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TEACHER RETENTION

FACTORS OF TEACHER RETENTION

by

TONI LOPEZ

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education in School Improvement
Department of School of Education

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College of Education and Psychology

The University of Texas at Tyler
August 2023

TEACHER RETENTION

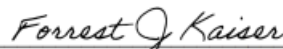
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This is to certify that the Doctoral Dissertation of

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has been approved for the dissertation requirement on
June 26, 2023
for the Doctor of Education in School Improvement degree

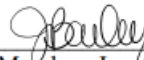
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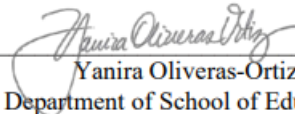
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TEACHER RETENTION

ACKNOWLEDGEMENT

I would like to express my heartfelt gratitude to the following individuals who have played significant roles in supporting me throughout my dissertation journey:

- To my husband, Mike, your unwavering support and belief in me have been my greatest source of strength. Thank you for being my rock and for always standing by my side.
- To my wonderful children, Sarah and Brian, you have been my constant motivation and inspiration. Your love, laughter, and understanding have helped me find balance and joy in the midst of academic challenges – and your editing skills were a bonus!
- To my Mom and Dad, I am eternally grateful for your unconditional love, guidance, and sacrifices throughout my life. Thank you for instilling in me a strong work ethic and the importance of education.
- To the UT Tyler Faculty, your expertise, guidance, and mentorship have been instrumental in shaping my research and intellectual growth. A special shout-out to my committee members, Dr. Forrest Kaiser, Dr. Wesley Hickey, and Dr. Jennifer Bailey, for your time and willingness to provide ongoing feedback. Additionally, I would like to thank Dr. Michael Odell, Dr. Yanira Oliveras-Ortiz (Yo), and Dr. Christopher Thomas for the extra guidance you provided these past three years.
- To Cohort One, I am honored to have shared this academic journey with such an incredible group of individuals.
- To my Houston Cohort One team, Alyta, Jorly, Donna, and Katie, I extend my deepest gratitude for your support and encouragement along the way.

Abstract

FACTORS OF TEACHER RETENTION

Toni Lopez

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The University of Texas at Tyler

June 2023

The steady decline in teacher retention within the teaching profession remains a pressing issue for our education system, as it significantly impacts student success. This study investigated the crucial factors influencing teacher retention through a design-based implementation mixed-method research methodology. The research includes gathering current teacher retention data from a large suburban school district, analyzing human resource department field notes, conducting teacher interviews, and administering exit and stay surveys. The findings from the literature review and collected data highlight campus culture, sense of belonging, and teacher participation in shared decision-making as influential factors affecting teacher retention. By examining these factors, this study aims to shed light on the complex dynamics of teacher retention and provide insights for improving the overall educational environment.

Keywords: teacher retention, campus culture, teacher exit survey, teacher stay survey, teacher shared decision-making, sense of belonging

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INTRODUCTION TO THE PROBLEM OF PRACTICE

Retaining teachers is vital to the success of a school system. Besides external influences, teachers wield the most significant impact on student achievement (Opper, 2019; Robertson-Kraft & Zhang, 2018). Teachers' effect on students' lives, which defies measurement, cannot always be quantified. Nevertheless, students instructed by highly experienced teachers generally perform better than those taught by less experienced teachers (Reichardt et al., 2020). Additionally, the high cost of recruiting and training new teachers imposes an additional strain on already limited school budgets (Podolsky et al., 2016). Finally, despite many years of scrutiny, the teacher shortage persists and plagues school systems today (Rose & Sughrue, 2020). Teacher retention is essential because of its impact on student success and strains on limited budgets (Donaldson & Johnson, 2011). For these reasons, this study aims to identify factors to retain more teachers.

Problem Statement

The annual attrition rate of 13% among teachers within a large suburban district presents a significant challenge, exerting adverse effects on student achievement and imposing financial constraints.

Definition of the Problem

Quality teachers positively impact student learning; conversely, ineffective teachers can slow their progress (Synar & Maiden, 2012). Research suggests that between 20% and 40% of teachers leave the profession within five years (Ronfeldt & McQueen, 2017). Teacher shortages have been identified since the 1980s and continue to plague urban schools today (Rose & Sughrue, 2020). The turnover rate for Texas beginning teachers varies from 19% to 30% (Moore

et al., 2018). A district's inability to identify and leverage critical factors, such as providing positive campus culture and opportunities for teachers to have a strong sense of belonging, has the potential to impact teacher retention. With these critical factors, educational leaders using interconnected systems approach have seen favorable teacher retention results (Minarik et al., 2003). Finally, the level of job satisfaction or happiness a teacher experiences at work significantly influences their choice to remain at the school (Randhawa, 2007).

