districts, wealthier schools often offer higher salaries and greater benefits to their teachers (Mehrotra et al., 2021). In certain states, the disparities among schools are even more pronounced. For example, in Louisiana and Mississippi, "Schools serving the greatest percentages of Black students have almost three times the percentage of first-year teachers" as those serving the fewest Black students (Mehrotra et al., 2021, p. 14).





teachers/

Teaching in urban, high-poverty schools has historically resulted in higher rates of teacher attrition (Moore et al., 2018). According to the researchers of a study about urban teacher retention, "One of the most prevalent social issues in the United States today is the unequal distribution of quality teachers to urban, high-poverty schools" (Moore et al., 2018, p. 2924). The authors further stated, "Decades of research have indicated that acquiring and retaining high-quality teachers in urban settings is challenging; to acquire and retain a sufficient number of highly qualified teachers in urban settings is nearly unquantifiable" (2018, p. 2924). Multiple researchers have shared the findings of a study by Ronfeldt et al. (2013) that measured how teacher attrition impacts student achievement, especially in schools serving economically disadvantaged students. This landmark study determined that in schools experiencing high teacher turnover rates, students in classrooms with more turnover demonstrated substantially lower student achievement than students in the same grade at the same school whose teachers did not leave (Mason-Williams et al., 2020).

The Cost of Teacher Turnover on Student Achievement

High teacher attrition rates are costly for schools and the teachers who are left behind, but what is the price students pay? In the seminal study by Ronfeldt et al. (2013), researchers analyzed the effects of teacher turnover, specifically on student achievement. Data were examined that included the test scores of 850,000 4th and 5th-grade students from hundreds of New York City schools over eight years. The aim of the authors was to determine if a correlation existed between teacher turnover and student achievement. According to Ronfeldt et al., the results of this study suggested that teacher attrition does have "a significant and negative impact on student achievement in both math and ELA" (2013, p. 30). Henry & Redding (2018), in their reflections about this study, stated that Ronfeldt et al. (2013) found "that fourth and fifth grade students in a grade where all teachers turned over the previous year scored between 8.2 to 10.2 percent of a standard deviation lower in math and 4.9 to 6.0 percent of a standard deviation lower in English Language Arts (ELA) compared to a grade in which all teachers return the next year" (2018, p. 333). Ronfeldt et al.'s study further noted that teacher attrition was especially detrimental to student achievement at schools with large populations of Black and low-performing students (2013).

In addition to the negative effects of high teacher turnover rates on student achievement, Ronfeldt and his colleagues' findings refuted the common assumption that replacing a less effective teacher with a more proficient one is beneficial to students. Instead, the study suggested that "there may be a disruptive impact of turnover beyond compositional changes in teacher quality" that also negatively impacts the students of the teachers who stay behind (2013, p. 31). Moreover, this study posits that turnover has a broader and more pervasive impact on school communities rather than only on the students of the teachers who leave. The authors summarized their results by stating that the "findings indicate that turnover has a broader, harmful influence on student achievement since it can reach beyond just those students of teachers who left or of those that replaced them" (Ronfeldt et al., 2013, p. 7).

A more recent study that used data from the North Carolina Education Research Data Center gathered from middle schools over a period of 22 years also showed the negative effects of teacher turnover on student achievement. In their study, Sorensen and Ladd (2020) restricted their sample by using data for only 6th - 8th-grade teachers of math and ELA. Their data set consisted of approximately 600,000 observations. It led to conclusions that "across all school types, those with more concentrated student poverty have higher rates of teacher turnover" and that urban areas experience more within-district transfers of educators (Sorensen & Ladd, 2020, p. 5). Their findings also found that even a 10 percent increase in teacher turnover led to statistically significantly lower math and ELA student scores. Additionally, due to excessive teacher attrition during the time frame studied, it was revealed that replacement teachers had been hired with "low levels of experience, without full licensure, and without certification in given subjects in subsequent years" (Sorensen & Ladd, 2020, p. 13). The combination of these factors led researchers to conclude that the significant decline in math and reading performance during the time frame studied resulted from teacher turnover (Sorensen & Ladd, 2020).

