

ABSTRACT

Title of Dissertation: **PRIORITIZING NEW TEACHER RETENTION FOR
PRINCIPALS IN HARD TO STAFF DIVERSE
SCHOOLS**

Kimberly R. Lane-Pettway, Doctor of Education, 2024

Dissertation directed by: **Dr. Segun Eubanks, Professor of Practice and Director,
Center for Educational Innovation and Improvement**

Teacher attrition is a major challenge for public school districts across the country, especially in poor, urban and/or high needs schools. Sixty-one percent of school district superintendents identified teacher retention as a top concern. The majority of the teachers who leave are the new, well-prepared, successful teachers and the mid-career teachers. The study design used a mixed methods approach, with an improvement science methodology and an action research design to explore the principal's role in the retention of non-tenured effective teachers. The design incorporated a focus group, implementing a teacher retention change strategy/change idea, and a survey to assess the potential influence of the teacher retention change strategy/change idea. The research was conducted in three phases. Phase 1 consisted of a qualitative focus group and brief training. Phase 2 consisted of a qualitative and quantitative implementation of a Plan-Do-Study-Act (PDSA) cycle and the completion of a PDSA instrument. Phase 3 consisted of a quantitative survey. The findings supported that principals do consider the retention of effective teachers to be important, however they are not implementing effective strategies. Findings highlighted that when principals implement specific, research-based retention strategies it can enhance the focus

on retaining effective teachers; and it shows promise that it may help to retain new teachers.

Two recommendations of this study include identifying new and innovative teacher retention strategies and providing principals with targeted training opportunities in order to enhance collaboration and retention strategy implementation at the school level.

PRIORITIZING NEW TEACHER RETENTION FOR PRINCIPALS IN HARD TO STAFF
DIVERSE SCHOOLS

by

Kimberly R. Lane-Pettway

Dissertation submitted to the Faculty of the Graduate School of the
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Advisory Committee:
Dr. Segun Eubanks, Chair
Dr. Douglas W. Anthony
Dr. Jean Snell
Dr. Ebony Terrell Shockley
Dr. Christine Neumerski
Dr. Donald Joseph Bolger

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Preface

I am an educator with 24 years of experience. I have worked in the district that is the subject of this study for the last 19 years. I have been a principal in a Title 1 school within the district for 10 years. During my fifth year as a Title 1 principal, I was presented with data on my school's teacher turnover/attrition trend for the previous four years. My teacher turnover/attrition percentage was as high as 30% in some years. I knew teachers were leaving my school, but I did not realize to what extent. I was shocked by the turnover/attrition data, leading me to think about why these teachers were leaving. I remembered those teachers; most were non-tenured, effective teachers. Through formal and informal observations, one-on-one conversations, and collegial relationships, they appeared to grasp the fundamentals of teaching and showed great promise to the profession. Yet, at the end of each school year, they informed me that they were leaving, some were going back to their hometowns, some were going to other districts, some were going to other professions, and some did not know where they were going.

Reviewing my school data, pre-COVID-19 data, and post-COVID-19 data motivated me to conduct this research to investigate how I, the principal, could have influenced those non-tenured effective teachers to stay at my school. I hope the research presented in this study provides insight into how principals can strategically prioritize the retention of non-tenured, effective teachers.

This dissertation has been divided into three sections. Section 1 describes the focus of my research by reviewing the background, context and scope of the problem.

Section 2 highlights the scope of the investigation to include the study design, processes and a description of the data collection and analysis procedures that were followed to conduct the research. Section 3 provides a discussion of my results, interpretation of the findings, a discussion of how the findings have contributed to my hypotheses and how my research can be applied practically within the district.

Dedication

This dissertation is dedicated to my family who encouraged, supported me throughout this research process, and provided strength when I wanted to give up. It is also dedicated to my family and friends who helped and cheered me on. Finally, this dissertation is dedicated to God for giving me the strength, wisdom and health to complete my journey.

Acknowledgements

I gratefully acknowledge and appreciate the full support of my committee chair, advisory committee, UMD cohort mates, colleagues, friends and family through the completion of my dissertation process.

Finally, I am grateful to God, my husband, my son, my mother and my father for their love, patience and unwavering support during the challenging moments and throughout the course of this work.

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Definition of Terms

Effective/High Performing Teacher: For this research, effective and high performing are interchangeable. The term effective/high performing is determined by the principal's perception of the teacher, utilizing formal and informal observation data, principal's experience with the teacher and other such data as deemed by the principal. The formal and informal observation data and ratings must range in the top two performance categories of proficient and distinguished based on the Framework for Teaching by Charlotte Danielson (Danielson, 2013) which is the framework used in Hope School District.

Title 1/Hard to Staff Schools: For this research, Title 1 and Hard to Staff are interchangeable. The term Title 1/Hard to Staff refers to schools staffed with at least more than one non-tenured teacher (Berry & Hirsch, 2005) and where at least 40% of the student population come from low-income families and receive free and/or reduced lunch rates. (MSDE, 2023)

Section 1: Introduction

Problem Statement

Teacher attrition is a major challenge for public school districts nationwide and an even larger challenge in high-needs schools. According to a 2018 Gallup Survey of K-12 School District Superintendents, 61% of Superintendents chose teacher retention as the greatest struggle from a list of challenges facing school districts (Hodges, 2018). Only one-third of the teachers leave due to retirement, the majority of the teachers who leave are beginning and mid-career teachers (Carver-Thomas & Darling-Hammond, 2019). Moreover, teachers may leave their schools or the teaching profession voluntarily or involuntarily. During the 2011-2012 and 2012-2013 school years, 67% of teacher attrition/turnover was voluntary, pre-retirement attrition/turnover (Carver-Thomas & Darling-Hammond, 2019). There is a nationwide trend of 17 % of new teachers leaving the classroom in their first five years, with 9.5 % leaving in the first year alone (Abitabile, 2020; Choudhury, 2022).

High teacher attrition is also most significantly affecting students in poor, urban or high needs schools. According to Diliberti et al. (2023), teacher turnover in 2021-2022 was highest (around 12 to 14 percent) in urban districts, high-poverty districts, and districts serving predominantly students of color. On average, schools with larger low-income and diverse populations experience greater rates of teacher turnover than other schools (Carver-Thomas & Darling-Hammond, 2017).

Although this issue existed before the COVID-19 pandemic, teacher attrition worsened significantly (Schmitt & deCourcy, 2022). Before the COVID-19 pandemic, the annual teacher turnover rate was about 6% (Schmitt & deCourcy, 2022). However, according to Diliberti et al. (2023), teacher turnover increased about 4 % in some areas, above pre-pandemic levels,

increasing the turnover rate to approximately 10 % nationally at the end of the 2021–2022 school year. Walker (2021) of the National Education Association (NEA) reported that 32 % of teachers indicated that the pandemic resulted in the plan to leave the profession earlier than anticipated. Another survey conducted by the RAND Corporation during the 2020-2021 school year found that nearly one in four teachers reported leaving the teaching profession by the end of the school year. This data is compared with one in six teachers likely to leave before the pandemic (RAND, 2023).

According to Podolsky et al. (2019), there are five major influences on teachers' decision to leave. They are (1) teachers' preparation and costs to entry, (2) district hiring and personnel management, (3) teacher salaries and other compensation, (4) induction and support for new teachers, and (5) working conditions, including school leadership, professional collaboration and shared decision making, accountability systems, and resources for teaching and learning.

High teacher attrition negatively affects student achievement, teacher effectiveness and quality (Ronfeldt, et al., 2013; Jackson & Bruegmann, 2009; Kraft & Papay, 2014; Sorensen & Ladd, 2018). Opper (2019) also found that effective or high-value-added teachers improve student achievement and influence longer-term outcomes, such as graduation, college attendance, and student earnings.

This study focuses on teacher turnover and examines how principals of Title 1 elementary schools in a large, culturally diverse school district, prioritize teacher retention (in this study, the district will be referred to as Hope District). Hope District is a pseudonym for a large urban/suburban school system in Maryland, with a very diverse demographic. The school system is composed of 55% African American students, 36% Latino students, 4% White and 3% Asian with over 60% of the student population receiving free or reduced meals. Teacher attrition

has affected the Hope District. Historically, Hope District's attrition rate has fluctuated over the years. According to Maryland's Teacher Workforce: Supply, Demand, and Diversity briefing, within the state of Maryland, attrition rates varied by Local Educational Agency (LEA) with a low of 7% to a high of 18%. Hope District fell in the middle with an attrition rate of 11 % (MTW, 2022). Teachers comprise about half of the district's workforce (PGCPS [PGCPS], 2015). However, this workforce is not stable.

For this study, teacher attrition and teacher turnover will be used interchangeably to measure opposing outcomes that support the instability in a school's or district's teacher workforce and change in classroom teachers from one year to the next in a school setting. Teacher attrition refers to teachers leaving the profession. Teacher turnover refers to teachers staying in the profession but leaving teaching or moving schools (Carver-Thomas & Darling-Hammond, 2019). Research shows that teacher turnover can increase the teacher attrition rate. According to Carver-Thomas and Darling-Hammond (2017), the effects of teacher turnover on schools is essentially the same as if they had left the teaching profession.

Evidence Supporting the Problem

The problem of practice to be investigated in this study is that non-tenured effective teachers are leaving hard-to-staff diverse schools at significantly higher rates, affecting academic performance and posing challenges to the districts' high-performing workforce. High teacher attrition affects the education workforce in all states, but it most significantly influences students in poor, urban, and/or high-needs schools. According to Goldring et al. (2014), teachers are leaving Title 1 or low-income schools at more than double the rate of schools where less than

35% of the student enrollment receives free or reduced lunch rates¹. They experience these great turnover rates because of various factors related to staffing that have been known to influence teacher attrition. For example, these schools are often staffed by newer teachers. It is reported that in cities and small towns in the United States, new teachers are assigned to high-poverty schools at nearly twice the rate as those at low-poverty schools (Barnwall, 2015). In addition, these schools are often staffed with less prepared teachers, for example, substitutes and/or uncertified teachers (Simon & Johnson, 2015). Research shows that teachers who lack comprehensive preparation are two to three times more likely to leave teaching in their early years than fully prepared teachers (Ingersoll et al., 2012).

According to Thomas and Hammond (2017), teachers in schools with 25% or more students of color are more likely to move or leave teaching than teachers with fewer students of color. Ronfeldt et al. (2013) found low teacher retention rates could negatively affect student achievement. Many times, when teachers leave these hard-to-staff schools, other prospective teachers are not selecting these hard-to-staff schools to work in, which leaves these schools with vacancies. Because of high teacher attrition, the achievement gap is widening for this diverse student group (Choudhury, 2022). Unfortunately, many of the teachers leaving these high-needs schools are often effective.

Attrition Among Effective Teachers

Research has shown that new, well-prepared, and successful teachers are leaving the profession. Garcia and Weiss (2019) found that some teachers who quit are as “credentialed” or

¹Title 1 refers to schools with a high %age of low-income students that receive federal funds (i.e. free and/or reduced lunch rates, etc.) under Title 1 of the Elementary and Secondary Education Act to help students meet academic standards (Carver-Thomas & Darling-Hammond, 2019)

“more credentialed” than the teachers who stay. They are leaving the schools identified as high-poverty schools, which are experiencing the highest teacher attrition rates. According to Grissom and Bartanen (2019), retention efforts should not be equal for all teachers. Principals should focus on retaining high-performing teachers and not retaining lower-performing teachers. They refer to this behavior as “strategic retention” (p. 515).

According to a study by The New Teacher Project (TNTP) in 2012, when a great teacher, also known as an “irreplaceable,” leaves a low-performing school, the school is almost guaranteed to hire a less effective replacement. An irreplaceable is a teacher who is successful in a school district and is nearly impossible to replace but “often vanishes from schools as the result of neglect and inattention” (p. 2). They generate 5 to 6 more months of student learning each year than a poor-performing teacher. Effective teachers have an impact on students for life. The high quality teaching provided by the so-called “irreplaceable” is essential to closing the achievement gap and/or opportunity gap. Still, students in high-poverty urban schools are less likely to have these quality teachers because they are leaving schools at a higher rate.

Attrition and the Achievement/Opportunity Gap

The National Center for Education Statistics (NCES) defines an achievement gap as a gap that occurs when an outcome (e.g., average test score or level of educational attainment) is higher for one group than for another group and when the difference between the two groups’ outcomes is statistically significant (2024). According to Byrd (2020), closing the achievement gap requires a transformational view of teachers as change agents who can reshape the culture, climate, and level of student achievement in their classroom. The opportunity gap takes a more asset-based approach, which moves the focus of students’ success from school achievement outcomes to the societal, school, and community inputs that impact the differences in educational

outcomes. Researchers have discussed many issues that have contributed to the opportunity gap, such as educational debt, social policies such as the No Child Left Behind Act (NCLB), housing segregation, school tracking, and quality of teachers (Flores & Gunzenhauser, 2021). Therefore, the high attrition rates of effective, quality teachers are widening student achievement and opportunity gaps.

National Scope of the Problem

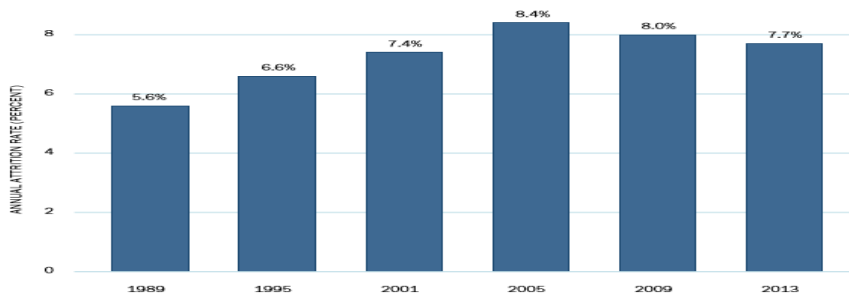
This section draws information and data from various sources, such as the U.S. Department of Education, the National Center for Education Statistics Schools and Staffing Survey (SASS), and the Teacher Follow-up Survey, which are the most recent national data available², to address the scope and depth of this problem and the consequences of not addressing the problem.

Between 1989 and 2005, attrition rates increased by about 50%. Attrition rates remained high through 2013, according to Figure 1. This does not represent data since the COVID-19 pandemic. However, post-pandemic, the attrition rate reported by Taie and Lewis (2023) from the Institution of Education Sciences was 7.9% for the 2021-2022 school year. In 2013, Perda conducted a longitudinal analysis and found that more than 41% of new teachers leave teaching within five years of entry. Perda (2013) concluded that these numbers had increased since the late 1980s. Perda (2013) found that the attrition rate for first-year teachers rose from 9.8% to 13.1% from 1988-2008, a 34% increase.

Figure 1.

National Attrition Rate Over Time

² The SASS is a set of questionnaires administered to a nationally representative sample of teachers across the country (Carver-Thomas & Linda Darling-Hammond, 2019). The Teacher Follow-Up survey is the supplement to the SASS (Ingersoll, 2003).



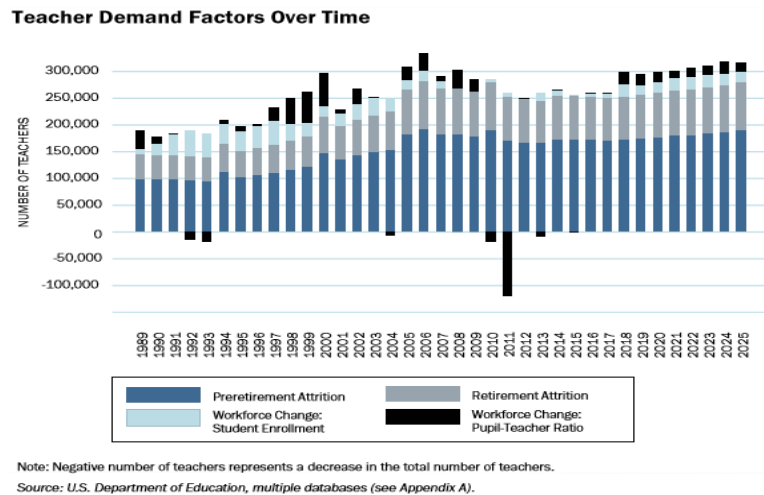
Source: National Center for Education Statistics (2015). Digest of Education Statistics. Mobility of public elementary and secondary teachers, by selected teacher and school characteristics: Selected years, 1987–88 through 2012–13. Washington, DC: U.S. Department of Education.

Note. This graph was produced by the Learning Policy Institute in 2016 to show the attrition rate from 1987 through 2013. From “A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S,” by L.Sutcher, L Darling-Hammond and D. Carver-Thomas, 2016, Learning Policy Institute, p. 39. Copyright 2016 by Learning Policy Institute. (<https://learningpolicyinstitute.org/product/coming-crisis-teaching>)

Teacher Attrition and New Teacher Demand. Teacher attrition accounts for anywhere from two-thirds to nearly 100% of the demand for new teachers in any given year, based on Figure 2. According to the Learning Policy Institute Report (2016), in 2012, the national public-school teacher attrition rate was 7.68%, representing the loss of 238,000 teachers in that year. The report also stated that only about one-third of teacher attrition is due to retirement. Therefore, pre-retirement attrition accounts for about two-thirds of all attrition. Pre-retirement attrition refers to decisions made to leave due to school staffing decisions, life changes, or dissatisfaction with teaching. Pre-retirement attrition is the largest contributor to teacher attrition. In addition, nationally, Figure 2 illustrates that teacher attrition outranks all other significant variables, such as increased student enrollment and reduced pupil-teacher ratios that have led to the teacher shortage.

Figure 2

National Teacher Demands Over Time



Note. This graph was produced by the Learning Policy Institute in 2016 to show the relative contribution of different factors to teacher demand. From “A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S,” by L.Sutcher, L Darling-Hammond and D. Carver-Thomas, 2016, Learning Policy Institute, p. 38. Copyright 2016 by Learning Policy Institute. (<https://learningpolicyinstitute.org/product/coming-crisis-teaching>)

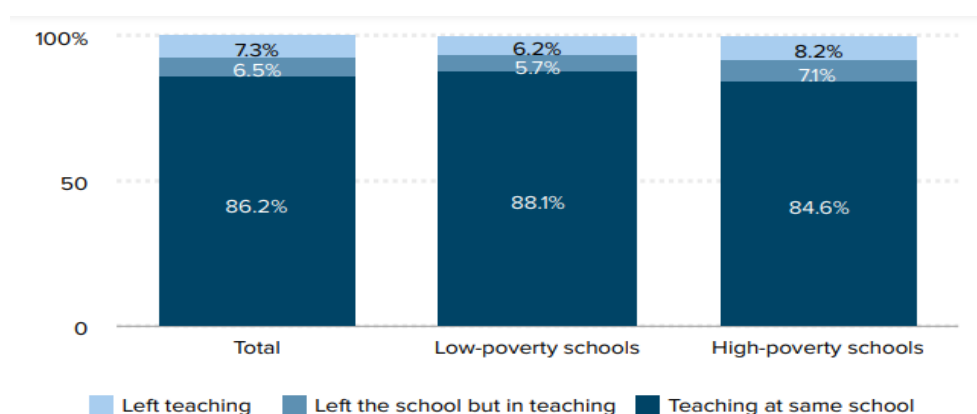
Ingersoll (2003) used data from the Schools and Staffing Survey and its supplement, the Teacher Follow-up Survey conducted by the National Center for Education Statistics, to explain that retirement accounts for a smaller portion of teacher turnover when compared to other factors, such as teacher job dissatisfaction and teachers pursuing other jobs. Ingersoll (2003) states that the problem is due to a “revolving door,” which refers to many qualified teachers leaving their jobs for reasons beyond retirement (p.3). Some of the reasons the teachers mentioned for leaving their jobs were lack of support from school administration, lack of teacher influence in school and/or policy decisions, and student discipline problems.

Teacher Attrition in High-Needs Schools. According to Allen (2005), teacher attrition has been a problem for urban and high-poverty schools nationwide for years. Garcia and Weiss’(2019) analysis of teacher attrition and turnover rates in high and low-poverty schools after the 2011–2012 school year shows that 6.5 % of teachers left the school but remained in the

profession (turnover rate). The analysis also showed that 7.3 % of teachers left the teaching profession (attrition rate). This leaves 13.8 % of teachers lost to turnover or attrition, as illustrated in Figure 3. High-poverty schools often have more difficulty filling vacancies than low-poverty schools. They also experience higher turnover and attrition than low-poverty schools.

Figure 3

Teacher Attrition/Turnover by Low and High-Poverty Schools



Note. This graph shows teachers who stay, leave the school, or quit the profession in low and high poverty schools from 2011-2013. From “U.S. schools struggle to hire and retain teachers,” by E. García and E. Weiss, 2019, Economic Policy Institute, p.14. Copyright 2019 by Economic Policy Institute. (<https://epi.org/164773>)

Ingersoll (2004) concluded that on average, high-poverty public schools in urban areas lose a fifth of their faculty annually, with some schools losing over half of their teaching staff every five years. Others (Darling-Hammond & Sykes, 2003; Ingersoll, 2001; Ingersoll, 2003) report that the turnover rate is about 50% higher in high-poverty schools as compared to that in more affluent schools. These rates also tend to be higher in schools serving large populations of low-performing, nonwhite, and low-income students. Unfortunately, these students tend to be

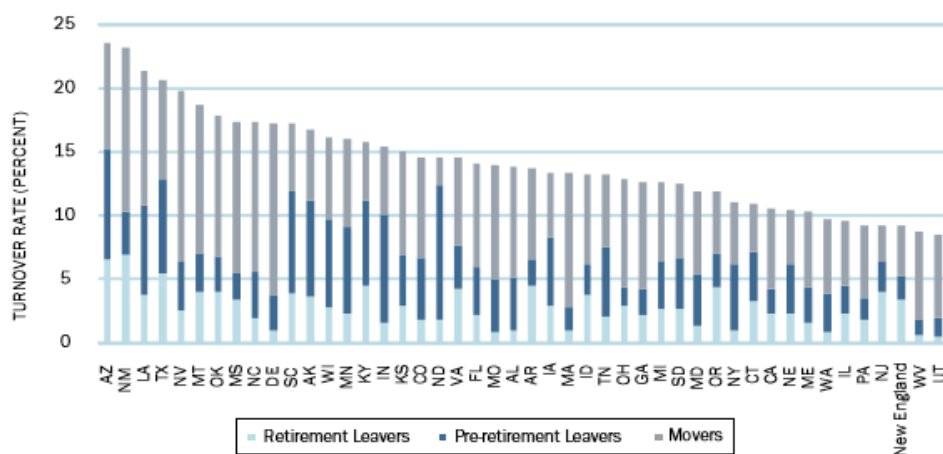
most in need of a consistent and supportive school experience (Boyd et al. 2005; Carroll et al. 2000; Hanushek et al. 2004; Scafidi et al. 2005).

Sutcher, et al. (2019) also found that teacher turnover rates in Title 1 Schools is 50% higher than in non-Title 1 schools. According to Diliberti et al. (2023), nationally, teacher turnover in 2021-2022 was highest in urban districts at 14%. These researchers define urban areas as high-poverty districts and/or where most students were predominantly students of color. In low-poverty schools, 88.1 % of teachers who were teaching when the 2011–2012 Schools and Staffing Survey was administered were at the same school the following year, compared with 84.6 % in high-poverty schools, which is 3.4 percentage points higher than the aggregate turnover and attrition rate.

Teacher Attrition By Region. According to an analysis by the Learning Policy Institute (2016), attrition differs significantly by the region of the country, as illustrated in Figure 4.

Figure 4

Teacher Turnover by Source and State



Note: States with fewer than 25 teachers surveyed were excluded (DC, HI, and WY). Three small New England states with similar data patterns were combined (NH, RI, and VT).

Source: LPI analysis of the Teacher Follow-Up Survey (TFS), 2013, from the Schools and Staffing Survey, National Center for Education Statistics.