Measuring the cost of teacher turnover on student achievement is challenging; however, measuring financial impacts is more straightforward. For example, the costs of recruiting, hiring, and training new teachers cut into already limited financial resources (Garcia & Weiss, 2019). Replacing teachers in high-poverty schools is estimated to cost large urban districts as much as \$18,000 per teacher, with a national price tag estimated at \$8.5 billion annually (Podolsky et al., 2016). Although critical factors for teacher retention are studied and identified, we continue to have a teacher shortage, causing an increased burden on school districts' limited budgets.

There is a plethora of factors that go into teacher retention, with many of those proving challenging to measure. For example, campus culture plays a significant role in teacher retention because it weaves itself with all other teacher retention aspects. Moreover, teachers who feel like they belong tend to stay longer. Therefore, defining campus culture and a teacher's sense of belonging is critical.

Campus Culture

Campus culture is the school's livelihood, or the "soul of the school," making its exact definition challenging (Eller & Eller, 2017). However, for this study, campus culture pertaining

to teacher retention was defined primarily based on teachers' perceptions than relying on a formal system. The culture provides the goals and expectations of the campus. The campus culture drives the decision-making process, and the way teachers perceive their role. Moreover, the culture determines the school's expected investment levels in teachers by providing ongoing opportunities to improve their craft.

Sense of Belonging

Moser and Kim (2020) maintain that a sense of belonging is critical in a professional setting such as a school. A teacher's sense of belonging consists of having opportunities to work with other teachers around a common goal while being treated respectfully. All the while, communication flows between teachers in a productive manner where they feel their voices are heard. Teachers who feel they are cared for and can be themselves to fit in with others on the campus tend to have a sense of belonging.

There have been many attempts at solving teacher retention, but the problem persists (Rose & Sughrue, 2020). Because campus culture drives campus outcomes, it is essential to consider this when reviewing teacher retention (Wahyuningtyas et al., 2022). Additionally, a teacher's sense of belonging or the relationships formed between teachers and their colleagues and administrators play a significant role in their decision to stay or leave (Reitman & Karge, 2019). Therefore, this study looked at campus culture and a teacher's sense of belonging to inform a large suburban school district about potential factors in retaining their teachers.

Background of the Problem

A large suburban school district in Texas serving 49,000 students has an 87% teacher retention rate, leaving the district recruiting 500 teachers yearly. The estimated cost to onboard a

new teacher is approximately \$18,000 (Podolsky et al., 2016). Therefore, teacher retention may cost this sizeable suburban school district over \$10 million annually.

Additionally, with an average class size of 22 students per teacher, this retention rate has the potential to negatively impact over 10,000 students annually. Furthermore, half of the teachers who are new to the district lack teaching experience, which can be suboptimal for student achievement. While some teachers may possess teaching experience, those who are new to the district may not have the same familiarity with the district's curriculum or systems. As a result, until fully acclimated, these teachers may divert their time and energy away from the students, leading to adverse consequences for student success.

Purpose and Significance of the Study

Outside of the factors a school does not have control over, home life and students' natural abilities, the teacher in the classroom significantly impacts student achievement (Hattie, 2023). Therefore, an overall school improvement approach would be remiss without a focus on retaining teachers. Many have recognized teacher retention as a problem but pinpointing what impacts teacher retention continues to plague school districts today. For instance, a large suburban school district in Texas has included teacher retention in its strategic plan for the past 10 years but has not identified the root causes for teachers leaving. Furthermore, this district used an in-person exit survey between the teacher and principal as its only avenue to gain input from teachers leaving the district. As a result, to identify the factors of teacher retention, this study aimed to provide multiple avenues to gain teacher input on why they stay or leave the district.

To control for principal bias and the potential for the teacher to feel uncomfortable being honest with the principal about why they are leaving, the exit survey was converted to a Human Resource department function in the form of an electronic survey. A teacher's resignation letter triggers an email to the teacher with a link to the exit survey. Accordingly, exit survey results provide much-needed information for decision-makers to make adjustments that impact teacher retention.

The exit survey spawned the need for a more proactive approach to retaining teachers, thus, creating a stay survey. All teachers were invited to complete the stay survey during the spring semester anonymously. The stay survey included Likert scale– type, multiselect, and open-ended response questions to gather data on what makes teachers stay.

These iterative cycles of collecting data from teachers resigning (exit survey) and teachers planning to stay (stay survey) provide an avenue for the district to improve teacher retention continuously. However, if teacher retention is left unaddressed, the burdens of replacing teachers will impact student achievement and the district's bottom line.

This study aims to investigate the critical factors attributed to teacher retention. Thus, this study sought to answer the following questions:

1. What are the main factors that influence teacher retention in a large suburban school system?
2. How can stay surveys be used to identify the critical factors in teacher retention?