The effects of within-year teacher turnover on student achievement have also been studied, with even more dramatic results. Henry & Redding (2018), in their article The Consequences of Leaving School Early: The Effects of Within-Year and End-of-Year *Turnover*, document their findings about the impact of teachers leaving their classrooms during the school year. About one-quarter of all teacher attrition takes place mid-year (Henry & Redding, 2018). Through their study, the authors learned that "the mid-year departure of a teacher disrupts student-teacher relationships and the continuity of a child's learning experience" (Henry & Redding, 2018, p. 334). As a result, when a teacher leaves mid-year, they weaken the social support system of their students by dissolving the relational ties that had been established with the student and the student's parents (Henry & Redding, 2018). Further findings showed that when a replacement teacher is selected, even if they are more effective than the previous one, due to the substantial task of learning about their students, the new school, and their grade-level team, the students in their class still exhibit a decrease in academic achievement. As a result, the data from Henry & Redding's study demonstrates that regardless of the experience and qualifications of replacement teachers, mid-year turnaround is harmful to students (Henry & Redding, 2018).

The data used during Henry & Redding's research was taken from a 6-year sample of 4th to 8th-grade students who took end-of-year ELA and math assessments, including hundreds of thousands of data points (Henry & Redding, 2018). This study concluded that the results of within-year teacher attrition significantly impacted student achievement, especially in math. Not only were the social supports severed for these students, but there was also a substantial impact on their academic achievement. As a result, the authors determined:

"that the effect for within-year classroom teacher turnover is -0.100 standard deviation on elementary math gains with the teacher fixed effects. The authors found that this coefficient translates to losing roughly 72 instructional days or 40 percent of the 180-day school year," according to the Center for Research on Education Outcomes (Credo, 2015) as cited by Henry & Redding (2018, p. 343).

In summary, Henry & Redding's research confirmed that the predominant factor causing reduced academic achievement when within-year teacher turnover occurs is the disruptive nature of students experiencing a change of teachers.

A final study examined the negative impact on students when they attend schools with high ratios of unqualified teachers and the subsequent inequitable distribution of highquality educators. This study, conducted by Zachary Blizard, reviewed data from 2017-2018 for 42 elementary schools in Forsyth County, North Carolina, a location that has one of the lowest rates of upward mobility in the United States (Blizard, 2020). According to the study's author, "It is more difficult to escape poverty in Forsyth County than nearly anywhere else in the country" (Blizard, 2020, p. 779). The author further elaborated that in Forsyth County, "a child born to parents in the bottom 20% of the household income distribution has less than 5% chance of reaching the top 20% later in life" (Blizard, 2020, p. 779). The research done in this study also referred to the work of researchers Chetty et al. (2014), when the author shared that one of the key factors correlated with increasing a person's future upward mobility is the quality of the elementary schools located in their area (Blizard, 2020).

The data that was used in Blizard's study was based on information taken from report cards that all public schools in North Carolina earn to designate their school's achievement score and the academic growth of their students. Every year, each school earns a letter grade (A - F) based on their school's achievement, which is tied to statewide and district assessment results and measurements of the academic growth of their students (Blizard, 2020). In his work, the author noticed a correlation between schools that earned higher grades and the percentage of teachers with more experience and lower attrition rates. For example, "At the Forsyth County elementary schools that earned As in 2018, over 72% of their teachers had over 10 years of experience. At the schools that earned Fs, only 40% of their teachers had over 10 years of experience" (Blizard, 2020, p. 789). Similarly, in 2018, the schools that earned a grade of F had a 20.5% attrition rate since the previous year, whereas schools that earned As experienced about 9.2% teacher attrition that year (Blizard, 2020).