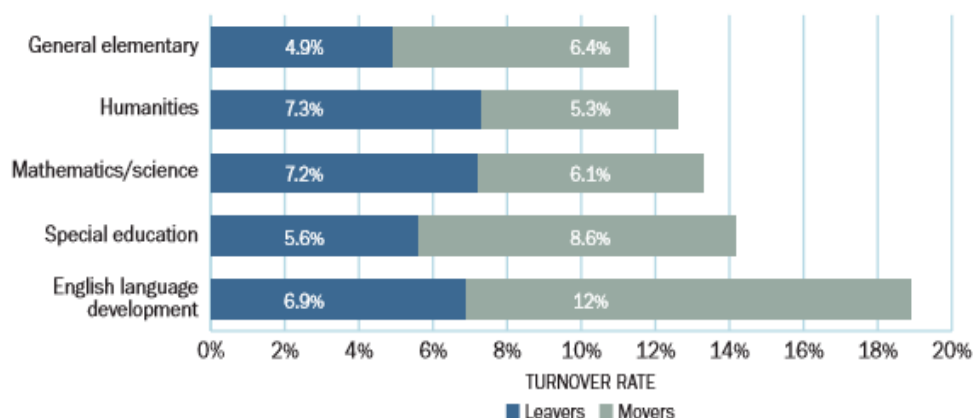
Note. This graph was produced by the Learning Policy Institute in 2016 to show the variation of teacher turnover rate by state. From “A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S,” by L.Sutcher, L Darling-Hammond and D. Carver-Thomas, 2016, Learning Policy Institute, p. 48. Copyright 2016 by Learning Policy Institute. (<https://learningpolicyinstitute.org/product/coming-crisis-teaching>)

The average teacher turnover rate in the South is over 16% annually, compared to the Northeast, Midwest, and West census regions, with average teacher turnover rates of about 13% or less. Arizona, Louisiana, New Mexico, and Texas had an annual attrition rate of above 20%. However, states such as Illinois, New Jersey, Pennsylvania, Utah, Washington, and West Virginia, and a set of New England states (New Hampshire, Rhode Island, and Vermont) combined for this analysis because of their size had an annual attrition rate of below 10%.

Teacher Attrition by Subject Area. Turnover rates across various subject areas, including mathematics, science, special education, and English language development teachers, exceed 13% annually, as illustrated in Figure 5. This may contribute to the decline in student achievement in mathematics and science for American students (Carver-Thomas & Darling-Hammond, 2017).

Figure 5

Turnover Rates by Primary Teaching Assignment



Source: Learning Policy Institute analysis of National Center for Education Statistics Schools and Staffing Survey, 2011–12.

Note. This graph was produced by the Learning Policy Institute in 2017 to show the variation of teacher turnover across subject areas. From “Teacher turnover: Why it matters and what we can do about it,” by D. Carver-Thomas and L. Darling-Hammond, 2017, Learning Policy Institute, p. 12. Copyright 2017 by Learning Policy Institute.
(<https://learningpolicyinstitute.org/product/teacher-turnover-report>)

State Scope of the Problem

According to Maryland’s Teacher Workforce: Supply, Demand, and Diversity briefing (2022), the attrition rate is at or above national averages and has held steady over the last five years, as illustrated in Table 1.

Table 1

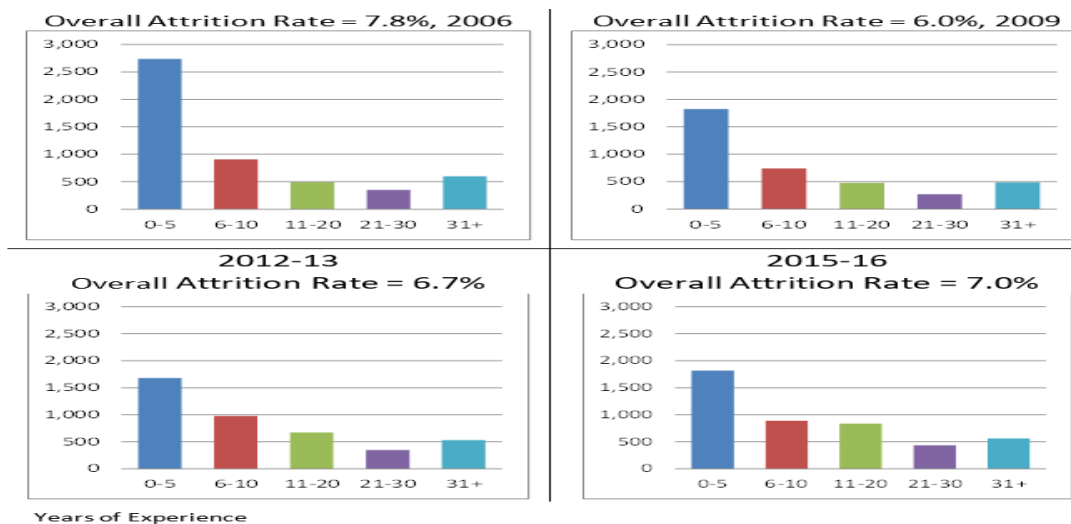
Maryland Teacher Attrition Rate

School Year	Attrition Rate by Percentage
2017-2018	9.1%
2018-2019	9.2%
2019-2020	9.5%
2020-2021	7.3%
2021-2022	9.1%

According to the data in Table 1, teacher attrition declined in 2020-2021 but quickly returned to pre-pandemic levels in the 2021-2022 school year. These rates are significantly higher than the attrition rates reported by the state in the past. In Maryland, teacher attrition rates had ranged from 7.8% in 2006-2007 to 6.0% in 2009-2010. Then, in 2009, attrition rates increased from 6.0% to 7.0% in 2015-2016, and current data continues to be high, as illustrated in Figure 6. Additionally, the attrition rate increased by 0.7% from 2009-2010 to 2012-2013. The data also showed that veteran teachers, those with 6-10 and 11-20 years of experience, made up a larger number of the teachers leaving Maryland’s public schools, with an increase from 2006-2007 to 2015-16.

Figure 6

Maryland Teacher Attrition by Number of Teachers (x-axis) and Number of Years Teaching (y-axis)



Note. This graph shows various years of Maryland’s teacher attrition by number of years teaching from 2006 through 2016. From “Is There A Teacher Shortage in Maryland? Examining Trends in Supply and Demand,” by E. Janulis, 2017, Policy Brief, p. 2. Copyright 2017 by The Maryland Equity Project. (<https://education.umd.edu/maryland-teacher-pipeline>)

According to Sutchter et al. (2016) of the Learning Policy Institute (LPI), a large portion of Maryland's teacher turnover comes from teachers who are movers and pre-retirement leavers. The LPI defines movers as teachers who leave a school but continue teaching in a different school. Pre-retirement refers to teachers who leave for other reasons, such as a career change or dissatisfaction.

The Maryland Equity Project (2017) found that teacher attrition rates had increased in Maryland. The policy brief examined trends in the Maryland teacher pipeline over 10 years, from 2005 to 2015, using data from the United States Census Bureau (USCB), the National Center for Educational Statistics (NCES), and the Maryland State Department of Education (MSDE).

State Novice Teacher Attrition. According to the Maryland Teacher Staffing Report (2014), Maryland has been losing more than 38% of the “novice” teacher workforce, which consists of teachers with one to five years of teaching experience, annually since October 2010. Between 2012 and 2013, the Maryland attrition rate for teachers with less than 5 years of experience was 39.9%. Also, according to the pre-pandemic data from Figure 6, the number of novice teachers, those with 0-5 years of experience, leaving Maryland public schools dropped, from 2006-07 to 2012-2013. However, novice teachers with 0-5 years of experience left the profession still accounted for 40% of the overall attrition in 2015-2016. Post-pandemic data shows that novice teachers in Maryland are leaving at a high rate. New teachers are the most likely to leave teaching with 13.6% leaving in less than 3 years (MTW, 2022). Therefore, 55.4% of these new teachers cited voluntary resignation as their reason for leaving.

Local Scope of the Problem

The Hope District serves approximately 130,000 students from diverse urban, suburban and rural communities. The system comprises 118 K-5 elementary schools, 25 middle schools, 26 high schools, 14 Academies and K-8 Campuses, 9 Public Charter schools, 8 special centers and 1 online campus. Approximately 45% of the schools in Hope District have been identified as a Title 1 school.

Generally, approximately 1000 teachers are hired annually and approximately 1000 teachers leave the district each year (PGCPS, 2023). Teachers in Title 1 or state-designated low-performing schools separated from Hope District more than teachers at other schools within Hope District between FY2018 and FY2021(PGCPS, 2023).

In the Maryland Teacher Staffing Report (2016), the Maryland State Department of Education declared Hope District as one of the twenty-four jurisdictions identified as a

geographic area of a projected shortage of certified teachers. Through data collection and analysis at that time, it was determined that Hope District, along with 23 other school districts, were projected to have a teacher shortage for the 2017-2018 school year. This projection was made based on two qualifying factors. First, the information provided showed that the school system experienced a critical shortage of teachers, primarily due to attrition, in any of the following state-identified critical shortage areas: computer science, technology education, ESOL, mathematics, chemistry, earth space science, physical science, physics, and special education. Secondly, based on the recommendation of the superintendent/CEO, who stated that they wished to have their school system declared an area of geographic shortage.

According to the teacher attrition data presented in the District's Bridge to Excellence (2015) the teacher attrition rate in Hope District has been high and inconsistent for many years and continues to be inconsistent. In Table 1, the school year 2009-2010 had the lowest total staff attrition with 862, but by school year 2014-2015, the total number had increased to 1,345. Of the 1,345 teachers who left in 2014-2015, 725 of the teachers left due to resignation, 238 left due to retirement, and the remainder were either dismissed or on leave from the county.

Table 2

Hope District Attrition Rate for School Year 2010-2015

Teacher Attrition by Subcategory					
Attrition Due To (Category):	Retirement	Resignation	Dismissal/ Non-renewal	Leaves	Total Attrition
	No.	No.	No.	No.	No.
2009-2010	191	383	70	218	862
2010-2011	427	345	136	119	1,027
2011-2012	291	764	53	353	1,121
2012-2013	203	637	107	125	1,072
2013-2014	207	771	68	283	1,329
2014-2015	238	725	91	291	1345

Source: Data displayed in Tables 6.6A through 6.6D are extracted from 2015 Master Plan Data Table 6.6, LSS 16. See Section 2, p. 177.

Note. The table represents Hope District attrition rate data from 2009-2015. From Chief Executive Officer’s Proposed Annual Operating Budget Question and Answers[A document created by the School Board to respond to the CEOs proposed budget for the 2020 School Year].by PGCPs, 2019.

Typically, Hope District’s teacher attrition has hovered around 13% annually. During 2016-2018, Hope District retained approximately 90% of its educator workforce (Goldson & Herbstman, 2019). Table 3 shows Hope District’s attrition rate from 2016 through 2018.

Table 3

Hope District Attrition Rate 2016-2018

	<i>FY 2016</i>	<i>FY 2017</i>	<i>FY 2018</i>
<i>Teacher Attrition</i>	1,101	1,185	1,157
<i>Total Number of Teachers</i>	10,171	10,282	10,490
<i>Retention Percentage</i>	89%	88%	89%

Note. The table represents Hope District attrition rate data from 2009-2015. From Chief Executive Officer’s Proposed Annual Operating Budget Question and Answers[A document created by the School Board to respond to the CEOs proposed budget for the 2020 School Year].by PGCPs, 2019.

Between 2010 and 2016, the average teacher attrition rate was 13.8%, well above the state-established target of 10% or less. From the school year 2007-2008 until 2016, Hope District lost over 7,100 teachers, approximately half (50.1%) of whom resigned and, according to exit survey data, were often going to neighboring, higher-paying jurisdictions (SY 2016-2020 Strategic Plan).

From 2018-2021, the average teacher attrition rate was 9.5%. The highest rate of attrition occurred during the 2018-2019 school year, with 13.8%, and the lowest rate of attrition was during the 2020-2021 school year, with 7.6% (PGCPs Recruitment Plan, 2023). When teachers left, it was primarily due to voluntary resignations, as illustrated in Table 4.

Table 4*Hope District's Causes of Teacher Separation, FY 2018-2021*

Years	Death	Retired	Termination	Voluntary Resignation	Leave of Absence
2018	1.6%	18.4%	4.7%	74.8%	0.5%
2019	1.1%	14.7%	20.4%	63.4%	0.4%
2020	2.1%	14.1%	1.8%	81.6%	0.4%
2021	3.1%	19.4%	2.4%	74.8%	0.4%

Of the voluntary resignations between FY 2018 through 2021, 1.5% remained working with Hope District and 41.4% left the district. Other reasons given were moving, marriage, maternity leave and home responsibility, personal illness, and dissatisfaction with teaching. Between FYs 2018 through 2021, teachers with the least experience resigned more often than more experienced teachers. More than 50% of voluntary resignations were among teachers with three or fewer years of experience (PGCPS Recruitment Plan, 2023).

It is clear, and the data is compelling. The scope of the teacher attrition problem spans across the nation, state, and local jurisdictions. However, to truly understand the impact of high attrition rates, one must examine the consequences of not addressing the problem.

The Consequences of Teacher Turnover

There are major consequences of high teacher attrition, which has been documented in the research literature. According to Schmitt and deCourcy (2022), attrition harms students, teachers, and the public education system as a whole. The lack of sufficient, qualified teachers threatens students' ability to learn and reduces teachers' effectiveness, which ultimately undermines the "education system's goal of providing a sound education equitably to all

children” (p. 2). As outlined below, teacher turnover impacts school finances, student learning, effective teachers, Title 1 schools, and school culture.

The Costs of Turnover

Teacher attrition is costly for schools and districts. Teachers leaving a district increases the demand and burdens the replacement costs on districts. Brown and Wynn (2009) found that teacher attrition places a major budgetary strain on school systems by having to advertise for open positions, review applications, conduct criminal background checks, orient new staff members and other such tasks associated with recruitment. Carver-Thomas and Darling-Hammond (2017) reported estimates that exceed \$20,000 to replace each teacher who leaves an urban school district. According to the Alliance Report (2014) approximately half a million teachers in the United States either move or leave the profession each year, which costs the United States up to \$2.2 billion annually.

In 2015, the State of Maryland spent over \$114 million on teachers leaving and transferring to other schools and districts (Alliance for Excellent Education, 2014). The National Commission on Teaching and Americas Future (2007) estimated that the cost of teacher attrition per year in Hope District was more than \$23 million and estimated the statewide cost would be well above \$100 million per year. The cost of teacher attrition per year in Hope District continues to be approximately \$21 million (Carroll, 2007). In Hope District, the ‘separation’ and ‘non-renewal’ of contracts were placing a strain on the fiscal and human resources sectors (Bridge to Excellence Master Plan, 2010).

Impact on Student Learning

According to Carver-Thomas and Darling-Hammond (2017), American students' achievement in mathematics and science has declined. They stated that when teachers leave, schools are often not only forced to hire inexperienced or unqualified teachers but also increase class sizes and cut course offerings. The authors also said that high turnover rates reduce achievement for students whose classrooms are directly affected and for other students in the school.

Teacher attrition reduces student achievement as measured by test scores (Sorensen & Ladd, 2018; Hanushek et al., 2016; Henry & Redding, 2018; Ronfeldt et al., 2013). According to Ronfeldt et al. (2013), the relationship between teacher turnover and student achievement is correlational, which has revealed negative correlations. In their study, examining data from over 850,000 fourth and fifth grade students in New York City schools, Ronfeldt et al (2013) found that schools had lower student achievement scores in years where there was increased teacher turnover or teacher attrition. They also found that teacher turnover affected the achievement of students in veteran teachers' classes as well. Students who had teachers that were veterans to the school had lower levels of achievement on standardized tests during years where there was increased teacher turnover (Ronfeldt et al., 2013).

Impact on Teacher Quality

The turnover rate of new teachers may influence the quality of teachers and teaching in schools. Wong (2003) stated that developing an effective teacher takes five to seven years. Nevertheless, if new teachers leave every five years, they are not staying long enough to be considered effective teachers according to Wong. With teachers leaving so early in their careers, students are denied the opportunity to be taught by effective/master teachers. According to

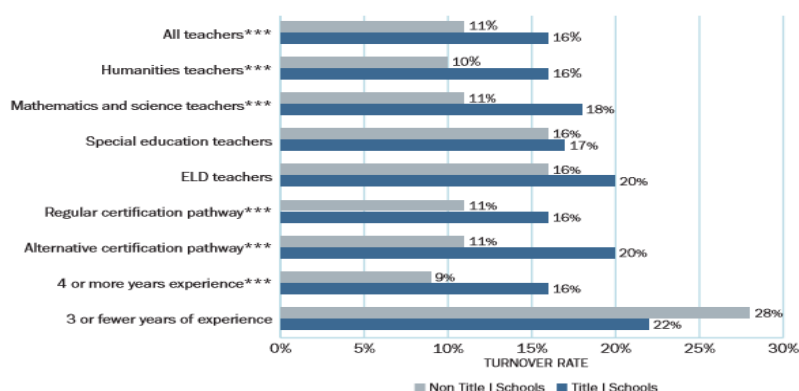
Carver-Thomas and Darling-Hammond (2017), in 2013-2014, the “quarter of schools enrolling the most students of color nationally had four times as many uncertified teachers as the quarter of schools enrolling the fewest students of color” (p. 1).

Impact on Title 1/High Needs Schools

A disproportionate number of non-tenured teachers in Title 1 schools serve the largest number of students eligible for free, reduced-priced meals. Title 1 schools have a high percentage of low-income students who receive federal funds under Title 1 of the Elementary and Secondary Education Act to help students meet academic standards (Carver-Thomas & Darling-Hammond, 2019). These schools also have higher attrition rates. The attrition rate for all teachers in Title 1 schools was 16%, significantly higher than the 11% attrition rate of all Non-Title 1 schools, as illustrated in Figure 7.

Figure 7

Teacher Turnover Rate in Title 1 and Non-Title 1 Schools



Note: Percentages are rounded to the nearest whole number; *** p<0.01, ** p<0.05, * p<0.1
Source: Learning Policy Institute analysis of National Center for Education Statistics Schools and Staffing Survey, 2011–12 and Teacher Follow-Up Survey, 2012–13.

Note. This graph was produced by the Learning Policy Institute in 2017 to show the impact of teacher turnover in Title 1 and Non-Title 1 schools. From “Teacher turnover: Why it matters and what we can do about it,” by D. Carver-Thomas and L. Darling-Hammond, 2017, Learning Policy Institute, p. 15. Copyright 2017 by Learning Policy Institute.
(<https://learningpolicyinstitute.org/product/teacher-turnover-report>)

Impact on School Culture

Ronfeldt et al. (2013) suggest that high teacher turnover may negatively impact the collegial relationship among staff. Johnson et al. (2012) also agree that teacher attrition negatively impacts the learning community by disrupting a strong school culture that may have been built. Research also shows that high teacher turnover affects teachers' ability to improve their effectiveness due to the lack of stability of shared planning and collaboration in a supportive and collegial work environment (Jackson & Bruegmann, 2009; Kraft & Papay, 2014).

When teachers remain in the profession but move from one school to another, the effects on the school they left can be just as devastating as if they had left the teaching profession altogether (Carver-Thomas & Darling-Hammond, 2017). According to Huling et al. (2012), high teacher attrition results in schools losing a large portion of their faculty with the skills and experiences necessary to sustain the educational reforms required by the U.S. Secretary of Education. As Ingersoll (2003) stated, the revolving door has also contributed to teacher attrition. He wrote in a 2002 analysis of teacher turnover:

[Schools] are unusually dependent on commitment, continuity, and cohesion among employees and are therefore especially prone to suffer when subjected to high employee turnover rates. From this perspective, high teacher turnover rates are problematic not only because they may indicate underlying problems in how well schools are functioning but also because they can disrupt the quality of school cohesion and performance. (Ingersoll, 2002)

Prior Attempts to Address Teacher Turnover

Many attempts have been made to address teacher attrition at the national, state, and local levels. The attempts have been differentiated and focused on retaining the teachers currently

serving in classrooms. The attempts have addressed such areas as new teacher induction, salaries, incentives and other such initiatives.

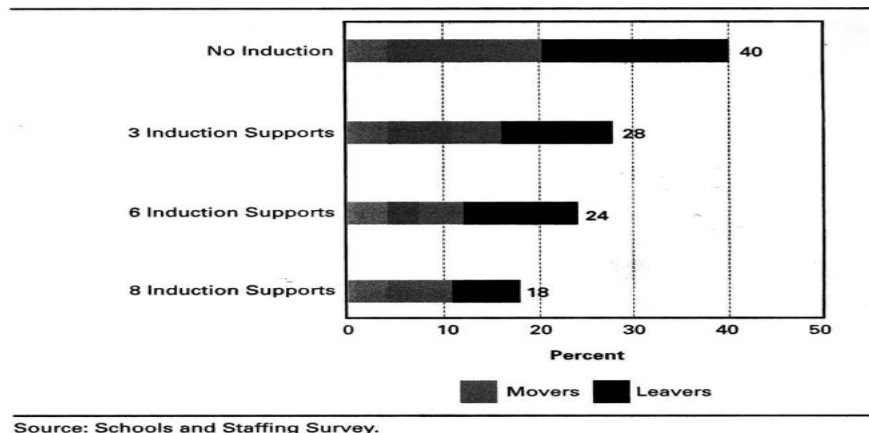
New Teacher Induction

New Teacher Induction is a comprehensive program designed to provide new teachers with the knowledge and skills necessary to succeed in their classrooms and schools. These programs attempt to address new teachers' critical professional learning needs, improve instructional quality, and help inductees/new teachers succeed in their initial assignments, resulting in improved student learning and higher retention in the profession.

Ingersoll and Smith (2004) examined whether support, such as induction programs, positively affects the retention of beginning teachers. They stated, “historically, the teaching occupation has not had the kind of structured induction and initiation processes common to many white-collar occupations and characteristic of many of the traditional professions” (p.3). They also go on to say that critics have described teaching as an occupation that "cannibalizes its young and in which the initiation of new teachers is akin to a sink or swim, trial by fire, or boot camp experience” (p. 3). The study used nationally representative data from the National Center for Education Statistics' (NCES) Schools and Staffing Survey (SASS) along with its supplement, the Teacher Follow-up Survey (TFS), and focused on different types and components of induction, including mentoring programs, collective' group activities, and the provision of extra resources and reduced workloads. The study found that beginning teachers with multiple supports/induction components were less likely to move to other schools and to leave the teaching profession after their first year, as illustrated in Figure 8.

Figure 8

Percentage of Beginning Teacher Turnover After the First Year, according to the Amount of Induction Support: 2000-2001



Note. This graph shows the impact of new teacher induction on teacher turnover. Reprinted from “Do Teacher Induction and Mentoring Matter?” by R. Ingersoll and T. Smith, 2004, NAASP Bulletin, 88(638), p. 37. (<https://core.ac.uk/download/pdf/76379704.pdf>)

According to the research, when a teacher receives mentoring, collaboration, and extra resources and is a part of a strong teacher network, first-year teacher turnover decreases by more than half, from 40% to 18%. Unfortunately, these types of support vary from state to state, district to Hope District and school to school.

Increased Salaries and Financial Incentives

Saenz-Armstrong (2022) from The National Council on Teacher Quality reported that strategic pay is an effective tool to retain teachers in hard-to-staff schools and subjects. Sutchter et al. (2016) shared the attempts of Connecticut and North Carolina to address their attrition issues by implementing salary and financial incentives. Because of their attempts, both states improved their teacher shortages, created a strong supply of well-qualified teachers, and experienced significant gains in achievement on the National Assessment of Educational

Progress (NAEP). Both states increased teacher salaries, turning their teacher shortage into a surplus. Both states established scholarships and forgivable loans targeted for teachers. North Carolina also adopted a new performance-based salary increase, 12% of base salary, for teachers who achieved their National Board Certification.

Grow Your Own Programs

Another way that states have attempted to address the teacher attrition problem is by establishing their own Fellow Programs. For example, North Carolina established the North Carolina Teaching Fellows Program. South Carolina started the South Carolina Teaching Fellows, and California started the Governor's Teaching Fellowships. Seventy-five % of the North Carolina Fellows were still teaching by their fifth year, more than 60% of other prepared entrants, and 40% of alternative route entrants. Eighty-two % of South Carolina's graduates between 2000 and 2011 either satisfied the service scholarship commitment or are still teaching to fulfill the commitment in a South Carolina public school district. California's program quickly provided high-ability and well-trained teachers to their high-need schools (Sutcher et al., 2016).

Local/Hope District Attempts to Address Turnover

Some of the local attempts to address the problem were mirrored by some of the initiatives discussed in the critical analysis of the research. According to the Hope District Strategic Plan, the strategies stated to improve the county's high-performing workforce and retain teachers are increased compensation, increased stipends for National Board-Certified Teachers, with incentives for working in highest-need schools, increased targeted professional

development for educators, and increased teacher mentoring, and support (PGCPS, 2015). The district continues to address its plans for the retention issue in its Strategic Plan by stating:

We will employ processes that ensure recruitment of a diverse and talented staff which is representative of the student population. As well, leadership will design, negotiate and implement competitive and innovative compensation packages that, when combined with comprehensive, high-quality professional development and career growth opportunities, will make Hope District the employer of choice among school systems in Washington, D.C. – Baltimore region. (SY 2016-2020 Strategic Plan)

Some of the earlier initiatives implemented were the Financial Rewards for Supervisors and Teachers (FIRST) Program, the Resident Teacher Program, and other programs funded by various grants such as the Great Teachers, Great Leaders, Great Schools grant, and the TSL Grant. The district identified a variety of goals for these initiatives, such as a diverse candidate pool of high-performing teachers for every student, “best-fit” placements for schools and new teachers, whether novice or veteran educators, incentives for high-quality teachers to improve staff retention, more reliable employee performance system, data management system with easily accessible information for teachers, school leaders, and human capital managers and improve support and retention of teachers (MSDE, (n.d); PGCPS, 2017). For these initiatives, the school system focused on various high-needs schools with a history of high levels of teacher turnover, less experienced teachers, and students from families with low income. Even with these earlier initiatives, teacher attrition continued to be an issue for the district.

Support Through Professional Learning. The district has an office that organizes its programming and professional learning opportunities. The mission of the office is to focus on enhancing the professional practice of all Hope District employees through the development of wide range specialized programs, coaching, and mentoring. They will also focus on creating an enhanced professional learning system where the office serves as the hub for all professional learning for the district. The office is organized around three core services: retention, support

and succession and five collaborative work strands: innovation, teacher leadership development, school leadership development, mentoring, coaching and induction, and technical assistance. As a result of their mission, the office has implemented several initiatives to support retention (PGCPS, 2020). Through the office, a number of new teacher's support is offered.

Teacher Mentor Program (TMP). The office is responsible for the Teacher Mentor Program (TMP). The Teacher Mentor Program (TMP) provides various support and resources to new teachers to assist with the successful transition into Hope District. Mentor teachers are assigned to first-year and selected second-year teachers enrolled in an alternative teacher preparation program. Unfortunately, due to the decrease in funding sources, such as Title II funds, and the limited number of mentor teachers to provide comprehensive induction support during the first three years of professional service, the TMP has not been as effective in addressing the needs of the district's new teachers (PGCPS, 2016). The TMP mentors provide mentoring, coaching, and modeling of best practices throughout the induction period.

Hope District Induction Program. The County has an induction program for new teachers. The induction program provides training on teaching standards, curriculum guidelines, best practices, and other related topics to new teachers. The induction program begins with an August pre-service induction program for new teachers to the district. During the three-day training, new teachers are introduced to school system leaders and fellow educators. They also receive information regarding curriculum, systemic initiatives, district policy and procedures, and other pertinent information for new teachers to the district. Many of the sessions are led by school/district lead teachers and content supervisors and are differentiated by instructional level

and content area. Through the induction program, they also provide monthly, ongoing professional development sessions for new teachers.

Peer Assistance and Review Program (PAR). In July 2014, Hope District implemented the Peer Assistance and Review (PAR) program. The mission of the PAR program is to provide intensive and differentiated support to non-tenured teachers who need improvement in professional practice. The program's vision is to ensure highly effective teachers are in every classroom. The format is for highly effective teachers to provide regular and consistent support to non-tenured teachers through peer coaching, peer observations, and other supportive means to increase student achievement by ensuring that the pedagogy of all teachers aligns with best practices. This program only supports struggling teachers, leaving many effective new teachers without support. The district also discontinued this program.

Task Force. In November 2018, the Interim Chief Executive Officer (CEO), announced in the “Interim CEO’s Quarterly Report” that a Task Force has been created to “assess the need for restorative pay increases and provide a comprehensive assessment of all salaries compared to neighboring school districts and others of similar size and demographics” (Interim CEO, "Building Pride in PGCPs", 2018, p. 4). In the report, the Interim CEO attributes low employee morale and hindered staff recruitment to salary issues, thus the creation of the Task Force. The Interim CEO also mentioned in the report that she charged the Human Resources team with devoting more resources to retaining teachers, more specifically, retaining the district’s high-performing teachers and teachers who work in hard-to-staff schools. The report also mentioned

the continued engagement with labor partners to improve working conditions and address other long-standing issues.

Systemic/School-Level Professional Development. In addition to the initiatives mentioned above, the county has offered a wide range of systemic and school-level professional development opportunities to enhance teacher practice and improve teacher retention. They have provided differentiated professional development for new teachers, including new and seasoned teachers, content-specific professional development, and other such professional development. These opportunities were provided to address and support the needs of teachers to increase teacher retention (PGCPS, 2015).

Assessing Local Efforts in Hope District. Although the county has made several attempts to address its teacher attrition problem, they have not yielded substantial or lasting success, and the attrition rate continues to be a problem for the district. Some of the attempts were derailed due to funding, while others targeted specific groups of teachers and left other larger groups of teachers with no support (PGCPS, 2016). Some of the initiatives implemented by the County emphasized the teachers in their first two years of teaching but provided little or no support after that. While other initiatives focused on struggling teachers or teachers with conditional or emergency licensure, leaving little or no support for the effective teacher who was still in his/her first five years of teaching.

In addition, many initiatives/prior attempts mentioned above were not regularly or effectively communicated to principals. In many instances, the initiatives were implemented in isolation from the principals/local schools. Not only were principals uninformed of many of the initiatives, but principals were never requested to encourage their new teachers to participate. There has been a significant disconnect between the district's prior attempts to address the

teacher attrition issue and the elementary principals in the district. Therefore, there is a need to investigate the teacher attrition issue in the Hope District and the role of the principal, specifically in the hard to staff/Title 1 schools.

Assessing the Role of the Principal in Hope District. Historically, the principal's role in retaining non-tenured effective teachers has not been monitored extensively within Hope District. First, the district job description for the principal position does not reference teacher retention. The description addresses expectations such as providing instructional leadership, building professional learning communities, ensuring efficient school operations management, collaborating with families and community members, and other such responsibilities. However, there is no reference to hiring and/or retaining teachers in the job description (PGCPS, 2024).

Secondly, Principals are evaluated with the Association of Supervisory and Administrative School Personnel (ASASP) evaluation system. The ASASP system is designed to provide employees with an evaluation that enhances job performance and promotes continuous improvement and growth. The school-based administrator evaluation model is a 70/30 model. The Professional Practice component comprises 70% of the final evaluation and is based on the 10 Professional Standards for Educational Leaders (PSEL). The Student Growth component comprises 30% of the final evaluation and is based on specific quantitative measures and qualitative measures that are monitored throughout the year. The PSEL standards are: (1) Standard 1: Mission, Vision, and Core Values, (2) Standard 2: Ethics and Professional Norms, (3) Standard 3: Equity and Cultural Responsiveness, (4) Standard 4: Curriculum, Instruction, and Assessment, (5) Standard 5: Community of Care and Support for Students, (6) Standard 6: Professional Capacity of School Personnel, (7) Standard 7: Professional Community for Teachers and Staff, (8) Standard 8: Meaningful Engagement of Families and Community, (9)

Standard 9: Operations and Management, and (10) Standard 10: School Improvement (National Policy Board for Educational Administration, 2015). One of the components under PSEL Standard 6 states, “effective leaders: recruit, hire, support, develop, and retain effective and caring teachers and other professional staff and form them into an educationally effective faculty” (p.14). While the statement/component, “retain effective and caring teachers” is mentioned in Standard 6, this statement/component is among many other components outlining the expectations of Standard 6 and the expectations of the work, qualities and values of effective educational leaders. As a result, within Hope District, during their final evaluation, principals may or may not provide evidence for this specific component within this standard. This would be acceptable, as principals are not required to provide evidence for every component, but must provide evidence for each standard.

The comprehensive analysis and efforts previously outlined represent the scope and depth of the teacher attrition problem nationally and locally. The efforts represent substantial work to retain effective teachers. However, these efforts have not been directly related to a focus on non-tenured effective teachers and the local school, therefore more work and analysis is needed.

Theory of Improvement

To address the problem, it is important to know what is causing it. The district's ability to establish a framework for why teachers are leaving the field will allow them to create systems and structures that will assist them in retaining teachers. This section outlines a theory of improvement that will center the study and examine the research and literature that supports the theory.

Causal System Analysis (CSA): Why Are We Losing Teachers

New, non-tenured, effective teachers have expressed many of the reasons cited in the literature and others as the root causes of their departure from their schools or the school district. During the analysis process of teacher attrition, research and literature reviews were conducted on this topic. Principals, teachers, central office personnel and former school board members were consulted regarding their opinions on the teacher attrition problem. They discussed whether they thought teacher attrition was a problem and if so, what were the determinants of teacher attrition. The ultimate question being, “what are the root causes of new teacher attrition”?

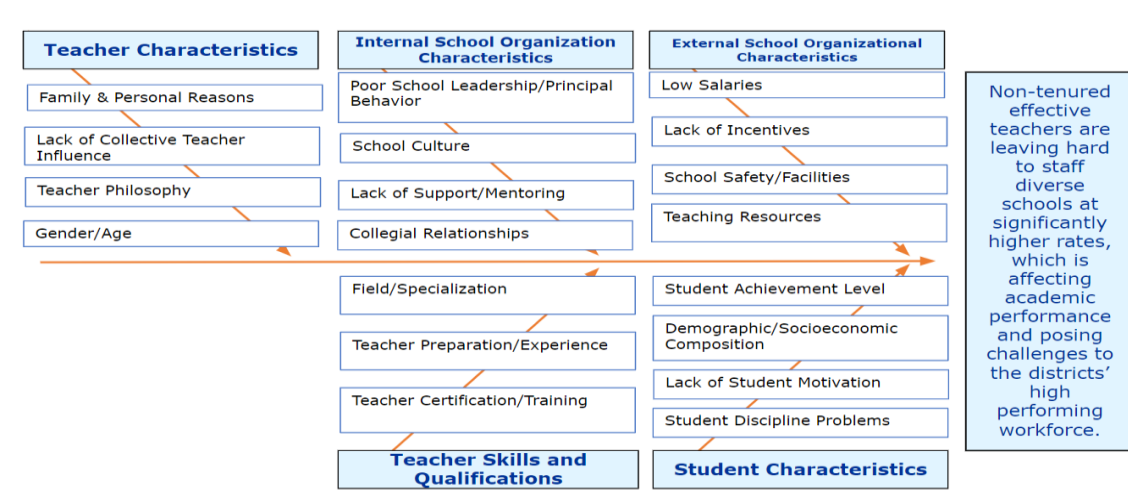
There are many root causes to new teacher attrition. Recently, post-pandemic, Kraft and Lyon (2022) published research that identifies a drop in the professional prestige of teaching, less interest among high school and college students in the profession, and less job satisfaction among teachers as some challenges facing the teacher workforce and affecting attrition. Borman and Dowling (2008) conducted a meta-analysis and narrative review of the research on teacher attrition and retention and identified factors that influence teachers’ decisions to leave into five categories. The five categories are teacher characteristics, teacher qualifications, school organizational characteristics, school resources, and student body characteristics. Teacher characteristics considered such factors as age, gender, race/ethnicity, and marital status. Teacher qualifications include such factors as teacher training, certification, teaching experience, teacher ability, and field or specialty area. School organizational characteristics were factors such as the urban city, size, secondary versus elementary level, and work environment. School resources focused on such characteristics as average class size and teaching materials. Student body

characteristics discuss factors such as the school’s socioeconomic composition, student achievement level, and the racial/ethnic composition of the school.

Based on the analysis, a casual systems analysis/root cause analysis of teacher attrition was completed, using a fishbone diagram, as illustrated in Figure 9. A root cause analysis is a protocol used to examine the sources of an unsatisfactory outcome in an educational system. According to Bryk et al. (2017), the protocol requires individuals to identify a specific problem to be addressed, ask “why” questions to probe deeper to determine the cause of the unsatisfactory outcome, and utilize a fishbone diagram to represent the protocol visually. The fishbone diagram outlines categories and causes as to why the teachers are leaving hard-to-staff schools. Many of the categories are based on the work of Borman and Dowling (2008) but infuse many of the other causes mentioned from the additional research, insights from the literature, and the experiences of the various education groups.

Figure 9

Potential Causes to Teacher Attrition for Non-Tenured Effective Teachers



Note. This figure depicts the various causes to why non-tenured effective teachers may leave the teaching profession.

Student Characteristics. For this research, student characteristics refer to characteristics related to the students that may affect a new teacher's decision to leave. The student characteristics revealed through the analysis were student achievement levels, lack of student motivation, student disciplinary problems, and demographic/socioeconomic composition.

Student disciplinary problems is one major factor that has contributed to why teachers leave their school and/or the profession (Djonko-Moore, 2016; Ingersoll & May, 2012; Kraft, et al 2016). Habegger (2008) also cited poor student discipline as a reason for high teacher attrition. Carver-Thomas & Darling-Hammond (2017) in their research identified poor student discipline as a factor for English Language Development (ELD) teachers, teachers of color, teachers in high-poverty schools and teachers in high-minority schools. Kottkamp et al (1987) in their study of Dade County, Florida found that one of the top reasons that African American and Cuban teachers left their school was due to student discipline problems.

Another major factor related to the student characteristics that was mentioned during the analysis that has impacted new teacher attrition is the demographic/socioeconomic composition of the students. Schaefer, et al. (2012) discussed demographic factors, such as high rates of poverty, rural, urban and suburban, as being causes of teacher attrition. Achinstein, et al. (2010) identified students' social class and race as causes of teacher retention. Through their research, they found that teachers are more likely to leave schools where the majority of the students live in poverty or a higher percentage of the students receive free or reduced-price lunches. Student characteristics may cause new effective teachers in hard to staff schools to leave because these are common characteristics that may be encountered in a hard to staff school. While these characteristics can be insignificant for some teachers, they can be challenging to address for a novice teacher. Novice teachers may lack the skills, such as classroom management and

pedagogical skills, needed to address the various characteristics and therefore may become overwhelmed and decide to quit.

Teacher Characteristics. For this research, teacher characteristics refer to individual qualities or needs of a new teacher that may affect their decision to leave. The teacher characteristics identified were family and personal reasons, gender/age, teacher philosophy, lack of collective teacher influence/connectedness, and psychological factors.

One of the major teacher characteristics that impact new teacher attrition is family and personal reasons. Carver-Thomas & Darling-Hammond (2017) used data from the National Center for Education Statistics Teacher Follow-Up Survey for 2012-2013 and found that teachers often cited various reasons for voluntarily leaving the profession. According to their research, 43% of teachers cited family and personal reasons for leaving the profession. Family and personal reasons can be seen as a broad category ranging from reasons such as health, financial, job-related, and other such reasons. Carver-Thomas and Darling-Hammond (2017) also found that teachers cited family and personal reasons for moving within the profession.

Borman and Dowling (2008) conducted a comprehensive meta-analysis of 34 quantitative studies seeking to understand why teacher attrition occurs or what factors moderate attrition outcomes and conducted the analysis in two stages. The first stage consisted of identifying the studies to be analyzed. It entailed a search of literature on teacher career trajectories with correlations of attrition and retention, which yielded more than 150 references. Then, they examined abstracts, looking for abstracts that included teacher retention or attrition data. As a result, more than 90 studies were retrieved and further analyzed based on seven major topic areas such as characteristics of individuals who enter and remain in the teacher profession, characteristics of individuals who leave the teaching profession, and other such topic areas. In

the second stage, I focused on a subset of the studies that provided quantitative information on teacher retention and attrition and met their five-point criteria. The criteria considered such considerations as: the study provided sufficient data on teacher attrition or retention from which effect sizes could be computed, the study reported teacher attrition by individual and/or school-related characteristics from which an effect could be determined, the statistical analysis employed provided attrition probabilities in the form of counts, proportions or logged odds and other such considerations. In the end, 34 studies met all the requirements and were selected for analysis. The studies ranged from the 1980's through 2005. The sample sizes ranged from a study with a sample size of 50 teachers to a study with a sample size of over 50,000 teachers. The analysis revealed that personal factors of teachers are predictors of teacher turnover. Personal factors refer to the teachers' background, philosophy, etc. They found that the odds of attrition are higher among teachers who are female, white, young, married, and who have a child. The study is a meta-analysis of 34 studies; therefore, it is not the researcher's original work.

Another major factor of teacher characteristic that has impacted a teacher's decision to leave is the teachers' connectedness to the school community or decision-making. Carver-Thomas & Darling-Hammond (2017) in their research identified lack of collective teacher influence over school decisions as a major determinant for teachers of color and teachers in high-poverty schools. Habegger (2008) also cited lack of collective teacher influence over school decisions as a reason for high teacher attrition.

Dunn and Downey (2018) conducted a qualitative ethnographic comparative case study that looked at the impact of the teachers' connectedness to the school community on the teachers' decision to stay or leave. The study investigated why and how teachers invest in themselves with extracurricular projects and how the investment in the project influenced their

decision to stay or leave the profession. There were two cases in the study. One field site was located in a large city in the northeastern United States. The second field site was located in a large city in the southeastern United States. There were 24 teachers involved in the research. The case study methods used were open-ended interviews, participant observations, document analysis and reflective memoing. The research yielded implications for a teacher's identity and career trajectory. They found those teachers' extracurricular investments, the time, which refers to the time outside the traditional classroom learning time, affect their identities and career trajectories. As teachers invest their time, emotions and energy with the extracurricular investment, it may, as was the case for the teachers in the case study, influence their decision to stay at the school and/or in the profession.

These teacher characteristics may cause new effective teachers in hard to staff schools to leave because the research shows the impact of these characteristics on teachers. These characteristics may also cause new effective teachers to leave because most of these teachers are young and therefore have not fully settled into their career. As a result of not being settled/grounded, it would be easy for these new teachers to leave. For example, if they do not have a strong philosophy on education and why they chose the profession, it would be easy for the demands of the job to overwhelm them; and they would leave. In addition, as a young, new teacher, although they may be doing well, they may still choose to leave for family/personal reasons such as marriage, pregnancy and other early-life milestones. Lastly, from the researcher's experiences, most of the new effective teachers are "millennials or generation z". Members of these groups are known to be very opinionated; therefore, lack of collective influence may cause them to leave, if they feel that they are being left out of the decision-making or a lack of connectedness.

Teacher Skills and Qualifications. For this research, teacher qualifications refer to a teacher's certification, licensing, and/or experience and how that may affect their decision to leave. Research implications show that teachers decide to leave or stay in the profession based on personal qualifications, such as their experiences and qualifications, which typically has nothing to do with aspects of the school, people, or organization.

One major factor that has impacted high teacher attrition is that the teacher is not certified or trained. The Barnwell (2015) report stated that new teachers often lack a teaching certification/training or a college degree in the subject he or she is teaching but are disproportionately likely to be assigned to teach a core class, such as English or math (P. Barnwell, 2015). As a result, teachers are not able to handle the demands of the profession and will often leave.

Greiner and Smith (2009) found that teacher preparation/experience is a variable in whether a teacher remains in the profession. They stated that “sufficient teacher preparation” (p. 582) can reduce many of the problems that first year teacher’s encounter, which often leads to their decision to leave.

Teacher skills and qualifications may cause new, effective teachers in hard to staff schools to leave because they may not feel qualified to do the job. For many of these new, effective teachers, it may be a matter of skill versus will. Although they may have the will, which means the desire to teach, many do not have the skill, which means the content knowledge. This may be especially true for new, non-tenured teachers in the field of special education, mathematics, and other specialized areas. Although these teachers may experience some successes, it is natural for them to have challenges. Lacking the content knowledge in

these specialized areas can lead to unsuccessful lessons and/or experiences that may cause them to want to leave their school or the profession.

External School Organizational Characteristics. For this research, External School Organizational Characteristics refer to the actions taken or structures established outside of the physical school building that may affect a new teacher's decision to leave. One of the main external factors is low salaries. Achinstein, et al. (2010) identified financial capital as affecting teacher retention. In the research, financial capital referred to salaries and teaching resources. Borman and Dowling (2008) found 14 studies that also included salary as a determinant to teacher attrition, stating that higher salaries correlated with the reduced odds of attrition (Hanushek et al. 2004; Imazeki 2005; Shin 1995; Smith & Ingersoll 2004; Stinebrickner 2002). Habegger (2008) cited low salaries as a cause of high teacher retention. Carver-Thomas & Darling-Hammond (2017) found that low salaries ranked the highest among special education teachers. As a way to offer incentives, Podolsky et al. (2016) offers suggestions of incentives such as service scholarships, loan forgiveness programs, and housing incentives, such as money for rent, relocation, and/or down payment assistance to retain teachers.

External school organizational characteristics may cause new, effective teachers in hard-to-staff schools to leave because the job market is so diverse and competitive, new, effective teachers do not have to stay in a job that is not comparable to other jobs. Podolsky et al. (2016) stated that beginning teachers earn about 20% less than individuals with college degrees in other fields. These new, effective teachers may leave to make more money and be compensated like their friends/counterparts. They also want to feel safe at work. These new, effective teachers are already navigating lesson plans and classroom management. School systems want them to also manage school violence, especially in school districts that may require them to learn how to use

a weapon. This can be overwhelming for a new, effective teacher, and therefore, they may choose to leave their school or the profession.

Internal School Organizational Characteristics. For this research, Internal School Organizational Characteristics refer to the actions taken or structures established within the school that may affect a new teacher's decision to leave. Goldring et al. (2014) with the National Center for Educational Statistics found that twenty percent of teachers who voluntarily left a school did so due to factors in the school. There were many factors considered such as collegial relationships, school culture, poor school leadership/principal behavior, and lack of support/mentoring. Kraft, et al. (2016) conducted a study that investigated the factors mentioned above. The study investigated the relationship between school organizational contexts, teacher turnover and student achievement in New York City middle schools. In the study, school organizational contexts referred to leadership, professional development, high academic expectations for students, teacher relationships and collaboration and school safety and order. The researchers drew from four sources of data provided by the New York City (NYC) Department of Education. The sources were teacher responses to the NYC School Survey, the NYC human resources data, the NYC student assessment data, and the NYC school administrative data. The study focused on 278 middle schools over five school years. According to the study, they found that schools with higher-quality contexts experienced lower turnover.

One of the major factors identified from the analysis is poor school leadership/principal behavior. Carver-Thomas and Darling-Hammond (2017) found that teachers leave due to dissatisfaction, more specifically, dissatisfaction with school administrators. Greenlee and Brown (2009) in their study also found that principal behavior is a factor teacher consider when

making the decision to stay or leave the school system/profession. The Boyd, et al (2009) research echoed that school administration is an important factor that influenced a teacher's decision to leave. More specifically, recognition and support from the administrator was identified as a criterion for the reason why teachers left the school/district.

Burkhauser (2016) built on previous literature that examined the role of the principal in teachers' perceptions of their working conditions. The research found that teachers' ratings of the schoolwork conditions depended on the school leadership. School principals can play a significant role in improving teachers' perceptions of their school conditions, which in turn will affect the teachers' decision to leave or stay. As a result of the research, Burkhauser (2016) suggested that districts should assess climate and use that information to advise and support principals.