Another pattern that this research study observed was that Forsyth County's lowestperforming schools were predominantly made up of economically disadvantaged students from underserved communities. The author shared that this pattern of inequity is troubling when it intensifies the gap between wealthier and economically disadvantaged students, especially when disadvantaged students would gain the most from having high-quality teachers. Nonetheless, the study revealed that students were not driving highly qualified teachers away from schools, but rather, it was the poor working conditions that created high teacher turnover rates at lower-performing schools (Blizard, 2020).

This research project also referenced the work of additional studies confirming the influential role that attending high-quality elementary schools has on the future outcomes of students. For example, the study cited research conducted in the Harlem Children's Zone in New York City (Dobbie & Fryer, 2011), which demonstrated that children who attend high-quality schools in Harlem have been shown to close the achievement gap between white and black students. Additionally, research completed by Chetty et al. (2014) was referenced, indicating that a student's future income, the decision to go to college, and their ability to own their own home eventually can all be statistically impacted by the quality of the

instruction they received at an early age (Blizard, 2020). In summary, Blizard concurred that his study demonstrated the direct correlation between the exposure of young children to enriching academic environments and their future outcomes (Blizard, 2020).

Factors that lead to teacher attrition

Given the immense impact of providing qualified teachers to our most vulnerable students, what are the underlying reasons for the high rates of teacher attrition in the United States? According to most researchers, teachers usually leave classrooms for a mixture of reasons. Frequently, high-quality teachers migrate to less economically disadvantaged schools in pursuit of greater resources and a more stable environment (Carver-Thomas & Darling-Hammond, 2017). Low compensation and benefits are another reason why educators leave their teaching positions. In her dissertation about special education teacher attrition, Diane Nadeau's research found that "20% of the participants responding to her survey indicated that they would leave education right away if they could secure higher paying jobs" (2019, p. 96). Paying teachers low salaries compared to other professions that demand a commensurate amount of education has been an ongoing factor that diminishes the value of pursuing a teaching career (Mason-Williams et al., 2020). Mehrotra et al. also spoke about the struggles teachers face due to receiving low compensation when they shared their surveyed participants' reflections by saying, "many expressed disappointment about low teacher salaries and noted the heavy burden of costs such as student loans and mortgage payments" (Mehrotra et al., 2021, p. 19).

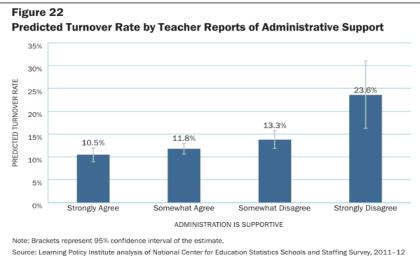
Several studies, however, have shown that the desire to receive greater financial compensation is not the most compelling reason for teachers leaving education. In their research that examined how working conditions influence teacher attrition, Bettini et al. (2020) shared that teachers reported during their study that having social support in place to help them accomplish the demands of their jobs, as well as receiving both collegial and administrative support was most important to them. These same researchers also highlighted

the work of Boyd et al. (2011) and Conley & You (2017), who found that "teachers who experience stronger administrative and collegial support are more likely to stay or intend to stay" (Bettini et al., 2020, pp. 312-313). Lastly, Zachary Blizard shared in his research the findings of Darling-Hammond et al. (2009), who observed that pay raises alone were not enough to attract teachers to work for higher-needs schools. Instead, these candidates were more interested in receiving social incentives such as being a part of decision-making processes, joining a teaching team with collegial relationships, and having highly effective administrators (Darling-Hammond et al., 2009).

Receiving quality mentoring and participating in induction programs has been another preventative factor found in studies that examine the causes of teacher turnover. Cardichon et al. discussed the importance of providing high-quality mentoring and induction programs, which they state has shown to "lead teachers to stay in the profession longer, can accelerate professional growth among new teachers, and can lead to improved student learning" (2020, p. 10). These same authors revealed that despite these types of programs preventing high rates of attrition, as of 2016, it was reported that only 16 states in the U.S. provide specific funding for teacher mentoring and induction programs (Cardichon et al., 2020). Other studies cited that new teachers, especially those working in urban locations, have been found to leave schools due to a lack of mentoring and support (Moore et al., 2018). About this situation, the authors stated that "the result is a staggering number of new teachers who vacate the profession in the first five years" and that "One-third (33 percent) of current public-school teachers in the United States do not expect to be teaching in K-12 schools five years from now" (Moore et al., 2018, p. 2926).