Simon and Johnson (2015) also indicated that teachers who leave high-poverty schools are leaving due to internal factors such as school leadership. Their research stated that such factors could be addressed. In the research, they call on policy makers and practitioners to work to improve these aspects of the school environment.

Ladd (2011) conducted a quantitative study to examine the relationship between teachers' perceptions of their working conditions and their intended and actual departures from schools. The components of work conditions in this study refers to leadership, teacher empowerment, time, professional development, mentoring, facilities, and resources. The study used administrative data for North Carolina combined with a 2006 statewide survey administered to all teachers in the state. The teacher survey had a response rate of over 70%. The survey consisted of 106 questions. All surveys were anonymous and administered electronically. The researcher was able to examine the perceived role of working conditions by teachers within an

empirical model with extensive statistical controls for other school characteristics. Ladd (2011) found that “teachers’ perceptions of working conditions at the school level are highly predictive of an individual teacher’s intention to leave a school, with the perceived quality of school leadership being the most salient factor” (p. 251).

Berteille, et al. (2009) also conducted a study of the effects of principals’ behavior on school effectiveness. They discussed the importance of personnel management in highly effective schools. They used a value-added method to examine the relationship between a school’s effectiveness during a given principal’s tenure and the retention, recruitment and development of its teachers. They used data from the administrative files on all staff and students in the Miami-Dade County Public Schools (M-DCPS) district from the 2003-2004 through the 2008-2009 school years. The data consisted of principal observations, student achievement data in math and reading, demographic data, teacher demographic data and classroom practice data. They were attempting to answer the following questions: (1) to what extent do more effective principals retain more effective teachers, (2) to what extent do more effective principals hire more effective teachers, and (3) to what extent do teachers improve more with experience in schools with more effective principals? From the study, Berteille, et al. (2009) found that (1) effective principals are able to retain higher-quality teachers and remove less-effective teachers, (2) effective principals are able to attract and hire higher quality teachers to fill vacancies, and (3) effective principals have teachers who improve at a greater pace than those in schools with less effective leadership.

Another internal factor of high teacher attrition that has been mentioned through the analysis is the lack of support for teachers. Luther and Richman (2009) mentioned the lack of

new teacher mentoring as a possible reason that teachers left. They stated that new teachers need support and guidance.

Inman and Marlow (2004) conducted a study that revealed that school and student demographics is not necessarily the issue of teacher attrition, especially for beginning teachers. The issue was support for teachers. They conducted their study in two phases. Phase 1 consisted of teachers with 0-3 years of teaching experience. Phase 2 consisted of teachers with 4-9 years of teaching experience. The study examined internal and external factors such as salary and employment factors such as working conditions (i.e. class size, availability of resources), demographics, and teacher background. The study found that Phase 2 teachers indicated that employment factors play a significant role in their decision to continue teaching. Phase 1 teachers, the new teachers, tended to be less concerned with employment factors as a factor in their decision-making process. The factors impacting the Phase (the new teachers) were more interpersonal and environmental such as strong support systems. Teacher education programs, administration, colleagues, and/or the community could have provided the support.

Internal school organizational characteristics may cause new, effective teachers in hard to staff schools to leave because they do not feel supported. As we have previously mentioned, teaching is a demanding profession, especially in hard to staff schools. New, effective teachers' lack of support may cause them to leave their school or the profession. In addition, as new, effective teachers attempt to navigate their new job, they need an environment that is nurturing and collegial to continue to thrive. New, effective teachers cannot flourish in schools with toxic school cultures or non-collegial relationships, and therefore may choose to leave the school and/or the profession.

From this casual systems analysis/root cause analysis of teacher attrition, the three categories that showed the most opportunities for positive outcomes were Teacher Skills and Qualifications, External School Organizational Characteristics, and Internal School Organizational Characteristics. After identifying some of the root causes outlined in the three categories mentioned above, specific outcomes were identified using the improvement science tool of a driver diagram.

Drivers for Change: Addressing Solutions to Decrease New Teacher Attrition

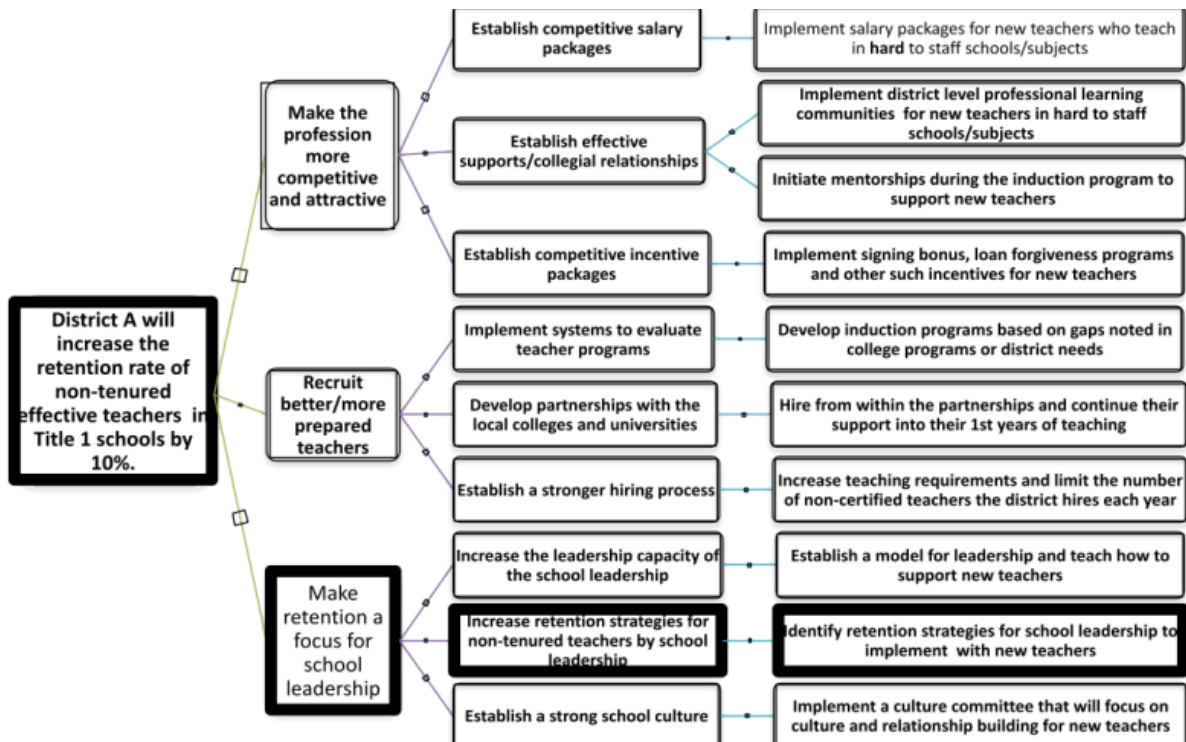
A driver diagram explicitly maps out a path toward an intended outcome. A driver diagram typically includes four components: an aim statement, primary drivers, secondary drivers, and change ideas. The aim statement addresses what is trying to be accomplished. The primary drivers represent what needs to be improved. The secondary drivers represent how to activate the primary driver. The change ideas represent the specific improvement/change idea linked to the secondary driver that may be developed, tested, and refined to address the aim/problem (Worsfold, 2021).

For this research, there are three primary and secondary drivers (see figure 12) that can be leveraged to decrease new teacher attrition: 1) make the teaching profession more competitive and attractive, 2) recruit better/more prepared teachers, and 3) make retention a priority for school leadership. This research synthesis analyzes literature that examines these primary drivers and how to address the teacher attrition problem. The University of Maryland Libraries online searchable database served as the main resource for identifying the literature for this synthesis. This research synthesis will attempt to answer the question; how can teacher attrition be addressed? By focusing on some of the determinants that have been identified and associated

with these three core drivers, teacher attrition can be positively impacted. Figure 10 overviews the three primary drivers, secondary drives, and change ideas.

Figure 10:

Core Drivers to Potentially Address Teacher Attrition



Note. The figure depicts the three primary drivers of the analysis of teacher attrition.

Make the Teaching Profession More Competitive and Attractive. In order to make the teaching profession more competitive and attractive, the district can increase the salary of new teachers. Brill and McCartney (2008) suggested that increasing teacher salaries is one way to decrease teacher attrition. They specifically discussed increasing the salary as an incentive to teach in hard to staff schools. However, they discussed that this may need to be a long-term goal due to the funding needed to support this initiative. Sims (2019) also suggested flattening the pay gradient. New teachers' decision to stay is much more connected to their salary than

seasoned teachers. In a study of new science teachers, Sims suggests giving new teachers more pay initially, followed by slower pay raises as they increase their tenure. Another suggestion given was varying teacher pay by the subject taught. Sims also mentioned that the difference between teacher pay and non-teacher pay is a major determinant of whether a person chooses to stay in teaching. As a result, as districts set teacher pay, they need to be mindful of the outside teaching earning potential and possibly use that as a guide to determine the teacher pay.

Another suggestion to make the teaching profession more competitive and attractive would be to enhance the district level support that is provided to new teachers. One level of support could be implementing district level professional learning communities to support new teachers. Brill and McCartney (2008) addressed establishing stronger professional communities as a way to decrease teacher attrition. Professional communities would allow for there to be continued dialogue and partnership between new and experienced teachers. This type of collaboration would focus on mutual growth and support. The collaboration would be initiated during the induction program for new teachers. According to Brill and McCartney (2008) effective induction programs, can also decrease teacher attrition. They discussed that the most important component of the induction program is the mentoring relationship that is developed between the new and experienced teacher during induction and maintained throughout the new teacher's first year and possibly second year of teaching.

A third suggestion to make the teaching profession more competitive and attractive would be to incorporate incentives for new teachers. Feng and Sass (2018) conducted a study and found that a loan forgiveness program and a bonus program were effective ways to reduce attrition rates for middle and high school math and science teachers. With the loan forgiveness program, the middle school teacher attrition rate was reduced by 10.4 % and the high school

teacher attrition rate was reduced by 8.9 %. The bonus program reduced attrition by as much as 32 %.

Recruit Better/More Prepared Teachers. One important way to increase teacher retention is to recruit better/more prepared teachers. Sims (2018) found that preparation is directly related to a teacher's intentions to stay or leave. He discusses the relationship of his findings with the Self-Determination Theory and the Job Demands-Resource Model by stating that teachers who feel competent, because they have had the appropriate training are more likely to remain in their profession. He also states that school leaders should, "try to give teachers assignments in the subjects in which they have a relevant degree or have received teacher training" (p. 13).

Another way to ensure that the district recruits better teachers is by ensuring that the teachers receive the proper training needed to be successful in the district. The district would ensure this through district-university partnerships. In the Darling-Hammond (2006) study, they discussed the need for a partnership between school districts and higher education. They discussed the need for both entities to share the responsibility for mentoring and coaching new teachers during their first few years of teaching. They also discuss a program that was piloted at their university called the "New Urban Teacher Collaborative (NUTC)". In NUTC university faculty members worked with the local urban district administrators to implement a program for development and support for graduates who had been hired to work in their district. Hutchinson (2012) discussed the STEM teacher shortage and the ways to recruit and retain effective STEM teachers. She suggested that recruitment should start with early undergraduate education experiences that then lead to certification through a support team approach (STA). This approach includes effective recruitment into the teaching profession that is supported through

scholarships and consistent academic advisement and mentoring while in school, and then followed by an induction year of teaching, which includes additional mentoring and professional development from their college professors. For example, Hutchinson (2012) references the UTeach program in her research. In the UTeach program, prospective teachers are offered a series of courses that allow the students to teach in diverse school settings, to tutor students, and work alongside practicing STEM teachers while receiving mentoring from college professors as a part of their undergraduate program and into their first year of teaching.

Another way to increase teacher retention by recruiting better teachers is for the district to address the educational gaps of their new teachers through their induction program. This will allow new teachers to engage in a range of diverse experiences that will better prepare them to address the demands of teaching. Wilson (2011) states that there is a lack of a core curriculum for teacher preparation in some university-based programs, which is making the programs vulnerable to both criticism and competition. Darling-Hammond (2006) also discussed the importance of multicultural course readings and completing such activities as community asset inventories, interviews and observations as a part of university course requirements. The district could ensure to embed these experiences within the induction program to better equip their novice teachers.

Lastly, a way to increase teacher retention by recruiting better/more prepared teachers is for the district to establish a stronger hiring process. They may establish a process that increases teaching requirements and limits or put a cap on the number of non-certified teachers the district may hire in a school year. Wilson (2011) briefly discusses the debate between alternative teacher prep programs vs. traditional teacher prep programs. According to the article, the teacher preparation landscape has changed, and now includes pathways that are sponsored by

universities, outside agencies, school districts, and other such organizations. Unfortunately, the research does not give a definitive answer on which program is better. Darling-Hammond (2006) stated that the national average for new teachers who leave teaching within the first 5 years is about one in three. However, the number is even higher when teachers receive less preparation through “truncated programs that short-circuit essential elements of teacher learning” (p. 310).

Make Retention a Priority for School Leadership. In order to improve teacher retention, school leadership must make retention a priority. This priority can come through the form of improvement of their internal organizational structures or through their leadership.

First, the research discusses making retention a priority by increasing the capacity of the school leadership. According to Boyd, et al (2009) school leadership can affect teachers’ career decisions. Sims (2019) suggests that training leaders to adopt a more autonomy-supportive leadership style can increase retention. Autonomy supportive leaders will seek to develop connections between their teachers, discuss decisions with their staff and carefully communicate the rationale for decisions. Simms (2018) quotes such researchers as Ladd (2011), Kraft et al. (2016), Boyd et al. (2011) and Weis (1999) when discussing his findings on leadership and retention. He found that leadership that clearly articulates a school vision, advises with and empowers teachers, and encourages teacher collaboration experiences decreased teacher turnover. He mentions that leaders can focus on such variables in order to address retention. He also mentioned the McREL Balanced Leadership Program on Leadership, which has been shown to improve teacher retention (Jacob, Goddard, Kim, Miller, & Goddard, 2015).

According to Sutter, et al. (2016) there are three things that effective school leaders are:

Table 5

Effective School Leader Attributes

Effective school managers	Ensuring that teachers have the necessary resources, communication channels, sensible budgets (Sutcher et al., 2016, p. 68)
Effective instructional leaders	Strategically hiring teachers and staff, providing regular and fair teacher evaluations, helping their teachers to improve continually (Sutcher et al., 2016, p. 68)
Inclusive decision-makers	Listening to teachers' ideas and engaging them in change, providing teacher autonomy within their classrooms as appropriate (Sutcher et al., 2016, p. 68)

Burkhauser (2017) stated that principals influence schools more than any other factors. She suggests that teaching principals how to communicate effectively with teachers or help principals to improve their adult leadership skills will allow the principal to improve school conditions allowing teachers to choose to stay at their school or in the profession. She also suggests that principal preparation programs should focus on adult leadership skills and how to provide effective feedback to teachers.

Secondly, the research discusses prioritizing retention by establishing a strong school culture. Fusco (2017) discussed establishing a teacher retention committee to retain teachers. He attributes this finding to Merseth (2009), the author of the book *Inside Urban Charter*

Schools. Merseth (2009) mentions that most successful schools she has studied have had teacher retention committees in her book. Teacher retention committees are designed to keep track of staff morale, listen to teacher concerns, and advocate for reforms. At his school, one of the first action items for the committee was to conduct a schoolwide survey to learn what compelled some of their colleagues to stay and others to leave. As a result of the responses from the survey, the school made some immediate changes that reduced teachers' workload significantly, which might have contributed to the teachers' decision to stay.

Johnson and Birkeland's (2003) also focused on the positive effects of school culture on retention. The study focused on the types of school cultures needed to support new teachers in staying in the profession. The researchers conducted a longitudinal interview study of 50 new teachers' experiences. For the study, they first interviewed a diverse group of 50 first and second-year teachers in a wide range of Massachusetts public schools, asking them how they experienced their work and how they conceived of careers in teaching. Then, in the summer of 2001, they interviewed those same teachers again, seeking to find out whether they had decided to stay in their schools, move to new schools, or leave public school teaching, and why they had made those choices. They were only able to interview 47 of the 50 from the original group. Two members of the original sample did not respond to their request for an interview. One other participant could not be located, having left the state to pursue another profession. They found that some respondents had left teaching, changed schools, or were displeased with teaching or their current schools. The study also revealed that the teachers' experiences at the school sites influenced their decisions to stay or leave. From their analysis of the interview responses, they focused on the types of school cultures needed to support new teachers in staying in the profession. They discussed three types of professional school cultures: (a) veteran oriented, (b)

novice-oriented and (c) integrated. The veteran oriented culture incorporated professional practices that emphasized privacy and professional autonomy. Novice oriented cultures incorporated practices that featured “youth, idealism and inexperience” (p. 605). The integrated culture was organized to engage teachers of all experience levels in a collegial and collaborative environment. Through their research, they found that teachers involved in the integrated school culture were more satisfied with their jobs, were more likely to stay in the school system and were more likely to stay at the same school.

Lastly, the research discusses making retention a priority by increasing the retention strategies of school leadership. TNTP conducted a study titled “The Irreplaceables: Understanding the Real Retention Crisis in America’s Urban Schools” (2012). The study focused on four urban school districts of 90,000 teachers, 2,100 schools and 1.4 million students. The researchers analyzed various data sets from these districts and found three main causes for the failing retention patterns within the school districts. The causes were (1) principals were making little effort to retain high performing teachers or remove low-performing teachers, (2) poor school cultures and working conditions were driving away great teachers and (3) policies were giving principals and district leaders few incentives to change their ways. At the end of the research, the researchers offered two main recommendations: (1) make retention of high performing teachers a top priority and (2) strengthen the teaching profession with higher expectations. The researchers suggest making the retention of high performing teachers a top priority by implementing a combination of eight retention strategies that school leaders can implement to help boost teacher retention. The eight retention strategies are: (1) provided me with regular, positive feedback, (2) helped me identify areas of development, (3) gave me critical feedback about my performance informally, (4) recognized my accomplishments publicly, (5)

informed me that I am high-performing, (6) identified opportunities or paths for teacher leader roles, (7) put me in charge of something important and (8) provided me with access to additional resources for my classroom. The TNTP study is the framework for this study.

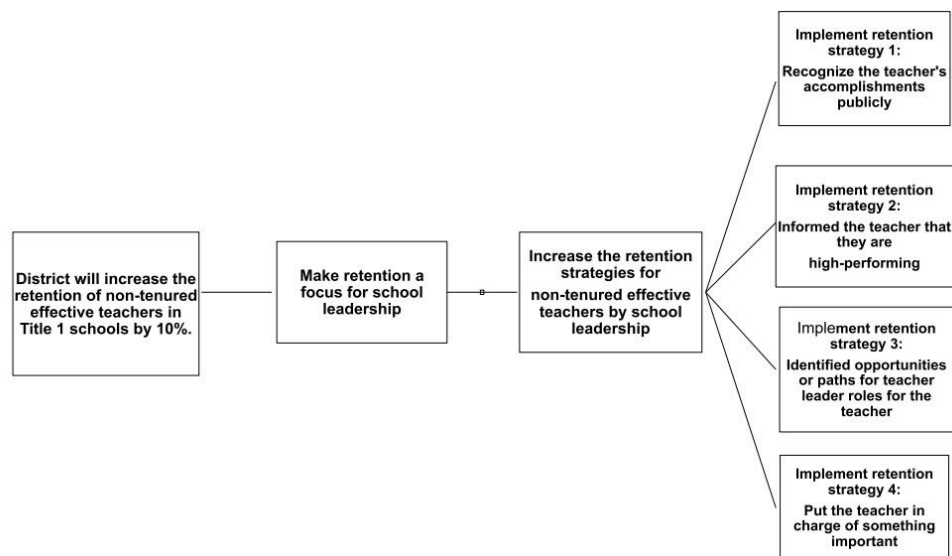
Investigation

The proposed investigation will examine how implementing specific retention strategies from the TNTP study can contribute to making retention a focus for school leadership. In Hope District, teacher retention is not and has not been an explicit part of a principal's end of the year evaluation. Therefore, it has not been a required priority for principals. However, as indicated previously in Section I, Hope District has made many attempts to address their teacher attrition issue. Many of the attempts by Hope District have been districtwide attempts and do not appear to include the local schools. For example, some of the initiatives mentioned were organized and implemented by the office that is responsible for the district's professional learning and leadership. The new teachers are asked to attend training sessions after their duty day; and the sessions are held at a location away from their local schools. The teachers are actively involved in mandatory induction activities for approximately 2-3 days at the beginning of the school year, with voluntary workshops offered to new teachers throughout the year. These voluntary workshops are also held away from the local schools and without the input of the local schools. Through the district, new teachers may receive periodic support from a mentor who visits the local school about 3-5 times throughout the year. According to The New Teacher Project (TNTP, 2012), good teachers usually leave their school or district for reasons that their school could have controlled. This research will use the TNTP study as a framework in an attempt to encourage principals in Title 1 schools in Hope District to prioritize the retention of non-tenured effective teachers.

The overall aim of this study was to explore the potential benefit of increasing the retention of non-tenured effective teachers³ in Title 1 schools within Hope District through the implementation of retention strategies by principals on non-tenured effective elementary teachers. Title 1 schools have been selected because they represent the high needs, urban schools in Hope District. The goal is to increase the retention rate of teachers by focusing on the school leadership. Figure 11 is a visual representation of the driver diagram that maps out the path of the intended outcome for this research.

Figure 11

Core Drivers and Change Ideas for the Investigation



Note: The figure depicts the aim, primary driver, secondary driver and change ideas, also known as retention strategies being investigated.

³ The criteria for identifying “effective teachers” was determined by the principal’s perception of the teacher utilizing formal and informal observation data, principal’s experience with the teacher and other such data as deemed by the principal.

Section 2: Methodology and Design

Purpose Statement

The purpose of this study was to examine Title 1 principals' self-proclaimed role in the retention of non-tenured effective teachers and examine whether a more strategic approach to teacher retention could encourage principals to prioritize the retention of non-tenured effective teachers. The role of the principal is to oversee all school operations, including daily school activities, coordinate curriculum and instruction, manage staff, and provide a safe and productive learning environment for the school community. Among those responsibilities, where does prioritizing the retention of teachers, specifically non-tenured effective teachers, fall?

The study tested the theory that principals can prioritize the retention of non-tenured effective teachers by implementing targeted and relatively easy retention strategies that may influence a non-tenured effective teachers' decision to stay at their current school. The study examined (1) title 1 principals' self-proclaimed role in the retention of non-tenured effective teachers, (2) whether the implementation of specific principal-led retention strategies by principals on non-tenured effective elementary teachers could encourage principals to prioritize the retention of non-tenured effective teachers in Title 1 schools within Hope District, and (3) whether the implementation of the specific principal-led retention strategies influence the non-tenured effective teachers in making the decision to remain in their school throughout Hope District. The results of the current study will be shared with the participating district to support teacher retention efforts and to define areas of focus for principal specific retention strategies.

Research Questions

The research questions for this study were:

RQ1. What do principals in Title 1 schools identify as their role in the retention of non-tenured effective teachers?

RQ2. Does the implementation of a set of specific, research-based principal-led retention strategies influence principals in Title 1 schools to prioritize the retention of non-tenured effective teachers?

RQ3. In what ways, if at all, does the implementation of retention strategies influence non-tenured effective teachers?

Author Positionality

In the spirit of reflection, I acknowledge that I am a principal of a Title 1 school in the district being studied. I recognize that working directly in the field I am studying presents added contextual knowledge, acquaintanceship, and the potential to have possible biases related to the work. I acknowledge that my positionality may have influenced this study to some extent. My experiences helped me make sense of the text. The acquaintanceships may have allowed the study participants to feel comfortable sharing their lived experiences in a way they felt could best express their thoughts and feelings. My background may likely have influenced my interpretations of the data.

To avoid any influence or bias, I relied strictly on the qualitative and quantitative data to draw my conclusions and form my recommendations. I adhered to established protocols, which allowed me to ask questions of the participants to ensure accuracy in my understanding of their

viewpoint. Being reflective and intentional, allowed me to decrease the ways in which influence and bias might have negatively impacted the quality of this study.

Study Design

The study design used a mixed methods approach, with an improvement science methodology and an action research design (Perry et al., 2020). Action research is a continuous process of problem posing, data gathering, analysis and action to alter curriculum, challenging common school practices and working for social change (Green et al., 2006). The design incorporated a focus group, the implementation of a change strategy/change idea using a data instrument, and a survey to assess the potential influence of the change strategy/change idea. The research was conducted in three phases. Phase 1 consisted of a qualitative focus group and brief training. Phase 2 consisted of a qualitative and quantitative implementation of a Plan-Do-Study-Act (PDSA) cycle and the completion of a PDSA instrument. Phase 3 consisted of a quantitative survey.

A mixed methods approach was selected because this research combines action research with quantitative and qualitative methods into one study to provide a broader investigation perspective (Creswell & Plano, 2011; Caracelli & Greene, 1997). The mixed-methods approach allowed me to utilize quantitative and qualitative data together to better understand the research and research questions (Ivankova & Creswell, 2009). The purpose of the quantitative methods allowed me to collect and analyze the numerical data associated with the study. The purpose of qualitative methods is to support the diverse patterns and complex meanings that emerge (Saldana, 2013).

In this study, the purpose of the quantitative and qualitative data was to analyze the influence of the change strategy/change idea, which was the specific retention strategies, on the principals and the non-tenured effective teachers. For this research, the improvement science and action research involved the school leadership implementing 1-2 retention strategies identified by TNTP with non-tenured effective teachers as the change initiative/change strategy/change idea.

A qualitative design was selected because qualitative methods are best for the researcher to explore human experiences with a specific phenomenon (Creswell et al., 2007). In this case, the shared phenomenon was the experience with specific retention strategies during the second and third years of teaching at a Title 1 school. Additionally, a qualitative design was selected, as its goal is to understand, discover, and describe data or experiences (Curry, 2015; Yin, 2015). Qualitative research design is flexible and evolving. The qualitative data in this mixed methods design gave a voice to the principals and teachers and ensured that the study findings were grounded in participants' experiences in order to provide a more complete understanding of the research. Focus groups are one of several qualitative methods. Qualitative focus groups were selected for their ability to generate data on participant experiences and perceptions (Denzin & Lincoln, 2005). For this research, the experiences and perceptions of the principal, the non-tenured effective teacher and the implementation of the retention strategy were analyzed.

In this design, quantitative data (e.g., teacher survey responses and the PDSA instrument responses) were collected and analyzed. This data was used to describe the characteristics and/or behaviors of the population being studied and was useful for investigating the educational problem. Quantitative data was collected and analyzed as a component of the PDSA data

instrument responses and teacher survey responses after the principals had an opportunity to implement the specific retention strategy.

An improvement science approach was utilized in this research. This approach allowed me to explore the influence of the retention strategy implementation as perceived by the principal and non-tenured effective teachers. According to Bryk et al. (2017), the improvement science research methodology approach incorporates a process of disciplined inquiry where researchers identify, adapt, and successfully implement interventions in education to improve the nation's schools and colleges.

Education research would benefit from inclusion of improvement science, which has methods tailored to rapid prototyping and testing, tools for detecting and learning from variation, and affordances to learn from widely different contexts. Improvement Science recognizes the capacity of practitioners to engage in disciplined inquiry using tools and ideas from another site and not only to faithfully implement a researcher-designed program. (Lewis, 2015, p. 59)

The improvement science research methodology approach includes embracing the discipline of improvement science mentioned by Lewis (2015), which relies on “rapid tests of change to guide the development, revision and continued fine-tuning of new tools, processes, work roles and relationships”. Improvement science uses disciplined inquiry to solve Problems of Practice (PoPs). It uses experiential and scholarly knowledge and data to determine if change initiatives that are implemented in cycles, also known as Plan-Do-Study-Act (PDSA) cycles, lead to an improvement (Perry et al., 2020). In this research, the PoP addressed the retention of non-tenured effective teachers and the impact on student and school academic performance. The PDSA cycle was implemented in Phase 2 of the research.

This research study used and built upon the research completed by TNTP titled “The Irreplaceables: Understanding the Real Retention Crisis in America’s Urban Schools” (2012). The improvement science approach allowed me to explore four of the eight principal behaviors

referred to as “retention strategies” in the TNTP report (2012). The retention strategies are divided into four categories. The four categories are Recognition, Responsibility & Advancement, Feedback & Development and Resources. The two categories explored in this research were Recognition and Responsibility & Advancement.

Recognition, Responsibility, and Advancement were selected for a few clear and strategic reasons. First, these two categories were selected because the other two categories, Feedback, Development, and Resources, would require more time for the principal to implement. For example, the strategies under Feedback and Development would require the principal to visit the teachers’ classroom multiple times formally and informally, strategically identify areas of development, and schedule multiple times to meet with the teacher to discuss the feedback, plan next steps and monitor/revisit for improvement. In addition, depending on the supply and demand of human and/or physical resources, it may require the principal time to identify, negotiate and allocate the resources, meet with stakeholders and any other required tasks needed to provide the resources for the teachers’ classroom. Therefore, this research design focused on the two categories that the researcher thought would be relatively easy for principals to access, implement and test within the confines of a short PDSA Cycle of improvement science.

Secondly, the retention strategies listed under the Feedback & Development and Resources categories are often embedded in principal’s work for accountability and/or instructional purposes, not as a strategy for retention. For example, in Hope District, for accountability and compliance purposes, principals must only conduct 2 formal observations, which includes feedback, for non-tenured teachers. However, if the principal was implementing these strategies as a retention strategy, the manner in which the principal implements the strategies may be different. For example, if the principal was providing observations and

feedback, as a retention strategy, the principal may conduct more than 2 formal and multiple informal observation and feedback opportunities. This could be seen as adding more to the principal's responsibilities, which could deter principals from wanting to prioritize retention by implementing the retention strategies.

Thirdly, the retention strategies listed under the Recognition and Responsibility & Advancement categories are not as normally embedded in the daily work of a principal and/or aligned to the evaluation process for principals or teachers. Principals would have to make a conscious effort to implement these strategies. The researcher was interested in introducing principals to these low risk and effort, but high return retention strategies that they can implement with their non-tenured effective teachers. For those reasons, the researcher was interested in exploring these principal-led, least likely retention strategies. Figure 14 shows the four categories and eight retention strategies identified by TNTP. The two categories and four retention strategies being investigated for this study are highlighted in Figure 14.

Table 6

TNTP Eight Retention Strategies

Feedback & Development	Recognition	Responsibility & Advancement	Resources
Provided me with regular, positive feedback	Recognized my accomplishments publicly	Identified opportunities or paths for teacher leader roles	Provided me with access to additional resources for my classroom
Helped me identify areas of development	Informed me that I am high-performing	Put me in charge of something important	
Gave me critical feedback about my performance informally			

Note. This table shows the eight retention strategies introduced during the focus group.

Participant Selection

The plan was to have 5-10 participants in the principal focus group, which is considered an optimal size for data collection and diversity of experience (Curry, 2015). I established the principal eligibility criteria, such as the principal of a Title 1 school for at least 1 year, able to identify at least one non-tenured effective teacher with at least zero (newly hired) to three years of teaching experience within their school and willingness to participate in the study. I obtained the contact information for principals of the eligible Title 1 schools. Then, I emailed the principals of each of the eligible schools to introduce the study, explain its purpose and rationale and request permission to conduct research with each school principal. Approximately 50 principals were invited to participate in the study. Nine principals agreed to participate in the study (i.e. Focus group and PDSA implementation). One week before the scheduled focus group, the nine principals were sent, via email, a consent form. The principals returned the consent form prior to the start of the focus group.

The plan was to have 13 participants of the teacher quantitative survey, which would have represented all of the teachers identified by the principal participants. All non-tenured effective teachers were pre-determined by the principal. Effective non-tenured teachers were identified based on a criterion established by the principal to include formal/informal observations, principal's experience with the teacher and other such criteria. The criteria for "effective" was determined by the principal utilizing formal and informal observation data, principal's experience with the teacher and other such data as deemed by the principal. When identifying their non-tenured effective teachers, they were asked to consider the formal and informal observation ratings first. Effective would represent those teachers scoring in the proficient and/or distinguished areas of the observation tool. Then, the principals were asked to

consider the qualities that the non-tenured teacher possessed that would be an asset to their building. Lastly, the principals were asked to consider any other criteria that would assist them in identifying the non-tenured teachers in their building that they would like to stay for the next school year and/or future years.

Following the implementation of the PDSA cycle, the teachers received an email from the researcher inviting them to participate in the study. The email informed them that their principal volunteered for this study, implemented a pre-selected retention strategy, using the Plan, Do, Study, Act (PDSA) cycle with them, and documented their experience using a PDSA instrument/data tool. As a result of their principal's participation, the teacher was being invited to participate. If they wanted to participate, they were asked to click on the survey link and complete the survey. Thirteen non-tenured effective teachers were invited to participate in the study. A total of five teachers agreed to participate in the study.

Participation in the study was entirely voluntary. Participants were provided an incentive to participate. All emails indicated that the study was being completed as part of fulfillment of a Doctorate of Education and also included approval from the district's research and accountability office.

Phase 1 Procedures

Phase 1 of the study addressed research question 1 and was organized around a qualitative focus group, followed by a brief training. The focus group discussion was based on questions and/or discussion prompts. Nine Title 1 Principals participated in the virtual focus group. The focus group was held in order to use open-ended questions to collect the narrative/qualitative data to gain a deeper understanding of their current retention practices and/or strategies. This method was useful because the qualitative results helped to further

explain and interpret the findings from the second and third phase of the study. I used a focus group protocol to conduct the focus group (see Appendix A). There were three parts to the focus group protocol.

During Part 1, I introduced the participants, discussed ground rules/norms for the focus group, reminded participants that the focus group would be recorded (this was also included on the participants signed consent form, which was submitted prior to the focus group), and ended with introductions from the participants. During Part 2, I asked five key questions to the participants, such as please share with us your name and the number of years you have served as a Title 1 principal and what is your role or responsibility in helping to retain in your building your non-tenured effective teachers. I also prepared follow-up and probing questions for each key question if needed. During Part 3, I provided a conclusion to the focus group, thanked the participants, and provided a break to transition from the focus group to the brief training.

The brief training followed the focus group and introduced the principals to the specific retention strategies that they were being asked to implement in phase 2. I conducted a 30-minute training using a google slide presentation (see Appendix B). At the beginning of the training, principals were given the “why” or purpose of the study and the research framework to include an explanation of the TNTP study. Then, during the training, principals were introduced to eight retention strategies. However, principals were only asked to implement 1-2 of the retention strategies. The 1-2 specific retention strategies for the principals to choose from were identified by I during the training. Lastly, the training provided the principals with their next steps and briefly reintroduced the principals to what a PDSA cycle was and how to implement the cycle based on the confines of the research. It is important to note that principal participants were already familiar with PDSA cycles as this improvement science approach was already being

utilized in Hope District as a component of their School Improvement process. Prior to the conclusion of the training, principals were asked to identify their non-tenured effective teachers for the study.

Phase 2 Procedures

Phase 2 of this study addressed research question 2 and included the implementation of Plan-Do-Study-Act (PDSA) cycles by the principals. The PDSA cycle is a four-step process that aligns with the scientific method, used to examine change ideas and help educators build new knowledge, products, and processes (Perry et al., 2020). Principals were given two weeks to complete one PDSA cycle. They implemented the retention strategy with their non-tenured teacher the first week. However, within 24-hours of implementing the retention strategy, the principal completed the “Do” section of the PDSA instrument. Then, the principal utilized the second week to complete the “Study” and “Act” sections of the PDSA instrument. The cycle entailed a mini-experiment during which the principal implemented the change initiative/change idea/change strategy, recorded and studied the results and shared how they would consider proceeding (i.e. adopt the change idea, adapt the change idea, or abandon the change idea). I predicted that the implementation of the retention strategies would yield positive results for the principal and the teachers involved in the study.

I created a PDSA instrument that was used by the principals (see Appendix C). After principals implemented the specific retention strategies shared with them during the training, they documented and provided feedback of their experience and their perception of the non-tenured effective teachers’ experience with implementing the specific retention strategy on the PDSA instrument. The data from the PDSA instrument addressed questions such as which retention strategy was implemented, what the principal learned from implementing the strategy,

would the principal be able to implement the retention strategy in the future, and other such data. The PDSA instrument also allowed the principal to collect some data about the non-tenured effective teachers. The teacher data from the PDSA instrument addressed questions such as how principals thought the teachers felt about the implementation, how principals described the nature of their interaction with the teacher during the implementation of the strategy and other such data.

Phase 3 Procedures

Phase 3 of this study addressed research question 3 and included the distribution of a short survey to the non-tenured effective teacher participants. The survey allowed teacher participants to provide any feedback they had regarding the retention strategy implementation, such as what they thought about the retention strategy implementation, how it made them feel when their principal implemented the strategy, and/or any other feedback they wanted to provide. They were also informed that their feedback was voluntary and would be used to assist in providing insight into how non-tenured effective teachers are influenced by principals' retention practices and its potential impact on career decisions in hard-to-staff, large, urban, Title 1 schools. They were also informed that their principal would not know whether they decided to provide feedback or not to provide feedback.

Data Instrumentation and Collection

The researcher used three instruments to collect data within the three phases of this study. The three instruments were the focus group, a PDSA Instrument, and a teacher survey.

Phase 1

I used a focus group to discuss the principals' opinions, experiences, and preferences as it related to retention strategies. Participants were invited to a virtual focus group using Zoom, a videoconferencing website. It is important to note that the focus group was conducted virtually for many reasons. First, the global Covid-19 pandemic has left participants reluctant to meet in person due to potential viral spread. All schools in Hope District have used some form of distance learning since the spread of Covid-19 in 2020. Therefore, the resources and knowledge existed for principal participants to be able to access the virtual platforms. Also, due to scheduling and the high demands on principals, the virtual option allowed for the maximum number of principals to participate in the focus group to offer their perspectives regarding the research. Finally, the use of the virtual platform for the focus group was helpful for facilitating recording and transcription efforts, hence supporting the most accurate documentation for the study. The intent of the focus group was to learn more about the principals and to explore the principals' beliefs, perceptions, and experiences regarding retention strategies. As a result of the focus group, I learned what guided the principals' opinions about retention practices/behaviors and their perspective regarding implementing retention strategies. The focus group lasted for about 30-45 minutes. The focus group was intended to address research question 1: What do principals in Title 1 schools identify as their role in the retention of non-tenured effective teachers?

One-by-one the participants entered the virtual space at the designated time. I greeted each participant as they entered virtually. There was a very relaxed feel in the virtual space as participants began to greet each other as they entered. I read from the focus group script, starting with an introduction and reminding participants of the purpose of the study, the ground rules and

ended the introduction with turning on the digital recording device. I began with the opening question, which asked participants to share their name, the number of years they have served as a Title 1 Principal and the number of non-tenured teachers they currently had in their building. Each participant provided his or her response one-by-one. Appendix A shows the focus group protocol that was used in the study.

After the focus group, participants were given a 10-minute break in which they were able to turn their virtual cameras off and if needed, walk away from the camera. Then, after all of the participants returned to their cameras and the virtual space, I used a google slide presentation to introduce and briefly train the participants on the retention strategies from the TNTP research. Appendix B shows the google slide presentation that was used to train the principals in the study. After being introduced and trained on the retention strategies, I discussed the principal's next steps and explained the PDSA instrument and implementation of the PDSA cycle. Principals were allowed to ask questions and confirmed their understanding of their next steps. Following the training, principals identified their non-tenured effective teachers and selected 1-2 of the retention strategies introduced in the training to implement in phase 2 with their non-tenured effective teachers. Research question 1 was addressed through phase 1.

Phase 2

I developed a PDSA instrument (see Appendix C) for principals to utilize as they documented the work they were doing with their teachers regarding their selected retention strategies. The PDSA instrument was electronically shared with the principals, following the focus group and training. The document allowed the principal to test, reflect on, and refine/identify changes to practice after they implemented the identified retention strategies. Principals completed and submitted the PDSA instrument to provide data and feedback of their

experience with implementing the retention strategies/change initiative. A separate PDSA Data Tool was completed for each teacher that the principal implemented one of the specific, research-based retention strategies with. The PDSA instrument was an electronic document with a combination of multiple choice and short answer questions that were answered by the principals. Appendix C shows the PDSA instrument.

Plan Section. To assist principals, the “Plan” section was pre-populated on the Data Collection Tool with the preparation steps needed to implement the specific principal-led retention strategy. In the plan section, each participating principal planned to implement at least one retention strategy with at least one to three of their non-tenured effective teachers. The principal identified the retention strategies from the pre-selected strategies as identified. The retention strategy options were: (1) recognize the teacher’s accomplishments publicly, (2) identify opportunities or paths for teacher leader roles, (3) inform the teacher they are high performing, and (4) put the teacher in charge of something important. The PDSA implementation occurred in a 2-week cycle. During the first week, the principal implemented the strategy with the non-tenured effective teacher. The principal conducted the PDSA cycle at their school. Due to Covid-19, the interactions with their non-tenured effective teacher could have been virtual or in-person, whichever was more comfortable for the participants. Within the first week and possibly into the second week, the principal provided their feedback by completing the electronic PDSA data tool. A total of 9 principals participated in the PDSA cycle. The same 9 principals who participated in the focus group participated in the PDSA cycle. Each principal implemented the retention strategy with 1-3 of his or her non-tenured effective teachers. The principal completed a PDSA data collection tool for each non-tenured teacher.

Do Section. The “Do” section of the PDSA data collection tool required the principal to document their experience when they implemented the strategy. The section contained one question, asking the principal to describe what happened or the steps that occurred during the implementation of the retention strategy. The question stated, “within 24 hours of implementing the retention strategy, in at least 150 words or more, describe what happened from the beginning, middle and end of implementation”. The principal documented in narrative form his or her own experience in the “Do” section of the PDSA data tool.

Study Section. The “Study” section required the principal to answer “Principal Questions” regarding the results of the implementation and their learning. The questions principals answered included open-ended questions and Likert scale questions. Principal participants did not respond to the prediction questions on the data tool. Due to the nature of the research, I did not require the principals to respond to the prediction questions.

Act Section. The “Act” section required the principal to answer “Principal Questions” related to the next steps for principals. Principals had to reflect on the results and their learning to determine what they would do next. As a result of engaging in a PDSA cycle, principals had to decide whether to adopt, adapt, or abandon the implementation of the retention strategy. After completing all required sections of the PDSA instrument, the principal submitted the completed PDSA data tool.

Phase 3

I developed a quantitative survey for teacher participants to document their experience. Within a week of completion of the PDSA data tools, the teacher participants received and completed the quantitative survey. Teachers completed and submitted the survey to provide data and feedback of their experience with having the retention strategies/change initiatives

implemented with them. Each teacher only completed one survey. The survey consisted of one open ended question and four Likert scale questions. Appendix D shows the survey questions.

Data Analyses

The data analyses were conducted in three phases. Phase 1 consisted of the analysis of the focus group. Phase 2 consisted of the analysis of the PDSA instrument. Phase 3 consisted of the analysis of the teacher survey.

Phase 1

A four-step, systematic, constant comparative framework was used for the focus group analysis (Krueger & Casey, 2015). The Zoom software generated a verbatim transcript. The transcription was copied into a Microsoft Word document and then cut, coded and analyzed to identify patterns, trends and emergent themes in the data. At least three iterations of coding were employed.

First, an analysis of each focus group question was conducted. The analysis entailed cutting participant responses, displaying each focus group question and categorizing the participant responses. The four-step process for analyzing focus group questions by Krueger & Casey (2015) was used:

1. Did the participant answer the question that was asked?

If yes - Go to question 3

Don't know - Set it aside and review it later

If no - Go to question 2

2. Does the comment answer a different question in the focus group?

If yes-Move it to that question

If no-Put in discard pile

3. Does the comment say something of importance about the topic?

If yes - Place it under the appropriate question

If no - Put it in a discard pile

4. Is it like something that has been said earlier?

If yes - Start grouping like quotes together to form categories of like things.

If no - Start a separate pile

I followed this four-step process for each research question. While completing the four-step process, I identified and coded keywords and phrases. I reviewed and categorized those keywords and phrases based on several factors identified by Krueger and Casey (2015):

- frequency-how often a concept was mentioned
- specificity-how much detail was provided by the participants
- emotion-how much emotion, enthusiasm, passion, or intensity was provided by the participants through their comments
- extensiveness-how many different people mentioned the concept

The factors supported a deeper understanding of how those words and phrases were referenced directly or indirectly, but prevalent in the participants' responses. As a result, I could develop categories and groupings of like or different quotes and/or comments. Then, from those categories and groupings, I was able to identify sub-themes within each focus group question that emerged based on that level of coding. Lastly, I chunked or synthesized the emerging sub-themes of each question and was able to identify categories and develop overarching themes that emerged for the focus group.

Phase 2

Once the PDSA instruments were submitted, the researcher analyzed the quantitative and qualitative data from the PDSA instrument. The three sections of the PDSA data tool that were analyzed were the “Do” section, the “Study” section and the “Act” Section. As previously mentioned, the “Plan” section was pre-populated on the PDSA instrument with the preparation steps needed to implement the specific principal-led retention strategy, and reviewed during the PDSA training, following the focus group. The first step in the analysis of the PDSA data was to determine how each principal responded to each of the questions within each section.

Do Section. The “Do” section consisted of one open-ended question to be analyzed. This question consisted of the principals typed narratives that described what happened from the beginning, middle and end of the retention strategy implementation. The narratives were copied into a Google document. I used the factors, frequency, specificity and extensiveness, from the constant comparative framework used in the focus group analysis, to develop groupings of similar and different comments. Using those factors, I analyzed various variables in the narratives such as the variations of the implemented retention strategies, the number of non-tenured effective teachers and other such variables. Then, I created tables to display and discuss the data. Lastly, I analyzed the commonalities and differences between each retention strategy and its implementation.

Study Section. The “Study” section of the PDSA instrument contained questions that included open-ended questions and Likert scale questions. The Likert scale questions ranged from very difficult to very easy, awkward to very comfortable and other such scale type questions to assist with the measurement of the implementation of the outcomes. First, the "survey-type" responses where principals answered Likert scale questions were calculated and

analyzed. For this quantitative analysis, I calculated the frequency of the survey responses by item. Then, I created tables. The analysis included calculating a composite score (sum or mean) from question items, creating a score for each respondent, using frequency distributions, measures of central tendency, and strength of correlation. For further analysis, I also cross tabulated the score mean with contributing factors. There were also open-ended questions in the “Study” section that were analyzed. The open-ended questions were questions such as, what did you notice about yourself and what did you notice about the teacher. The study section specifically contained questions about behaviors related to analyzing data collected by principals to measure outcomes after the implementation of the retention strategy. For this type of qualitative analysis, I coded and made notes or comments on similarities and differences. I looked at the frequency, specificity and extensiveness of responses. I grouped responses and created categories. I also looked for patterns and connections. I used the themes and connections to address the research question, to discuss the principal’s perception and the impact or influence of the implementation on the principal.

Act Section. The “Act” section contained two open-ended questions and one multiple-choice question to be analyzed. The questions allowed the principals to reflect on their future steps regarding the implementation of the retention strategy. For example, one question asked, “Would you adopt, adapt, or abandon the implementation of this retention strategy with other non-tenured effective teachers”? The first two potential actions, adopting and adapting, represent continuing the implementation, while the last action, completely abandons implementation. The abandonment represents ending the practice entirely and starting anew. For the analysis, I continued with the same process from the study section. I coded and made notes or comments on similarities and differences. I looked at the frequency, specificity and extensiveness of

responses. The analysis also included the calculation of the frequency of the multiple-choice response item. I looked for patterns and connections to address the research question, to discuss the principal's perception and the impact or influence of the implementation on the principal.