It appears that often the most decisive factor that drives teachers to leave schools is a lack of administrative leadership and support. In his study that focuses on linking principal effectiveness with reducing attrition, Jason Grissom (2011) shared that, especially in disadvantaged schools, principals play a large role in developing positive working conditions for teachers. As a result, teacher satisfaction ratings about principal effectiveness strongly correlate with teacher attrition. Comparatively, Diane Nadeau, in her study that focused on the current shortage of special education teachers, pointed to prior research citing that "new teachers were found to leave three times more often when administrator support dropped by one standard deviation" and that "conversely, teachers reported staying in their roles when they perceived that they were well respected and appreciated for their efforts by administration" (2021, p. 94).

The analysis of data from the National Center for Education Statistics Schools and Staffing Survey from 2011-12 and the Teacher Follow-up Survey from 2012-13 by Carver-Thomas & Darling-Hammond (2017) found that under the category of Workplace Condition, a lack of leadership support was cited as the most significant predictor of teacher attrition. This deficit was attributed to an administrator's ability to "encourage and acknowledge staff, communicate a clear vision, and generally run a school well" (Carver-Thomas & Darling-Hammond, 2017, p. 29). The authors mentioned that these findings were consistent with additional research demonstrating a link between teacher turnover and ineffective school leadership.



and Teacher Follow-up Survey, 2012-13.

Content: https://learningpolicyinstitute.org/product/teacher-turnover-

report?gclid=Cj0KCQjwqNqkBhDlARIsAFaxvwzJ4E89GCRImJEpsxPh9GTKIE0mZxlHGcDPCHkp

The research presented in this thesis attests to the great importance of providing all students with a high-quality education, regardless of their social or economic standing. Additionally, it demonstrates the substantial benefit that receiving a high-quality education provides to both individual students and entire communities. However, the data, analyses, and summaries contained in this literature review point to the clear inequities of educational opportunities that currently exist in our country, often due to high teacher attrition rates. This research offers a glimpse into the reality of public education today, and it beckons us to be agents of change within our schools. By incorporating internal changes such as providing substantive induction and mentoring opportunities, as well as increasing the oversight of teacher feedback by administrators will be a starting point for reversing our current teacher shortage.

CHAPTER III: APPLICATION OF RESEARCH

The writer will address the second thesis question in this Chapter.

What measures should be taken by schools to improve special education teacher & regular education teacher retention?

Developing Robust Induction and Mentoring Programs

Improving teacher retention in schools requires a two-fold approach. The first measure to reduce teacher attrition would be to introduce effective induction programs that include mentoring for new teachers. Studies have shown that high-quality mentoring programs increase teacher retention as well as improve student achievement and instructional effectiveness (National Institute for Excellence in Teaching, 2021). Raue and Gray (2015) determined that educators in their first five years of teaching had an 80% retention rate when assigned mentors, whereas those who were not assigned mentors had a 64% retention rate, as cited by Mrstik et al. (2019). Additionally, rather than simply assigning a staff buddy, studies have shown the effectiveness of matching mentors that work with similar grade levels and in similar subject areas (National Institute for Excellence in Teaching, 2021).

In her dissertation that focused on supporting early career special education teachers, researcher Diane Nadeau (2019) learned that there is significant variability in the quality of new teacher mentoring programs. When surveyed, over one-third of her study's participants reported they were not provided any assistance with conducting parent meetings, learning how to work with paraprofessionals, or preparing lessons. Her participants also noted the challenges of scheduling regular meeting times with their mentors and that many of them were not able to observe their mentors' teaching. Nevertheless, in Nadeau's study's results, mentors received high ratings for providing moral support to new teachers and were "given strong ratings as people who treated them as professionals" (2019, p. 92). Providing a well-matched mentor also appears to be a key factor in the success of induction programs.

Nadeau cited Kathleen Lozinak's work (2016) by stating that "Previous research describes the increased value that mentorship creates when deliberate attention is given to mentor-matching" (2019, p. 91).

Induction programs typically offer new teachers assistance in learning instructional skills and developing foundational teaching practices. Mitchell et al. (2021) referred to the research of Darling-Hammond et al. (2009) by stating that "Induction supports vary, but most programs include targeted professional development, mentoring and feedback, assistance with planning, and in rare circumstances, a reduced teaching schedule" (Mitchell et al., 2021, p. 412). Carver-Thomas and Darling-Hammond (2017) also suggested including the following supports to induction programs: observations by mentors, receiving feedback after being observed, planning time with colleagues to discuss teaching strategies, and receiving a reduction in their teaching assignments. It is not surprising that when these types of supports are put in place for new teachers, induction programs have been found to reduce teacher turnover and increase teacher satisfaction.

High-quality induction and mentoring programs have a proven track record of increasing teacher retention, especially in urban schools or with those serving economically disadvantaged communities, where turnover has the most detrimental impact on students (Moore et al., 2018). In a study by Kamman & Long (2010) and Leko & Smith (2010) that was located in St. Louis and took place between 1996 to 2008, Nadeau, in her dissertation, reported that due to the provision of specialized mentoring there, retention rates rose from 74% to 96% (2019). Cardichon et al. also confirmed, "The best-designed programs provide scheduled collaboration with colleagues, and release time for their mentor to provide individualized coaching and demonstration lessons in the classroom" (2020, p. 10). When considering all of the elements that could be added to a new teacher induction program, redesigning it to include robust mentoring and other proven supports would be a relatively inexpensive endeavor with substantial benefits.

Using Culture Surveys to Develop a Strong Community

A second practice to implement in schools to increase teacher retention is to introduce principals' regular use of culture surveys. Due to principals' highly influential role in student achievement and staff well-being, developing a strong school culture is critically important for retaining staff members (Pannell et al., 2018). Kim Jihyun, in her research correlating principal effectiveness to teacher retention, also indicated that administrative support, according to several studies, has the "most significant school contextual factors" linked to teacher turnover (2019, p. 106). Carver-Thomas and Darling-Hammond also concurred with this finding in their analysis of several studies by stating that "We found that the workplace condition most predictive of teacher turnover was a perceived lack of administrative support, a construct that measures how teachers rate an administrator's ability to encourage and acknowledge staff, communicate a clear vision, and generally run a school well" (2017, p. 29).

Developing a strong school culture is essential for helping novice teachers undertake the challenges of their new position (Kutsyuruba, 2021). Kutsyuruba further posits when referring to previous research (Le Maistre et al., 2006) that "there is also consensus that beginning teachers who find support from administrators and peers are less likely to leave the profession" (2020, p. 3). In his dissertation that examined how principals used teacher feedback to become more effective leaders, Kevin Macina stated that a "principal who is seen as a transformer does not take this role lightly and gathers information from the staff to make the best decision and create the vision for the school" (2019, p. 104). Research clearly demonstrates that principals set the stage for creating a transparent and healthy culture where open discourse and self-reflection can become attributes of their school's identity.

Developing a supportive and encouraging school environment where teacher feedback is encouraged requires a proactive and systematic approach. Emmanuel & Valley (2022), in their study examining the attributes of exemplary principal leadership, concluded that principals ensure they will be well informed about any staff issues needing attention when they commit to holding regular collaborative interactions with school teams. In their study, the authors also shared that participants indicated in their survey and interview responses that their principals sought feedback from them and were willing to receive honest and, at times, constructive feedback (Emmanuel & Valley, 2022). In her research to examine the causes of special education teacher shortages, Diane Nadeau also questioned respondents using a survey to determine the level of administrative support they were receiving.