Phase 3

The teacher survey consisted of one open-ended question and four multiple-choice questions. The teacher survey analysis is similar to the analysis conducted in phase 2. I used the factors, frequency, specificity, and extensiveness from the constant comparative framework used throughout this study, to develop groupings of similar and different comments. For the quantitative analysis, I calculated the frequency and percentage of each option selected by the teachers. Then, I coded and made notes or comments on similarities and differences for the qualitative analysis. Lastly, the themes from the focus group and the PDSA data tool were compared to the teacher survey data to triangulate and uncover any correlations.

Section 3: Results and Conclusion

This chapter presents the findings from the data analyses that address the three research questions outlined in Section 2, interprets the findings, and discusses recommendations to Hope District. The following section provides the findings from the analysis of the principal focus group, the principal data collection tool, and the teacher survey results. It will also review the study's limitations and propose recommendations for future research.

Phase 1 Results

The focus group began with the opening question, which asked participants to share their name, the number of years they had served as a Title 1 Principal and the number of non-tenured teachers they currently had in their building. Each participant provided his or her response one-by-one. Table 7 provides the principals' responses and the demographic profile of each focus group participant. Note that each principal has been given a pseudonym throughout the research.

Table 7

Focus Group Participants

Principal Pseudonym	Gender	Number of years served as a Title One Principal	Number of non-tenured teachers currently in their school
Martha	Female	10	4
Theresa	Female	12	11
Donald	Male	4	5
Pamela	Female	18	5
Dylan	Male	6	1
Maria	Female	15	5
Helen	Female	3	6
Devin	Female	10	9
Pedro	Male	22	5

There were six female and three male participants. Years of experience as a Title 1 Principal ranged from 3-22 years of experience. The average number of non-tenured teachers serving in

each of the schools ranged from 4-11. With only one Principal, Dylan, stating that he only had one non-tenured teacher serving in his school. The data analysis revealed four overarching themes from the focus group: (1) Cultivating Teacher Success through Principal Support, (2) Building Relationships for Teacher Retention (3) Empowering Growth Through Clear Guidance, and (4) Enabling Teacher Success through Resourceful Leadership. The themes address the principals' professional and personal role as it relates to their non-tenured effective teacher.

Table 8 shows the four-focus group themes and provides a brief analysis of each theme.

Table 8

Focus Group Themes and Analysis

Themes	Definition Relative to the Scope of this Study	Theme Development/Analysis
Theme 1. Cultivating Teacher Success through Principal Support	Principals in Title 1 schools believe their role in retaining non-tenured effective teachers is to ensure that they are provided with support and coaching.	Every principal discussed this strong theme. This theme emerged in participants' responses through response frequency, specificity and extensiveness. It was raised consistently across all questions throughout the focus group.
Theme 2. Building Relationships for Teacher Retention	Principals in Title 1 schools believe their role in the retention of non-tenured effective teachers is to check-in and make personal connections.	This was another strong theme that most principals spoke about. Transcript analysis using coding showed that this theme emerged through frequency, specificity and extensiveness. Many principal participants mentioned this theme; but the specificity of the implementation varied from principal to principal.
Theme 3. Empowering Growth Through Clear Guidance	Principals in Title 1 schools believe their role in retaining non-tenured effective teachers is communicating expectations and creating structures.	Several principals spoke about this moderately strong theme. One Principal responded particularly intensely, and many other principal participants responded. This theme emerged in participants' responses through response specificity and emotion. Although this was a

		moderately strong theme, participants who spoke felt strongly about communicating expectations and creating structures.
Theme 4. Enabling Teacher Success through Resourceful Leadership	Principals in Title 1 schools believe their role in retaining non-tenured effective teachers is to provide fiscal and human resources.	This was a weaker theme that emerged during the analysis. However, it was worth mentioning due to the frequency of its components and the overlap with theme 1, which was mentioned by all principal participants.

Theme 1: Cultivating Teacher Success through Principal Support

From the analysis, support and coaching refers to providing the non-tenured effective teacher with guidance, physical help, and feedback to do their job effectively. All focus group principals alluded to the theme of support and coaching. When asked to explain their specific leadership actions, which I referred to as strategies, principals offered a variety of strategies to ensure support and coaching for their non-tenured, effective teachers. For example, Devin reported that her role was to provide differentiated support for non-tenured teachers based on their years of experience. Devin also discussed providing in-class support, from retired teachers, for her first-year non-tenured teachers. Theresa also discussed the importance of knowing her non-tenured teachers, so that she can support them based on their individual needs. As she stated, “they don’t all need the same thing”. Dylan also stated that his role was to support the non-tenured teacher and be available if they had any questions.

“I think my role is to support that non-tenured teacher...support them in the classroom...identify mentor teachers that can mentor them throughout the school year, and have them participate in the New Teacher Academy that we offer. And make sure they participate in professional development.”

He described the New Teacher Academy as a place to review the curriculum, and learn to navigate the various technology platforms for submitting leave, grades, and attendance. For Dylan, the mentors and New Teacher Academy served as his main strategy to help him to retain his non-tenured teacher. It is worth noting that Dylan was the only principal with just one non-tenured teacher in his building. Utilizing mentors and a New Teacher Academy resonated with all the principals in the focus group. However, the structure for the mentors and the New Teacher Academy varied from principal to principal. For example, some principals discussed selecting mentors on the non-tenured teachers' grade level, while others discussed specifically selecting mentors from another grade level or content. Pedro discussed a "new teacher happy hour" which met outside of the school building; but discussed many of the same topics (i.e. reflect on instruction, what new teachers were going through etc.) For the other principals, the new teacher academy was held inside the school building.

Although the structure of the New Teacher Academy varied by principal, all principal participants discussed assigning someone to lead that work with the non-tenured effective teachers. For example, Pedro mentioned utilizing his Instructional Lead Teachers (ILTs) to lead the work. He also mentioned utilizing three "teacher leaders" and providing them with emoluments and opportunities to be compensated to facilitate workshops after school to support his non-tenured teachers. Maria discussed a "twofold" process in her building. She stated, "the system identified some mentors, so they have a whole curriculum in place that they're working with, which is a little bit different than the new Teacher Academy that we have". For Maria the mentors/ILTs have a different title, Math Instructional Coach and Reading Specialist. They are responsible for leading the New Teacher Academy; and topics are selected based on the activities of the school year. For example, at the beginning of the year they may look at curriculum.

Then, as the year progresses the focus may be based on data from observations or learning walks. Maria discussed the support she provided to one of her Special Education non-tenured teachers. She mentioned that she reached out to other colleagues to have the teacher go to another school for support. Donald mentioned that he tries to partner his ILTs as the first mentor with his non-tenured teachers. This allows the non-tenured teachers to have support from their Grade Level Chair and the ILT/mentor. Donald also mentioned that prior to the non-tenured teachers' formal observation, he always sends the ILT/mentor to observe and provide feedback. He said he does this because, "it's a lot more comfortable...it's non-evaluative, but the goal is to grow the pedagogy and the learning experience" for the non-tenured teacher. Devin was the only principal who mentioned classroom teachers as the lead for the New Teacher Academy. She states, "I have my second and third year non-tenured teachers actually run the New Teacher Academy, so that's like a rite of passage. Once you get past your first year, you get to run the New Teacher Academy". According to Devin, they deal with the "bones, the systems and structures of the school". However, she goes on to mention that the non-tenured teachers are also assigned a content mentor to support them with the "instructional things". The non-tenured teacher and the content mentor can request quarterly time off/one full day each quarter to do long range planning, score written work, or catch up on some things that they may be behind in.

Another strategy mentioned by principals that aligns with the theme of support and coaching was providing Professional Development/Courses, observation, and feedback. Maria discussed meeting with the non-tenured teachers individually and allowing them to complete a survey to find out what they want to know about. Then, she designs professional development based on the survey results rather than on what principals think the non-tenured teachers need to know.

Pedro also alluded to utilizing Professional Development/Courses as a way to support and assist in the retention of his effective non-tenured teachers. He reminded everyone of the current teacher shortage, and how a principal's approach may vary based on the non-tenured teacher. He gave the example of a principal's approach with a non-tenured teacher in a resident teacher program versus a principal's approach with a non-tenured teacher who has 30 or 40 credits needed for certification. He stated, "we have to keep them on top of what they have to do....or you're going to replace that person because they are not going to get those credits [and stay]".

Dylan and Helen identified observation and feedback as their specific role or identified strategy that they use to help retain their non-tenured effective teachers. They discussed utilizing the required platforms from the district to support their non-tenured teachers. They also stated that utilizing these platforms keeps it "consistent" and that it allows the non-tenured teachers to go back to and reflect on their progress. Helen stated, "why work harder when you can work smart through what's already in place for us".

Theme 2: Building Relationships for Teacher Retention

From the analysis, the theme's idea of checking-in and making personal connections refers to spending one-on-one time with the non-tenured effective teacher getting to know them on a more personal level. The time is spent with the principal and the teacher discussing personal or professional topics. Helen, the principal with the least amount of principal experience in a Title 1 school, introduced this theme during the focus group discussion. Donald referenced this theme of check-in and making personal connections by stating that his role and responsibility was to provide a listening ear. Martha mentioned that her responsibility was to connect with them [the non-tenured teacher] on a personal level.

“I make an effort to just go by their classrooms, whether it's once a week or once every other week, like after school, stop by their classroom for 5 minutes to just say, how are you doing? What's going on, and get to know them outside. Don't talk about anything school related. I also sent home a card every other week...I'll mail it to them and it's personally written to catch something great that they did in school or..to let their spouse know, sometimes I'll mail it to the spouse and say, this is something that I really thank you for supporting your person, your wife or your husband in this area, and I really appreciate the work that they're doing here, and they really love that.”

Donald mentioned that he provides the non-tenured teachers with a half day every 2 months. The first 45 minutes of the half day is a “check-in” with him and each teacher individually. Then, the remainder of the time the teacher uses for planning. Devin also mentioned that she schedules individual time with the teacher to discuss any certification needs that they may have and make sure that the teachers clearly understand what they have to complete to be fully certified.

Theresa shared that they have monthly outings for their non-tenured teachers. The non-tenured teachers are able to “let their hair down”. She mentioned that sometimes she attends, but that she does not always go. She states,

“If I'm there sometimes the conversation may be a little different...so just giving them the opportunity to have time to let their hair down with each other in an informal setting, lets them feel connected to each other and helps....it opens the door for them to go to each other for support with the work, because they feel connected to them personally as well.”

Many of the principal participants alluded to this theme by discussing such topics as encouraging and praising their teachers and being concerned about the health and wellness of their teachers. Theresa discussed the principal's role and responsibility in helping to retain non-tenured effective teachers was to encourage them [non-tenured teachers], “letting them know when they do get something right ...keep the momentum going, and keep them in a positive headspace as much as possible”.

Devin mentioned utilizing one of her community partners to provide mental health sessions for her non-tenured teachers. She mentioned that at the beginning of the year, one of her community partners offers a stress survey to her entire staff; and they talk about work life balance, stress, what stress looks like and the importance of mental health days. Then, as the year progresses, the community partner offers individual sessions to her non-tenured teachers. During those sessions, they talk to the non-tenured teachers about how they are feeling, how they are balancing their school life, their personal life, and talking about the signs of depression. They give the non-tenured teachers an opportunity to talk about things that are happening with them and give them strategies to address those things. In addition, because of the sessions, Devin mentioned that the community partner/therapists also recommend strategies to her, as the principal, that she may want to consider embedding in the culture of the school. As she stated, they help her to know, “when I need to pull back the throttle a little bit...give things in smaller doses...so I get support as well, just as a leader on how to watch the meter in my building.

Theme 3: Empowering Growth Through Clear Guidance

This theme refers to principals explaining what is expected of the non-tenured effective teacher and creating the structures/parameters for the teachers to be successful. Pedro and Maria, two of the principals with the most years of experience, discussed this theme as one of their main

roles and responsibilities in helping to retain their non-tenured effective teachers. Pedro stated very boldly, “so I think it's important to be honest, on the front end when you're recruiting these teachers. Letting them know that they're coming into a Title 1 school, letting them know that they may be coming into a community school, the demographics, the neighborhoods that we serve, the types of young people, and also parents that we serve in our neighborhoods”. Maria immediately followed up by stating, “we [she and/or the Assistant Principal] meet with them [non-tenured teachers] separately to talk about the observation process, letting them know who to contact for different things, and resources that they may need within the building”.

Theresa, the principal with the largest number of non-tenured teachers in her building, mentioned putting structures in place to give the non-tenured teachers time and space to be able to get everything done.

“My role is to communicate to them in a timely manner, like things that are coming up, so they aren't surprised, you know, or additional stress isn't added with the time measurement...so just communicating with them, making sure they know things ahead of time...giving them the time and space, putting structures in place for them to be able to have the time to actually get it all done. So just to try to lessen the stress as much as possible.”

Devin also mentioned being attuned to the structure/make-up of the classes as one of her roles or responsibilities in helping to retain non-tenured effective teachers. She discussed student placement and how she really thinks through things such as placement, and whether she needs to remove a student from a non-tenured teacher's class. Helen discussed the importance of creating structures that allowed the teachers to, “...connect with and collaborate with to support their

[non-tenured effective teacher) growth”. Theresa cosigned by saying that, “having that [structure] also helps bond the cohort as well”. Helen also discussed creating a space of vulnerability for her teachers.

Theme 4: Enabling Teacher Success through Resourceful Leadership

The fiscal resource mentioned during the focus group was allocating funds. Devin discussed allocating funds to provide substitutes for her non-tenured teachers. She specifically discussed allocating funds for substitute support to assist with the Praxis exam. The Praxis exam is the exam needed by teachers to become certified.

“I allocate in my budget for them [non-tenured teachers] to have a substitute with them the first 2 weeks of school...for someone to be there alongside them the first 2 weeks to kind of get them started, and some need more than 2 weeks. I allocate budget money for Praxis...I have money in my budget with a company that comes in quarterly and does mental wellness for the new Teacher Academy, [they] get like 5 free Sessions, if they want.”

Human resources were mentioned in various capacities during the focus group. As mentioned in theme #1, all of the principal participants discussed their role to support and coach their teachers. It was also discussed that each principal utilized various human resources such as Instructional Lead Teachers (ILTs), Instructional Coaches, Reading Specialists and other human resources to work closely with their non-tenured effective teachers to provide the support and coaching.

Phase 2 Results

The analysis of the PDSA data supported the evaluation of three concepts: 1) each principal’s individual PDSA cycle and their perception of the teacher’s response, 2) common

themes or ideas across the thirteen submitted PDSAs and 3) the impact/influence of the implementation on the principal. The implementation of the data collection tool was intended to address research question 2: Does the implementation of a set of specific, research-based principal-led retention strategies influence principals in Title 1 schools to prioritize the retention of non-tenured effective teachers? I analyzed the electronic PDSA data tool, which was completed by each principal. There were thirteen PDSA Data Tools to be analyzed.

Do Section

On the first part of the tool, the “Do” section, principals provided a brief narrative that included the retention strategy and a description of what happened from the beginning, middle and end of the implementation with the non-tenured effective teacher. All principals implemented one strategy with one teacher; however, some principals implemented one strategy with multiple teachers. Table 9 provides the principals’ total number of non-tenured effective teachers that they implemented the retention strategy with and the retention strategy that they implemented.

Table 9

Principal Participants’ Non-Tenured Teacher Total and Strategy Implemented

Principal Pseudonym	Number of non-tenured effective teachers the Principal implemented the retention strategy with	Implemented Retention Strategy	
Martha	1	informed the teacher they are high-Performing and identified opportunities or paths for teacher leader roles	
Theresa	2	identified opportunities or paths for teacher leader roles	put the teacher in charge of something important

Donald	1	informed the teacher they are high-performing		
Pamela	1	recognized the teacher's accomplishments publicly		
Dylan	1	put the teacher in charge of something important		
Maria	3	put the teacher in charge of something important	recognized the teacher's accomplishments publicly	identified opportunities or paths for teacher leader roles
Helen	1	recognized the teacher's accomplishments publicly		
Devin	2	informed the teacher they are high-performing	put the teacher in charge of something important	
Pedro	1	identified opportunities or paths for teacher leader roles		

Most principal participants implemented one strategy with one non-tenured effective teacher, with the exception of Theresa, Maria, Devin and Martha. Theresa implemented a different strategy with each of her two teachers. Maria implemented a different strategy with each of her three teachers. Devin implemented a different strategy with each of her two teachers. Martha implemented two different strategies with her one teacher. The implemented retention strategy varied by principal. As shown in Table 10, all of the pre-selected retention strategies identified by the researcher were implemented by the principal participants. The strategy, “put the teacher in charge of something important” was implemented the most. The other three strategies were implemented for the same number of times among the participants.

Table 10

Implemented Retention Strategy and Frequency of Implementation

Implemented Retention Strategy	Frequency of Implementation
Recognized the teacher's accomplishments publicly	3
Identified opportunities or paths for teacher leader	3

roles	
Informed the teacher they are high-performing	3
Put the teacher in charge of something important.	4

Once the principal participant implemented the strategy, they recorded their experience on the PDSA data tool. According to the principals, the majority of the strategies were implemented during a one-on-one interaction such as during a conversation between the teacher and the principal in the principal's office or in the teacher's classroom. However, the three implementations of "recognized the teacher's accomplishments publicly" were implemented during a staff meeting or leadership team meeting.

When the teachers were recognized publicly, they were acknowledged for their strengths being exhibited in their classrooms and how these practices can benefit the school community. For example, Pamela wrote about her experience of recognizing her non-tenured teacher's successful use of small group instruction, her use of manipulatives and following the curriculum. She stated, "I recognized the teacher publicly during a staff meeting. There were about 60 people present. I praised her for her small group instruction, the use of manipulatives during her lessons and her ability to follow the curriculum." Maria also recognized her teacher, in the presence of over 50 of their colleagues, for her ability to successfully engage her students and utilize small group instruction.

During the strategy implementation, the principal participants, Theresa, Maria and Pedro implemented the "identify opportunities or paths for teacher leader roles" strategy with their non-tenured teachers. They offered opportunities/paths such as assigned the teacher as grade level chair, assigned the teacher as content level chair and assigned the teacher as the Professional Development Lead Teacher (PDLT). Pedro described the PDLT as an individual who would

occasionally provide professional development to staff and could receive a stipend or an emolument for this additional assignment.

The retention strategy, “informed the teacher they are high-performing”, was implemented by Martha, Donald, and Devin during a one-on-one conversation with their non-tenured teacher. According to the principals, they each met with the non-tenured teacher for an observation post conference at which time they informed the teacher that they were “high-performing”. During the conversation, each principal participant not only shared with the teacher that they were high performing; but they also provided the teacher with examples of what made them high performing. For example, Martha highlighted effective strategies that the teacher used with her special education students. During Donald’s conversation with his teacher, he highlighted the growth that he had witnessed over the school year with the teacher’s classroom management and daily instruction. He ended the conversation by informing the teacher that they were high performing. During her conversation, Devin shared with the teacher that they were high performing and identified areas of strength, growth and contributions the teacher made to their school community.

The final retention strategy, “put the teacher in charge of something important” was the one strategy implemented the most. Principals reported that they put their non-tenured teachers in charge of a variety of tasks. Theresa shared that she put her teacher in charge of the team building activity for the final staff meetings of the school year. Prior to leading the activities, Theresa met with the teacher in advance and provided the teacher with the expectations for leading the activity. Dylan reported putting his teacher in charge of conducting professional development training on a specific topic. Maria reported that her teacher led the end of the year planning committee. Devin reported that she asked her teacher to lead the new teacher academy.

All the principals reported similar logistical experiences. For example, the interactions with the teachers was either one-on-one or during a group setting of at least 20-60 people. The duration of the interactions lasted between 30-60 minutes. The location of the interactions occurred in the school building, either in the principal's office, the teacher's classroom or the school library.

Study Section

The focus of the "Study" section of the PDSA tool was to determine whether the implementation of the specific research-based retention strategies had an impact or influence on the principal. Nine principals completed the PDSA tool. Six principals implemented the retention strategy with one of their non-tenured effective teachers; and three principals implemented the retention strategy with two or three of their non-tenured effective teachers. Principals completed one PDSA tool for each teacher that they implemented the retention strategy with. Therefore, thirteen PDSA tools were completed and submitted. Based on the data collected and reported by the principal participants, the implementation of the specific research-based retention strategies did have an impact/influence on the principal participants. The "study" section consisted of three parts: the results, the learning and the predictions. Principal participants did not respond to the prediction questions. Due to the nature of the research, the researcher did not require the principals to respond to the prediction questions; and therefore, did not collect data from the "prediction" section of the PDSA tool.

The questions under the "results" section of the tool asked the principal participants to measure the success of implementing the specific research-based retention strategy on them and their teacher(s). The questions consisted of three Likert scale questions and three open-ended questions. Table 11 shows the principals' responses to the first Likert scale question regarding the success of the implementation.

Table 11*Principals' Responses to the First Likert Scale Question*

Question	How was the strategy implemented by the teacher for you?				
Rating Scale	very difficult	difficult	Neutral	easy	very easy
Principals' responses for each strategy implementation	0	0	0	3	10

All principal participants reported that implementing the strategy with their teacher was very easy. The next question asked principals to describe the nature of their interaction with the effective non-tenured teacher. Table 12 shows the principals' responses to the second Likert scale question regarding the nature of their interaction.

Table 12*Principals' Responses to the Second Likert Scale Question*

Question	Describe the nature of the interaction between you and the teacher when implementing the strategy.				
Rating Scale	awkward	somewhat awkward	Neutral	comfortable	very comfortable
Principals' responses for each strategy implementation	0	1	0	3	9

Most principals reported that when they implemented the strategy, the interaction between them and their teacher was either very comfortable or comfortable. Only one principal participant described their interaction as somewhat awkward. This principal, Martha, when she responded to the question, "Did anything unexpected happen?" she reported that she was surprised that initially her teacher was nervous at the beginning of their interaction. The teacher's nervousness may have contributed to the awkwardness that Martha referenced in her

reporting of their interaction. The final Likert scale question in the result section asked principals to describe how the teacher responded to the interaction. Table 13 shows the principals' responses regarding the teachers' responses.

Table 13

Principals' Responses Regarding the Teachers' Response

Question	How did your teacher respond?			
Rating Scale	The teacher showed or communicated no response	The teacher appeared thankful or communicated thanks	The teacher appeared happy or communicated happiness	The teacher appeared sad or communicated displeasure
Principals' responses for each strategy implementation	1	7	8	0

The next question asked the principal to report how the teacher responded to implementing the research-based retention strategy. Eight principal responses reported that the teacher appeared happy or communicated happiness. Seven principal responses reported that the teacher appeared thankful or communicated thanks. Maria reported that the teacher showed no response or communicated no. She reported that this particular teacher was quiet. Pamela, Helen and Devin reported that their teachers reacted twice to their one strategy implementation. In the three interactions, the teacher appeared thankful or communicated thanks and appeared happy or communicated happiness.

The last three open-ended questions asked principals to reflect on the implementation to determine whether anything unexpected happened, if they noticed anything about themselves, and/or if they noticed anything about the teacher. The majority of the principals reported that nothing unexpected happened. The only principal to report something unexpected was Devin.

She did not expect the teacher to decline the opportunity to be in charge of something. Although the teacher was thankful, she declined the offer due to the workload. Devin reported that the teacher stated, “I just finished getting my degree”.

In response to the next open-ended question, many of the principals reported something about themselves. They reported that implementing the strategy had a positive outcome for them. For example, Theresa reported that implementing the retention strategy made her feel proud. Pamela reported that implementing the retention strategy reminded her of how she can be supportive of her staff, especially the effective non-tenured teachers.

Most principals reported something they noticed about the teacher during the implementation. Devin mentioned that for one of her teachers, she noticed that the teacher did not “give herself as much credit as I did. The teacher viewed excellence differently”. Donald reported that the teacher was appreciative of the feedback and smiled frequently during the interaction. Dylan mentioned that he noticed a positive impact on the teacher’s confidence and self-esteem. Pedro reported a positive change that he noticed in the teacher.