23. To what extent was	an administrate	or effective in	somewhat	quite a bit	a great de
Supporting you with student behaviors	0	0	0	0	
Providing instructional leadership	0	0	0	0	0
Discussing instructional practices on a regular basis	•			•	0
Working with your team to problem solve	0	0	0	0	0
Knowledge of special education practices	•			0	0
Providing overall strong leadership	0	0	0	0	0
Providing opp for PD	0	0	0	0	0
Making expectations clear	0	0	0	0	0
Providing constructive feedback on your performance	0	0	0	0	0
Fostering school environment that promotes success of all students	0		0		0

 Was this true for yo 	u?						
		Yes				No	
Reduced caseload as a beginning special education teacher						0	
Similar # of planning periods as general education teachers						0	
Adequate instructional resources		0				\bigcirc	
Treated as a professional by administration		0				C	
Treated as a professional by other colleagues		0				0	
5. Please identify scho eaching. Check all the	at apply in	each row.	other special	general education	other school		no help
	mentor	administrator	educator	teacher	personnel	no help given	needed
Orienting you to the school							
Providing social support and encouragement							
Obtaining classroom materials							
Improving classroom management skills							
Preparing lesson plans							
Completing school & district paperwork							
Writing IEPs							
Planning and conducting parent conferences							
Collaborating with general education teachers							
Providing assistance with general education curriculum							
Working with paraprofessionals							

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The responses Nadeau received from her survey reflected that participants felt their administrators were most effective at creating a solid environment for student success, setting expectations, and providing support for new teachers with student behaviors. The areas where they rated administrators as being least effective were reviewing instructional practices and providing leadership in the area of instruction (2019). By using a similar survey for receiving teacher feedback, administrators could review their current practices to target any areas needing improvement. Moreover, surveys could be used to solicit feedback once a year from teachers or, optimally, more frequently so that gaps in support could be quickly addressed. In addition to using surveys, it is recommended that administrators meet with teams regularly to maintain a pulse of their staff's wellbeing and to determine specific needs (Emmanuel & Valley, 2022). By implementing both practices, principals can create a more transparent and healthy school environment that fosters teacher retention.

Reducing teacher attrition during a time when staffing shortages are great, especially for students from underserved communities, has become critically important. Seeking to provide all students with an equal opportunity for an excellent education has never been as important. In fact, the disparities that currently exist between economically disadvantaged students and those receiving an abundance of resources have reached a breaking point. The implementation of the processes and systems discussed in this thesis would reduce some of the teacher attrition currently being experienced. This would be done by ensuring that all new teachers receive a substantive induction program that includes carefully selected mentors. In addition, having principals systematically request and receive feedback from their teachers could elevate the level of teacher satisfaction found in schools. This writer hopes that many schools across our country will consider implementing research-based practices to reduce the significant levels of teacher attrition that are being experienced, and that ultimately affects the quality of education provided to students.

CHAPTER IV: DISCUSSION AND CONCLUSION

SUMMARY OF LITERATURE

The journey of writing this thesis began as a general study focused on examining the impact of teacher turnover on students. The research found regarding this topic consistently revealed that the most common reasons for teacher attrition are poor working conditions, low compensation, and a lack of peer collegiality and administrative support. I was surprised to learn that the current teacher turnover rate in the United States, unlike many other industrialized nations, has had high rates since the Great Recession. Exacerbating this situation, enrollment into teacher education programs is also declining (Sutcher et al., 2016), with the number of students entering the field of education at its lowest point in several decades. It appears that while our society values the altruistic nature of teaching, fewer college students view teaching as a viable career option.

The most compelling information that began to unfold during my research was the chronically unequal distribution of qualified and experienced teachers available to students living in underserved communities. The data I found not only revealed that teacher turnover has a detrimental effect on the academic achievement of all students but that students of color and those attending economically disadvantaged schools suffer disproportionately. Throughout my review of a variety of literature, it became evident that the current teacher shortage has become a crisis in our nation that is primarily impacting the students who are most in need of experienced and highly effective educators.

While researching various methods for mitigating high rates of teacher turnover, I referred to the work of several authors who offered feasible solutions. Many researchers in education suggested providing higher salaries or bonuses to improve teacher retention. Several others advised developing "grow your own" teacher preparation programs in difficult-to-staff communities (Carver-Thomas & Darling-Hammond, 2017). Others still referred to conclusive data pointing to poor administrative support as the number one factor

in teachers leaving schools. After reviewing all of these options, I chose to focus on the lower-cost solutions of establishing robust induction/mentoring programs for new teachers and implementing the frequent use of staff culture surveys by administrators. Recent data has shown a dramatic increase in teacher retention when carefully designed and implemented induction programs are offered. Although the use of culture surveys by school leadership has fewer data supporting it, some recent studies that examined the qualities of highly effective principals have yielded positive results for using surveys to develop a stronger school culture (Emmanuel & Valley, 2022).

LIMITATIONS OF RESEARCH

The research limitations that became apparent while completing this project centered on the lack of abundant and diverse data surrounding the impact of teacher turnover on students. One landmark study by Ronfeldt et al. (2013) was frequently referred to in much of the literature about the effects of teacher attrition on student achievement. Another study completed by Henry & Redding (2018) regarding the impact of mid-year teacher turnover provided solid data about that aspect of this discussion, but otherwise, there were few studies available with conclusive data. Furthermore, there was little substantial research found that discussed the impact of teacher turnover on specific groups of students, such as special education students, English Language Learners, or other groups of at-risk students.

Another limitation of the research found for this project was the lack of available data demonstrating the efficacy of using culture survey information by principals as a retention tool. I was able to locate one dissertation that addressed this topic and a small study located in the Virgin Islands that examined the attributes of highly effective principals, but otherwise, little research appears to be completed on this topic. With education being such a data-driven field, having more solid research available could foster new programs that would develop stronger school cultures and, thereby, reduce teacher attrition.

FUTURE RESEARCH

In addition to the already discussed limitations of the current literature available concerning the impact of teacher turnover on students from a variety of settings, it would be helpful to perform more studies that evaluate new ways to improve the effectiveness of school leaders. Current research about teacher attrition has repeatedly demonstrated that strong principals improve retention. Due to this finding, it would be beneficial to conduct future research examining leadership attributes that effectively reduce teacher attrition. This research could include evaluating the efficacy of activities such as interactions between principals and teachers, holding periodic team meetings, having leadership regularly visit classrooms, and the regular use of culture surveys as a means of providing teachers with more administrative support.

APPLICATION OF RESEARCH

The research I have learned about while completing my thesis will definitely shape my professional decisions in the future. The first way I will use this newfound knowledge will be to share the information I have learned about the negative effects of teacher attrition on students and entire school communities. I plan to share this information with my school leadership in hopes that they will be open to starting a retention committee to keep a better pulse on the well-being of our teaching staff. Secondly, because the data I studied highlighted that a lack of collegiality among peers is a main reason for teacher turnover, another way to apply the information I have learned will be to offer more support to new staff members. For example, when I notice that a colleague appears overwhelmed by their teaching duties, I will be certain to offer help to them. I will also confidentially bring my concerns to the attention of my team members and, when necessary, to school leadership. Lastly, when making my own personal career decisions in the future, I will keep in mind that teacher turnover is especially detrimental to children from underserved communities. That information will definitely be at the forefront of any employment decisions I make in the future.

CONCLUSION

Due to the current shortage of teachers in our nation and its detrimental impact on students, it is imperative that school communities take action to find remedies for this chronic situation. Unfortunately, it is most often the students from underserved communities who bear the greatest burden from the inequities resulting from rampant teacher turnover rates. We can no longer afford to be idle or to remain hopeful that this situation will fix itself. Instead, we must work together to identify the underlying reasons and remedies for this societal problem. Receiving a quality education is a human right that must be upheld both by educators and society if we want that sentiment to be a reality in our nation,

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