“The teacher’s demeanor and body language changed; and she began to look to be more relaxed based on the positive nature of the interaction and acknowledgement of her normal responsibilities as a classroom teacher and the opportunities that were being presented to her for the upcoming year.”

The questions under the “learnings” section of the tool, asked the principal participants to reflect on what they learned from the implementation of the specific research-based retention strategy. The questions consisted of one open-ended question and two Likert scale questions. The open-ended question asked principals to reflect on implementing the specific, research-based retention strategies and whether it helped them to think differently about prioritizing the

retention of non-tenured effective teachers. Six of the nine principal participants reported that implementing the retention strategies helped them think differently about prioritizing the retention of non-tenured effective teachers. Maria shared that the implementation helped her realize the importance of individualization and power. Helen reported how implementing the retention strategy helped her think differently.

“Yes, while I try to consistently support and extend opportunities to my non-tenured teachers; I never really considered how those actions or opportunities could influence retention. When staff feel their work is noticed and appreciated, it encourages them to want to remain with the organization.”

Donald, Pamela, and Pedro were the only principals who reported that implementing the strategies did not help them think differently about prioritizing retention. They mentioned that the shared retention strategies were things they were already doing consistently and were a part of their regular leadership moves.

The Likert scale questions asked the participants to reflect more on their learning. The first question asked the participants how it made them feel to implement the strategy. Table 14 shows the principals’ responses to the first Likert scale question regarding their learning.

Table 14

Principals’ Responses to the First Likert Scale Question Regarding their Learning

Question	How did implementing the retention strategy make you feel as a principal?			
Rating Scale	Very happy	Happy	Not very happy	Not happy at all
Principals’ responses for each strategy implementation	7	6	0	0

Seven principals reported that it made them feel very happy to implement the retention strategy with their non-tenured effective teacher. Six principals reported that it made them feel happy to implement the retention strategy. The second question asked them if they thought implementing practices like this would make teachers stay in their school. Table 15 shows the principals' responses to the second Likert scale question regarding their learning.

Table 15.

Principals' Responses to the Second Likert Scale Question Regarding their Learning

Question	Do you think that implementing practices like this would make teachers stay in your school?			
Rating Scale	Strongly agree	Agree	Partially disagree	Totally disagree
Principals' responses for each strategy implementation	8	5	0	0

Eight principals reported that they strongly agreed that implementing these retention practices would make teachers stay in their schools. Five principals reported that they agreed that implementing these types of retention practices would make teachers stay in their school.

Act Section

The focus of the "Act" section of the PDSA tool was to allow the principals to reflect on their future steps regarding the implementation of the retention strategy. Based on the data collected and reported by the principal participants, they plan to adopt this practice. The questions consisted of two close-ended questions and one open-ended question. One of the closed-ended questions asked the teachers to tell why they made the choice. The first close-ended question asked, "would you adopt, adapt, or abandon the implementation of this retention strategy with other non-tenured effective teachers"? Five Principals reported that they would

adopt the implementation of the retention strategy. Four principals reported that they would adapt the implementation of the retention strategy. Table 16 shows the principals' responses to the first closed-ended question.

Table 16

Principals' Responses to the First Closed-Ended Question

Question	Would you adopt, adapt, or abandon the implementation of this retention strategy with other non-tenured effective teachers? Why or why not		
Answer Choices	adopt	adapt	abandon
Principals' responses	5	4	0

The choice of adopting refers to continuing the strategy implementation with no changes. The choice of adapting refers to continuing the strategy implementation with slight changes or adjustments. The last choice, abandon, refers to completely abandoning the implementation and trying something new. Pamela reported that she would adopt the strategy implementation. She shared that she thought that it was a very good strategy for teachers; and she liked that teachers benefited from it. Maria also shared that she would adopt the strategy implementation. She reported that she would be continuing with the implementation next year with other non-tenured effective teachers. Helen reported that she would adapt the implementation.

“I will adapt the implementation. I try to acknowledge greatness amongst our staff regularly. I also encourage staff to share great practices with others. I will continue this practice, but be more consistent to encourage retention and be sure to implement the strategy early and follow through.”

Dylan mentioned adapting the implementation by using more of a differentiated approach and considering the teachers' experiences. Pedro also mentioned adapting the implementation and

using a more individualized approach. He shared that some teachers may not want to take on a leadership role within the building, and possibly ask the teacher what they want to do and where they believe their strengths are. There were no principals who responded to abandon the implementation of the retention strategy. The abandonment represents ending the practice entirely.

The second question asked principals to think about what they would do differently, if they had the opportunity to implement the strategy again. Five of the principals reported that they would not do anything differently. However, in addition to the adjustments already mentioned by Helen, Dylan and Pedro, Devin reported that one thing that she would do differently was to ask the teacher what they want to do and where they see themselves next. Helen also added that she would implement the strategy earlier in the year and consistently follow through.

The final question asked the principal participants if they would be able to implement the retention strategy regularly/yearly. All principal participants responded “yes” to the final question. They all agreed that they would be able to implement the retention strategy regularly.

Phase 3 Results

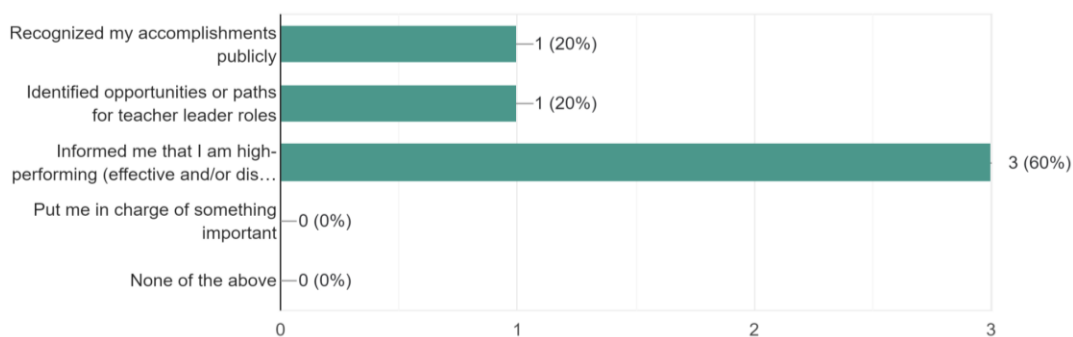
The teacher survey results were intended to answer research question 3: In what ways, if at all, does the implementation of retention strategies influence non-tenured effective teachers? A week after the principal implemented the retention strategy; the effective non-tenured teachers received an email informing them of the PDSA cycle and their opportunity to participate in the study. The email to participate in the study was sent to 13 teachers. Five teacher surveys were returned, representing a response rate of 38%. Given the low number of teachers in the study

and the modest response rate, there is insufficient data to answer the research question in this study. However, the teacher participants provided some insight.

In the survey, teacher participants were asked to respond to five questions. The questions consisted of four multiple-choice questions and one open-ended question. The first question asked the teacher participants to identify the retention strategy that their principal implemented with them. Figure 12 shows the retention strategies represented by the teacher participants. According to Figure 12, 60% of the participants were informed that they were high performing.

Figure 12

Responses to Teacher Survey Question 1



The only teacher retention strategy not represented in the data is “put the teacher in charge of something important”. One teacher reported that their principal recognized their accomplishments publicly. Another teacher reported that their principal identified opportunities or paths for teacher leader roles.

The second question was meant to determine the impact of the implementation on the teacher. According to the data, four out of 5 teacher participants reported that the implementation had a positive impact on them. One teacher reported that the implementation of

the retention strategy had no impact on them. No teacher participants reported that the implementation of the retention strategy had a negative impact on them.

The purpose of the third teacher survey question was to determine how teachers felt after the implementation of the retention strategy. Two of the five teacher participants felt happy. Two of the five teacher participants felt thankful. One of the five teacher participants reported having feelings regarding the implementation of the retention strategy.

The fourth teacher survey question allowed teachers to share whether the implementation of the specific retention strategy that was implemented with them would influence their decision to stay at their current school. Four of the five teacher participants reported that the implementation of the specific retention strategy would have an influence on their decision to remain at their current school. One of the five participants reported that the implementation of the specific retention strategy would not influence their decision to remain at their current school.

The final teacher survey question asked, “how does, if at all, the implementation of the retention strategy that you identified above influence non-tenured effective teachers, like yourself, to remain teaching at their current school?” The purpose of this question was to allow the teacher participants to provide written feedback regarding the implementation of the retention strategy. Most of the teacher participants provided positive feedback regarding the implementation of the strategy. One teacher participant reported that the retention strategy gave him/her the confidence that he/she needed to move forward in their teaching career. Another teacher reported the positive impact from the principal's actions.

“It provides hope that I can grow within my school and that my principal's support will continue to push me to remain in a space of achieving high

accomplishments and stay in the posture of learning and growing. In addition, it is great to know that my leader is supportive and cares enough about me to give me words of encouragement, advice, acknowledgement, and opportunities to lead.

All of this keeps me coming back to this school, year after year!”

A third teacher stated, “ I’m glad that my efforts as a first year teacher are being noticed and appreciated by [my] principal. I appreciate that my principal sees how hard I am working and trusts me to be in a leadership position and feels my teaching strategies are effective”. One teacher participant reported that they did not want to remain at the school next year.

Conclusions

The purpose of this study was to explore the potential of increasing the retention of non-tenured effective teachers in Title 1 schools within Hope District through the implementation of retention strategies by principals on non-tenured effective elementary teachers. After reviewing the evaluation process for Hope District, teacher retention is not a key part of the evaluation process. As a result, I engaged in this study of increasing the retention of non-tenured effective teachers through the lens of the three research questions. While the small sample size makes it difficult to “prove” or “disprove” the effectiveness of increasing the retention of non-tenured effective teachers in Title 1 schools within Hope District, there are suggested conclusions that can be drawn that will be of interest to school and district leaders aiming to increase teacher retention.

Summary of RQ1

What do principals in Title 1 schools identify as their role in the retention of non-tenured effective teachers? (*Phase 1- Focus Group*). Principals in Title 1 schools believe that they play a

significant role in the retention of non-tenured effective teachers. The general consensus of their role can be conveyed through the four themes that emerged from the focus group: (1) Cultivating Teacher Success through Principal Support, (2) Building Relationships for Teacher Retention (3) Empowering Growth Through Clear Guidance, and (4) Enabling Teacher Success through Resourceful Leadership. All principals reported actions or tasks related to one or more of the themes listed above. However, principals do not appear to have a targeted approach to how they “explicitly” prioritize the retention of non-tenured effective teachers. None of the principals articulated any one clear systematic approach or plan that they regularly use to retain non-tenured effective teachers. This conclusion is consistent with the study conducted by The New Teacher Project (TNTP, 2012), where they stated that most schools do not have a strategy for retention and those good teachers usually leave their school or district for reasons that their school could have controlled.

The four themes also address the perceived roles that principals in Title 1 schools believe they should play in the retention of non-tenured effective teachers. Principals believe that the key to retaining non-tenured effective teachers is by ensuring that the teacher improves in their practice by providing them with the fiscal or human resources that they need. The principals reported several strategies that they are using to retain their non-tenured effective teachers. However, all the strategies appear to focus on the improvement, the support and/or well-being of the teacher. The principals reported putting support in the classroom, tending to the teacher’s health and wellness, providing professional development and other such improvement and supportive practices/strategies. This conclusion is also consistent with the study conducted by The New Teacher Project. The TNTP study divides the retention strategies into four categories. The four categories are Feedback & Development, Recognition, Responsibility & Advancement,

and Resources (TNTP, 2012). The strategies/approaches reported by the principals consistently align with the Feedback & Development and Resources categories. However, principals do not appear to utilize approaches within the Recognition and the Responsibility & Advancement categories. Principals are naturally implementing some of these targeted and relatively easy retention strategies; but they are not implementing them strategically. This could lead to a one size fits all way of retaining their non-tenured effective teachers. Meaning, if there is no variation in the retention strategies being implemented, principals will continue to use the same strategies with all of their non-tenured effective teachers, rather than personalize their approach. It is not just important to implement a targeted and relatively easy retention strategy. It is also important to implement a variety and more than one retention strategy with the non-tenured effective teacher. This conclusion is consistent with the TNTP study, which states that top teachers who experience two or more of these retention strategies plan to keep teaching at their schools for nearly twice as long (2-6 more years) (TNTP, 2012).

Principals need to also take a more active role in the retention of non-tenured effective teachers. The focus group revealed that principals often delegated the responsibilities of working with the non-tenured effective teachers to other staff members in the building. Principals utilized Instructional Lead Teachers, mentors, and other school-based leaders. However, the PDSA cycle required the principal to implement the strategy with the non-tenured effective teacher. One teacher's response from the survey shows how this one act had an impact on the teacher. The teacher stated, "I'm glad that my efforts as a first-year teacher are being noticed and appreciated by [my] principal."

While Title 1 principals in Hope District appear to be clear that they play a role in the retention of non-tenured effective teachers, the focus group revealed some of the gaps that exist

in understanding their role. The gaps are their inability to execute a clear retention strategy or plan, their inability to diversify retention strategies, and their lack of engagement with individual teachers in the retention process of non-tenured effective teachers. A closer look at the specific retention strategies and its implementation is needed to ensure that effective retention strategies are implemented with a clearer intent and focus.

Summary of RQ2

Does the implementation of a set of specific, research-based principal-led retention strategies influence principals in Title 1 schools to prioritize the retention of non-tenured effective teachers? (*Phase 2 - PDSA Cycle*). The implementation of a set of specific, research-based principal-led retention strategies can influence principals in Title 1 schools to prioritize the retention of non-tenured effective teachers. Six of the nine principal participants reported that the implementation of the retention strategies helped them to think differently about prioritizing the retention of non-tenured effective teachers. Donald, Pamela and Pedro were the only principals that reported that implementing the strategies did not help them think differently about prioritizing retention. Pedro and Pamela represented the principals with the most years of service as a principal; and Donald represented one of the principals with the least number of years of service as a principal. They mentioned that the retention strategies that were shared were things that they were already doing consistently and were a part of their regular leadership moves. As a result, the PDSA implementation reinforced their thinking around prioritizing retention. However, those principals failed to mention the four retention strategies implemented for the PDSA cycle during the focus group.

Principals are able to begin to consistently implement retention strategies with their non-tenured effective teachers. One of the final questions of the “Act” section of the PDSA data tool

asked principals if they would adopt, adapt, or abandon the implementation of the identified retention strategy. Five principals reported that they would adopt the implementation of the retention strategy. Four principals reported that they would adapt the implementation of the retention strategy. There were no principals who responded to abandon the implementation of the retention strategy. The principals were also asked if they would be able to implement the retention strategy regularly/yearly. All principals responded “yes” to this question. They all agreed that they would be able to implement the retention strategy regularly/yearly. Principals’ reports from the PDSA cycle supports the theory that principals can begin to prioritize the retention of non-tenured effective teachers by implementing targeted and relatively easy retention strategies.

It is beneficial to principals and teachers when principals implement principal-led retention strategies. The retention strategies for the principals to implement during their PDSA cycle were “principal-led retention strategies”. This means the principal was responsible for completing the task with the non-tenured effective teacher. The principal was not able to delegate the responsibility to someone else, such as the ILT or mentor. The premise of the principal-led retention strategy was very different from the current/regular practices of the principals. During the focus group, most principals referenced retention strategies that were delegated to others to complete with the non-tenured effective teacher.

During the PDSA implementation, all principals reported that it was very easy/easy for them to implement the retention strategy. Their interactions lasted 30-60 minutes. The longer interactions occurred during group settings such as staff meetings where there were multiple agenda items to be discussed. Principals also reported that implementing the retention strategy with their non-tenured effective teacher made them feel happy. They also reported that the

teacher appeared thankful or happy. One principal stated, “I never really considered how those actions [retention strategies] or opportunities could influence retention...it encourages them to want to remain with the organization”.

After analyzing the data from the PDSA data tool, it is evident that the implementation of a set of specific, research-based principal-led retention strategies have the potential to influence principals in Title 1 schools to prioritize the retention of non-tenured effective teachers.

Although this is a small sample size, the conclusion is consistent with a number of other studies that address the retention of effective teachers. Grissom and Bartanen (2019) refer to this practice as “strategic retention” (p. 515). It also shows that the Title 1 principals in Hope District in this study sample perceive that they are able and willing to implement the retention strategies; however, data from the focus group and the PDSA data tool reveals that some principals do not know how to fully implement or integrate the principal-led retention strategies with their non-tenured effective teachers.

Summary of RQ3

In what ways, if at all, does the implementation of retention strategies influence non-tenured effective teachers? (*Phase 3 - Teacher Survey*). Although not conclusive, the teacher survey data supported preliminary data to begin to draw some conclusions on whether the implementation of retention strategies influence non-tenured effective teachers. The survey asked teachers to share whether the implementation of the specific retention strategy that was implemented with them would influence their decision to stay at their current school. Four of the five teacher participants reported that the implementation of the specific retention strategy would have an influence on their decision to remain at their current school. One of the five participants reported that the implementation of the specific retention strategy would not influence their

decision to remain at their current school. This begins to support the theory that the implementation of specific, research-based principal-led retention strategies can have an influence on non-tenured effective teachers. However, it is not clear whether the influence would be positive or negative and whether it would lead to the retention of the non-tenured effective teacher given the small sample size.

This is also evident with the last question that was asked of the teachers, “how does, if at all, the implementation of the retention strategy that you identified above influence non-tenured effective teachers, like yourself, to remain teaching at their current school?” Although most of the teacher participants provided positive feedback regarding the implementation of the strategy, one teacher participant reported that they did not want to remain at their school for the next school year. More research is definitely needed to determine whether the implementation of retention strategies influence non-tenured effective teachers.

Limitations

The aim of this study was to explore the potential benefit of increasing the retention of non-tenured effective teachers in Title 1 schools within Hope District through the implementation of retention strategies by principals on non-tenured effective elementary teachers. The small number of principals and teachers who participated in the study limited the study. The study was conducted in Title 1 elementary schools and in one school district, Hope District. Given the overall size of Hope District, this data is not representative of all the Title 1 schools that have large amounts of non-tenured effective teachers. Despite the small sample size, this study was able to contribute important findings, insights and recommendations to exploring the retention of non-tenured effective teachers.

Another limitation of this study was the limited amount of time to conduct the study. The focus group took place in April during spring break. The PDSA cycle and the teacher survey took place shortly after returning from spring break, and during the district's annual testing season within the academic school year. Many follow-up emails were sent in order to get the PDSA cycle completed and the principal's PDSA data tool returned and to get enough participants to complete the teacher survey.

The final limitations of this study are general in nature. As with any survey or tool where participants provide responses, participants' responses are subject to their understanding of questions and time spent on considering their response. Another factor contributing to the participant responses was a desire on the part of the principals to provide a favorable impression of their strategy implementation. This limitation could have had a larger impact given that the researcher is a colleague of the principals and a current elementary principal.

Recommendations

This study explored the potential benefit of increasing the retention of non-tenured effective teachers in Title 1 schools within Hope District, through the implementation of a set of specific, research-based principal-led retention strategies by principals on non-tenured effective elementary teachers. The study used an improvement science approach, which incorporated a focus group, short PDSA Cycles and a teacher survey in order to analyze data to determine the influence on principals and non-tenured effective teachers in identified Title 1 schools within Hope District. Based on the study results and conclusions, the following recommendations are provided to Hope District for consideration.

First, the district should make the retention of effective non-tenured teachers a priority by identifying new and innovative retention strategies, especially for Title 1 and other high need schools. The district can do this by implementing systemic structures and processes that outline a retention plan. The plan could include setting district-level and school-level targets for increasing the retention of effective teachers. The plan could also include developing and implementing a networked improvement community (NIC) that addresses the retention of effective teachers. NICs are highly structured, intentionally formed collaborations among education professionals, researchers, and designers that aim to address a high leverage practical problem (Russell et al., 2017). The NIC would allow the District to build upon this current research by implementing PDSA cycles. As mentioned above, a limitation of this study was the limited amount of time to conduct the PDSA cycles. The district could implement PDSA cycles to test the implementation of the principal-led retention strategies with more schools and principals, determine the most effective retention strategies and learn from any other findings that may be revealed.

This recommendation is based on the information and data shared in the study. It is evident from the district's prior attempts and the data shared by principals during the focus group that Hope District recognizes the need to focus on the retention of effective non-tenured teachers; however, the district continues to struggle with retention. Therefore, investing resources in implementing new and innovative retention strategies may help to increase the retention of non-tenured effective teachers in the district.

Second, the district should focus on the implementation of the new and innovative retention strategies at the school level. The district can do this by first training principals to identify their most effective teachers utilizing formal evaluations, formal and informal

observations and other quantitative or qualitative data. Then, the District would train the principals to implement the new and innovative retention strategies with those teachers effectively. According to the research conducted by TNTP (2012), principals have a responsibility to focus their strategic retention efforts on effective teachers in their buildings. The research shows that Hope District has a long history of implementing retention practices. However, the practices rarely included the school and/or the principal. It is clear that principals in Hope District are attempting to implement retention strategies to some degree and that they understand the importance of implementing retention strategies at the school level. However, the district must provide principals with training on the most effective retention strategies and the most effective ways to implement them with their effective teachers.

This recommendation is based on the data shared from principals during the focus group the PDSA implementation and some from the teacher survey. The data shows that principals are willing to focus on retention; however, they need new and innovative retention strategies. During the focus group, principals shared that they were implementing strategies, but the district data does not show an increase in retention; therefore, the strategies may not be working. Principals were willing to implement the new retention strategies that were presented to them and shared positive feedback from their experience with the PDSA cycle. Thus, if provided with the retention strategies and resources, school level implementation may have an impact in non-tenured teacher retention.

Implications for Future Research

This study reshaped my thinking. Before conducting this study, I thought that principals did not believe they played a role in retaining non-tenured effective teachers. However, as a result of the research, I learned that some principals believe they play a role in retaining non-

tenured effective teachers. However, their role is not defined, and implementing the retention strategies is not necessarily strategic. From the focus group, I learned that principals are just implementing strategies with the hope that implementing them will influence their new, non-tenured teachers' decisions to stay. This is a concern because it shows that the principal's implementations are not targeted. The strategies are being implemented with all their new, non-tenured teachers, not just the "effective non-tenured" teachers. For the implementation to be effective, principals need to identify the specific non-tenured effective teacher and strategy. Therefore, future research and/or PDSA cycles should incorporate cycles where they use criteria when selecting retention strategies for teachers and conduct multiple cycles for longer periods.

I also learned that the principals' role in the implementation is limited within Title 1 schools in Hope District. They delegate these responsibilities to teacher leaders, chairpersons, and other leadership staff. This approach is similar to the previous approaches implemented by Hope District. I noticed that because most district level approaches did not involve the principals, and in most cases for the district did not involve the local school at all. Therefore, future research may want to include the implementation of retention strategies by principals vs. other school leaders. We know the demands of principals are great, therefore identifying easy, principal-led retention strategies will be essential to the success of this school level approach.

Future research should also entail increased teacher voice. More research needs to be conducted to determine the effectiveness of the retention strategy implementation on teachers. This would definitely need to entail increasing the number of teacher participants and survey responses within each school. It would also need to entail increasing the number of schools participating in the study.

I believe that Title 1 schools and/or hard-to-staff schools will need the district's support to succeed in prioritizing the retention of non-tenured effective teachers. Districts need to provide support and create structures to support principals in engaging in this work. The structures must be systemic, targeted, and intentional. Retaining non-tenured effective teachers and reducing a district or school's attrition rate requires a comprehensive approach.

Appendix A: IRB Approval



1204 Marie Mount Hall
College Park, MD 20742-5125
TEL 301.405.4212
FAX 301.314.1475
irb@umd.edu
www.umresearch.umd.edu/IRB

DATE: January 27, 2023

TO: Kimberly Lane-Pettway
FROM: University of Maryland College Park (UMCP) IRB

PROJECT TITLE: [1918276-1] An Investigation into the Principal's Approach to Reduce Teacher Attrition in Hard to Staff Diverse Schools and School Districts

SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: January 27, 2023

REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7.

Thank you for your submission of New Project materials for this project. The University of Maryland College Park (UMCP) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Prior to final approval of this project scientific review was completed by the IRB Member reviewer. This submission has received Expedited Review based on the applicable federal regulations. This project has been determined to be a MINIMAL RISK project.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Unless a consent waiver or alteration has been approved, Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate Amendment forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Appendix B: Focus Group Protocol

PHASE 1: BEFORE THE FOCUS GROUP

Focus Group: One focus group

Time: The focus group will run between 30-45 minutes.

Participants: 5-10 Title 1 Principals

Facilitator: Myself(Kimberly Pettway) The facilitator will ask the questions and probes, but not participate in the dialogue or correct participants.

Location: Zoom, virtual platform or in-person

PHASE 2: CONDUCT THE FOCUS GROUP

- Materials:
 - a. Computer
 - b. Focus group list of participants
 - c. Focus group script
- Arrive before the participants
- Introduce myself and the note-taker (if applicable) and carry on the focus group
- according to the script.
- Conduct the session, being mindful of the following:
 - a. Set a positive tone.
 - b. Make sure everyone is heard; draw out quieter group members.
 - c. Probe for more complete answers.
 - d. Monitor the questions and the time closely – it is my job to make sure we are on track.
 - e. Thank participants and tell them what my next steps are with the information.

PHASE 3: INTERPRETING AND REPORTING THE RESULTS

1. Summarize the focus group
 - a. Immediately after the meeting, I will write up a quick summary of my impressions.
 - b. Transcribe the notes or recording of the focus group immediately after the focus group
2. Analyze my summary
 - a. Read my notes and look for themes/trends. Write down any themes which occur more than once.
 - b. Interpret the results
 - i. What are the major findings and what recommendations might I have?
3. Write the report
 - a. My report will include my purpose, outcomes, process, findings, and recommendations, discuss the implications and highlight the main themes, issues, or problems that arose in the focus groups.

FOCUS GROUP SCRIPT

Part One: Welcome participants, explain purpose and context, explain what a focus group is, and make introductions. Explain that information is confidential and no names will be used. You will record the proceedings.

Introduction Text (To be spoken by the Facilitator)

Welcome and thank you for being here today. My name is Kimberly Pettway and I will be the moderator for today's Effective Non-Tenured Teacher Attrition focus group. The format we are using is a focus group. A focus group is a conversation that focuses on specific questions in a safe and confidential environment. The purpose of this focus group is to learn more about Title 1 principal's role in the retention of non-tenured effective teachers. All of you have been asked to participate because you are principals in Title 1 schools. It is our expectation that your opinions and experiences will help us learn more about what you do to retain non-tenured effective teachers. I will guide the conversation by asking questions that each of you can respond to. If you wish, you can also respond to each other's comments, like you would in an ordinary conversation. It is my job to make sure that everyone here gets to participate and that we stay on track.

After the conclusion of the focus group, the information we discuss will be categorized into themes and topics before being shared anonymously as a part of my research with the University of Maryland. I will take this anonymous focus group information and use it to help give suggestions on practices that may be utilized to retain non-tenured effective teachers. Your personal information will not be connected to the results of this focus group.

Prior to the focus group you were provided a consent form and a non-disclosure form. By submitting the form, you are agreeing to participate in the Non-Tenured Teacher Attrition focus group and to keep our discussion confidential. If you feel uncomfortable for any reason during the focus group, you are free to leave at any time.

Before we begin, I would like to go over a few ground rules for the focus group. These are in place to ensure that all of you feel comfortable sharing your experiences and opinions.

Ground Rules:

1. *Confidentiality* – As per the non-disclosure form, please respect the confidentiality of your peers. The moderator will only be sharing the information anonymously.
2. *One Speaker at a Time* – Only one person should speak at a time in order to make sure that we can all hear what everyone is saying.
3. *Use Respectful Language* – In order to facilitate an open discussion, please avoid any statements or words that may be offensive to other members of the group.

4. *Open Discussion* – This is a time for everyone to feel free to express their opinions and viewpoints. You will not be asked to reach consensus on the topics discussed. There will be no right or wrong answers.
5. *Participation is Important* – It is important that everyone's voice is shared and heard in order to make this the most productive focus group possible. Please speak up if you have something to add to the conversation!

I will be recording this focus group. The recording will only be used to make sure my notes are correct and will not be heard by anyone outside of this research.

Let's begin with introductions.

Part Two: Ask questions; remember to use probes and follow up questions to explore the key concepts more deeply.

Questions (To be spoken during the focus group by the Facilitator)

1. Opening Question: Please share with us your name and the number of years you have served as a Title 1 Principal.
2. Key Question: What is your role or responsibility in helping to retain in your school your non-tenured effective teachers?
 - a. Follow-up Question: Why or Why not?
 - b. Probing Question (if necessary): Does anyone else feel the same way?
3. Key Question: What strategies do you currently utilize that could help to retain your non-tenured effective teachers?
 - a. Follow-Up Question: How did you identify those strategies to implement?
4. Key Question: What strategies or practices do you think all principals could do to influence their non-tenured effective teachers decision to remain teaching at their Title 1 school?
 - a. Follow-up Question: Why these strategies or practices?
 - b. Probing Question (if necessary): Does anyone else feel the same way?
5. Ending Question: Do you have any other additional comments regarding the principal's role in the retention of non-tenured effective teachers in Title 1 schools?
 - a. Follow-up Question: What makes retention in Title 1 schools different from other schools?

Part Three: Close the focus group – thank participants, give them contact information for further follow up if requested, explain how you will analyze and share the data.

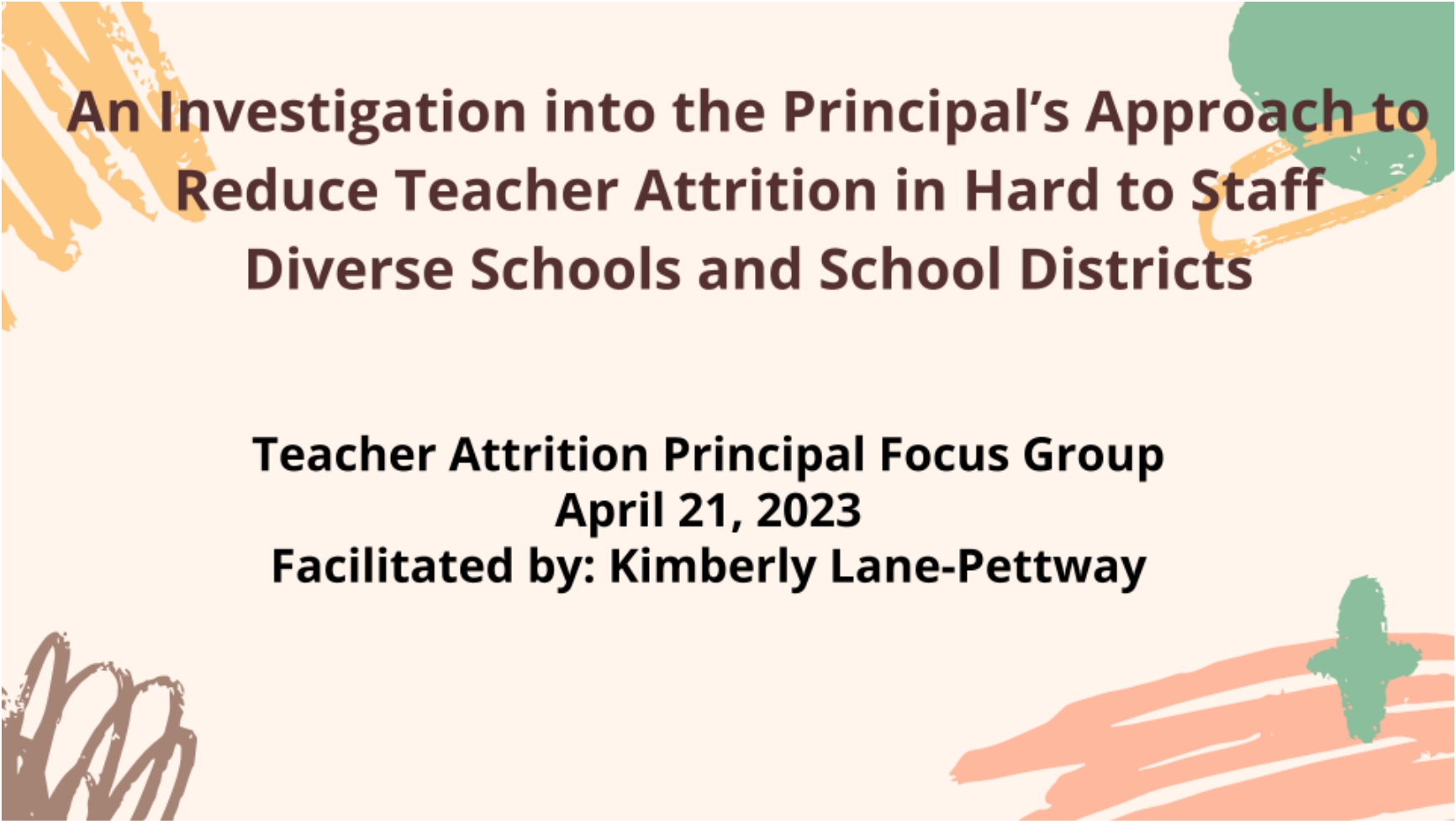
Conclusion Text (To be spoken by the Facilitator)

I see our time is up. Thank you for participating in today's Effective Non-Tenured Teacher Attrition focus group. As a reminder, I will be sharing the information learned during this session as part of my research with the University of Maryland to help give suggestions on practices and resources that may be utilized to retain effective non-tenured teachers. If you have any additional thoughts or comments that you would like to share, please feel free to contact me.

As a token of my appreciation, each person's name has been placed in a drawing for one \$25 Amazon gift card. Only one person will win. Let's spin to see who the winner is. And the winner is_____ (announce name after spinner stops). Your gift card will be sent to the email address submitted on the consent form.

Part Four: Transition from Focus Group to Training

The recording was stopped. Participants were given a 10-minute break. Upon their return, the researcher proceeded with the training.

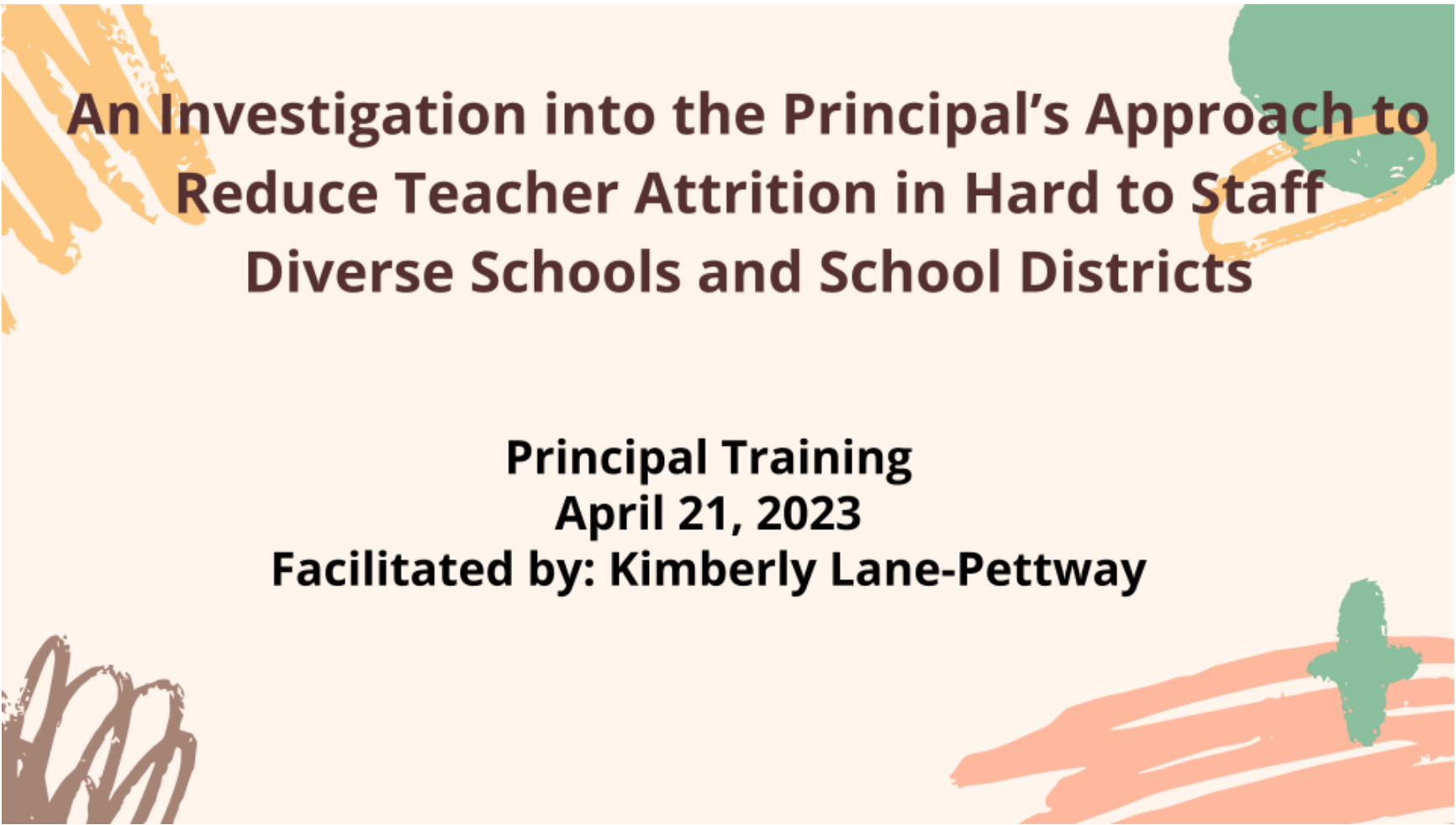


An Investigation into the Principal's Approach to Reduce Teacher Attrition in Hard to Staff Diverse Schools and School Districts

**Teacher Attrition Principal Focus Group
April 21, 2023
Facilitated by: Kimberly Lane-Pettway**



Break



An Investigation into the Principal's Approach to Reduce Teacher Attrition in Hard to Staff Diverse Schools and School Districts

**Principal Training
April 21, 2023
Facilitated by: Kimberly Lane-Pettway**

Objectives

- Principal Participants will be introduced to eight retention strategies in order to develop a plan to implement 1-2 of the retention strategies with their effective non-tenured teacher(s).
- Principal Participants will discuss the components of the research study in order to develop a timeline of implementation.

The Why

- High teacher attrition is impacting the education workforce. The scope spans across nations, states and local jurisdictions.
- On average, schools with larger low-income and diverse populations, such as Title 1 schools, experience greater rates of teacher turnover than other schools. Research shows that teachers are leaving at more than double the rate of schools where less than 35% of the student enrollment is receiving free or reduced lunch rates.
- Research also shows that the teaching profession has had one of the highest attrition rates among the professions. Nearly half of new teachers leave the classroom in their first five years, with 9.5 percent leaving in the first year alone.

Research Framework

- In 2012, The New Teacher Project(TNTP), a national nonprofit organization, published the findings of their study on teacher retention.
- The study identified eight retention strategies implemented in schools.
- My research will use the TNTP study as a framework.

The Irreplaceables. Understanding the Real Retention Crisis in America's Urban Schools. Rep. Brooklyn: TNTP, 2012

Eight Retention Strategies

Feedback and Development	Recognition	Responsibility & Advancement	Resources
Provided me with regular, positive feedback	Recognized my accomplishments publicly	Identified opportunities or paths for teacher leader roles	Provided me with access to additional resources for my classroom
Helped me identify areas of development	Informed me that I am high-performing	Put me in charge of something important	
Gave me critical feedback about my performance informally			

Focus Retention Strategies for the Study

Recognition	Responsibility & Advancement
Recognized my accomplishments publicly	Identified opportunities or paths for teacher leader roles
Informed me that I am high-performing	Put me in charge of something important

Next Step(Phase 2)

Utilize improvement science which uses disciplined inquiry to solve Problems of Practice (PoPs). It uses experiential and scholarly knowledge and data to determine if change initiatives that are implemented in cycles, also known as Plan-Do-Study-Act (PDSA) cycles, lead to an improvement (Perry et al., 2020).

- In this research, the PoP addresses the retention of non-tenured effective teachers.
- The change initiative is the implementation of the 1-2 retention strategies with the non-tenured effective teachers.
- We will implement 1 Plan-Do-Study-Act Cycle.

*****The criteria for non-tenured “effective” teacher will be determined by the principal’s perception of the teacher utilizing formal and informal observation data, principal’s experience with the teacher and other such data as deemed by the principal. *****

Principal PDSA Data Instrument

Next Step (Phase 2) Continued

1. Review the pre-populated “Plan” section on the PDSA Data Instrument (TODAY, during the training).
2. Identify your non-tenured effective teacher(s) AND provide the researcher with their email address. (TODAY, during the training)
3. Next week(the week of April 24th), implement the retention strategy with your identified teacher(s).
4. Within 24 hours of implementing the retention strategy, complete the “Do” section(also referred to as “2a. Observations”) on the PDSA Data Instrument.
5. By the end of the following week(the week of May 1st) complete and answer the “Principal Questions” in the “Study” and “Act”sections on the PDSA Data Instrument.
6. After completing the PDSA Data Instrument, submit the completed PDSA Data Instrument to the researcher.

Phase 2 Implementation Reminders/Researcher Next Steps

- For the integrity of the study, Principal Participants may not share with the teacher that they are participating in this study. After the retention strategy implementation, Principal Participants may not discuss any components of the study with their identified, non-tenured teacher.
- The PDSA data instrument is vital to this research. Therefore, when completing the PDSA data instrument, Principal Participants are asked to be honest and provide their detailed perspective of the implementation of the retention strategies.
- After the retention strategy implementation, the Researcher will contact the non-tenured teacher and ask them to complete a confidential survey. They do not have to participate in completing the survey. They do not have to identify themselves if they complete the survey.

Questions





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The Irreplaceables. Understanding the Real Retention Crisis in America's Urban Schools. Rep. Brooklyn: TNTP, 2012

Appendix D: PDSA Instrument

Overall Aims	<i>Hope District will increase the retention rate of new, non-tenured effective teachers by 10%</i>
Focus Driver(s) for Testing	Make retention a focus for school leadership <i>Increase retention strategies for non-tenured effective teachers by school leadership</i>
Change Idea being Tested	<i>The implementation of at least 1 retention strategy identified by TNTP with non-tenured teachers by School Leadership</i>
Team Members	<i>Researcher, Selected Principals and Selected Teachers</i>

1. Plan – Plan Your Test and Predict What Will Happen		
1a. Test Steps	1b. Learning Goals	1c. Predictions
<i>What is your plan for enacting this test? (Who, What, When, Where?)</i> Who: Principal and Selected Teacher(s) What: Principals will implement at least one retention strategy with at least one of their non-tenured effective teachers. Then, the principal will share their experience with the strategy implementation and their teacher’s experience and its impact on their teacher. 1. The Principal will be assigned 1 retention strategy. 2. The Principal will plan the week to implement their assigned retention strategy. 3. The Principal will implement the retention strategy with the teacher. At this time, the Principal will not tell the teacher about the retention strategy implementation test. 4. Within 24 hours of implementing the strategy, the Principal will document their own experience in the “Do” section of the PDSA instrument. 5. The Principal will answer the “Principal Questions” in the “Study” and “Act” sections of the PDSA instrument. 6. Within a week of implementing the retention strategy the Principal will briefly meet with the teacher to document the teacher’s experience in the “Teacher Debrief” section of the PDSA	<i>What do you hope to learn from this test?</i> ● We hope to learn whether the implementation of a set of specific, research based retention strategies encourage principals in Title 1 schools to prioritize the retention of non-tenured effective teachers. ● We hope to learn whether the implementation of a set of specific, research based retention strategies impact non-tenured effective teachers and/or influence their decision to remain teaching at their Title 1 school.	<i>What are your targets or expectations for each test measure?</i> <u>Principal Questions</u> 1. Do you think implementing the specific, research based retention strategy will encourage you to prioritize the retention of non-tenured effective teachers? 2. Do you think your non-tenured

instrument. The Principal will document the teacher's experience on the PDSA instrument. 7. The Principal will submit the completed PDSA instrument to the researcher. When: Spring SY 2021-2022, 2 week cycles (1 week for Principal implementation; 1 week for Principal and Teacher Debrief) Where: The Principal's school (Due to Covid-19, the interactions can be in a virtual or in-person setting, whichever is more comfortable for the participants)		effective teacher will consider the implemented retention strategy in their decision to remain teaching at your school? OR 3. Do you think the implementation of the retention strategy will impact and/or influence your non-tenured effective teacher in their decision to remain teaching at your school? Other potential questions: 1. Do you think this strategy will or will not have an impact on the teacher?
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		2. Do you think this strategy will have a positive or negative impact on the teacher?
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2. Do – Put Plan into Place
2a. Observations
<i>What happened?</i> <u>Principal Question</u> 1. Within 24 hours of implementing the retention strategy, in at least 150 words or more, describe what happened from the beginning, middle and end of implementation.

3. Study – Compare Your Predictions to What Occurred

3a. Results	3b. Learnings	3a. Predictions
How did your test perform on your measures? <u>Principal Questions:</u> ● How was the implementation of the strategy with the teacher? ○ very difficult ○ difficult ○ neutral ○ easy ○ very easy ● Describe the nature of the interaction between you and the teacher when implementing the strategy. ○ awkward ○ somewhat awkward ○ neutral ○ comfortable ○ very comfortable ● How did your teacher respond? ○ The teacher showed or communicated no response. ○ The teacher appeared thankful or communicated thanks. ○ The teacher appeared happy or communicated happiness. ○ The teacher appeared sad or communicated displeasure. ● Did anything unexpected happen? ● What did you notice about yourself? ● What did you notice about the teacher?	What did you learn from this test? <u>Principal Questions:</u> ● Did the implementation of a set of specific, research based retention strategies encourage you to prioritize the retention of non-tenured effective teachers? Please explain ● Did the implementation of a set of specific, research based retention strategies impact non-tenured effective teachers and/or influence their decision to remain teaching at their Title 1 school? Please explain ● How did implementing the retention strategy make you feel as a principal? ○ Very happy ○ Happy ○ Not very happy ○ Not happy at all ● Do you think that implementing practices like this would make teachers stay in your school? ○ Strongly agree ○ Agree	Did you meet your target or expectations? <u>Principal Questions:</u> ● Was your prediction from “1c. Predictions” correct? Explain

	○ Partially disagree ○ Totally disagree	
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4. Act – Determine Next Steps
4a. Next Steps
<i>What will you do based on what you learned? What are your next steps? Adopt, Adapt, or Abandon?</i> <u>Principal Questions</u> ● Would you adopt, adapt, or abandon the implementation of this retention strategy with other non-tenured effective teachers? Why or why not? ● What would you do differently? If you had to do it again, would you do anything differently? If yes, what? ● Would you be able to implement the retention strategy regularly/yearly? ○ Yes ○ No

Appendix E: Teacher Survey

During the last two weeks, my current principal..... (Check all that apply)

- Recognized my accomplishments publicly
- Identified opportunities or paths for teacher leader roles
- Informed me that I am high-performing
- Put me in charge of something important
- None of the above

The implementation of the retention strategy that I identified above by my principal had....

- A positive impact on me
- A negative impact on me
- No impact on me

When my principal implemented the retention strategy that I identified above, it made me feel....

- Sad
- Thankful
- Happy
- No feeling

Do you think the implementation of the retention strategy that you identified will have any influence on your decision to remain teaching at your school next year?

- Yes
- No
- Maybe

How does, if at all, the implementation of the retention strategy that you identified above influence non-tenured effective teachers, like yourself, to remain teaching at their current school?

Thank you for your time and feedback!

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