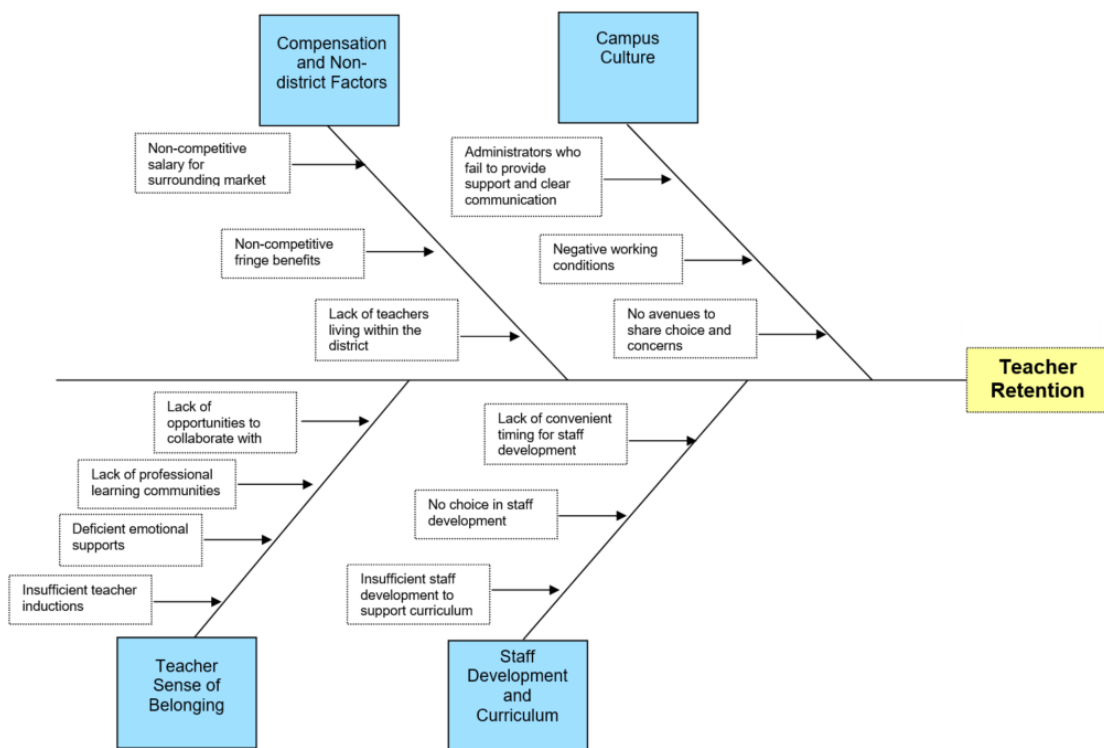
Root Cause Analysis

Figure 1 presents a fishbone diagram highlighting four root causes of teacher retention, as identified through a root cause analysis conducted by a small group of human resource

administrators in a large suburban school district. Each team member individually brainstormed reasons for teachers leaving the field of education, and subsequently, the team collaborated to identify commonalities that formed the categories depicted in the fishbone diagram. The accuracy of these categories was further validated through a literature review.

Figure 1

Teacher Retention Fishbone Diagram



First, the most apparent teacher retention factor is compensation. The teacher compensation package, including pay and benefits, must be competitive with its local market. The teacher labor market within the district may impact teacher retention. Moreover, the local economy drives both overall compensation and the teacher labor market, so these are sometimes considered factors out of the district's control.

As a root cause, campus culture delves into how administrators interact and support teachers. Additionally, unfavorable working conditions impact teacher retention. The systems for teachers to express their concerns and be part of the decision-making process may drive teachers to leave.

A teacher's sense of belonging, identified as a root cause of teacher retention, focuses on how teachers interact with one another, and it supports their well-being. This analysis recognizes teachers' need to collaborate casually and professionally with colleagues. Teachers need a robust induction system to acclimate to the campus culture. Finally, professional support is essential, but losing sight of the needed emotional support could negatively impact teacher retention.

This root cause analysis pinpoints allowing teachers to improve their craft through professional development to retain teachers. However, professional development should be convenient and allow teachers to choose their growth opportunities. Professional development opportunities closely tied to curriculum expectations may stave off frustrations resulting in improved retention efforts.

Theory of Change

This study employed a continuous improvement cycle to enhance teacher retention by actively seeking input from teachers regarding the factors that influence their decision to stay or leave. The process begins with thoroughly analyzing root causes within the school district's control that may impact teachers' choices. These factors are campus culture, compensation packages, staff development and curriculum, and teachers' sense of belonging.

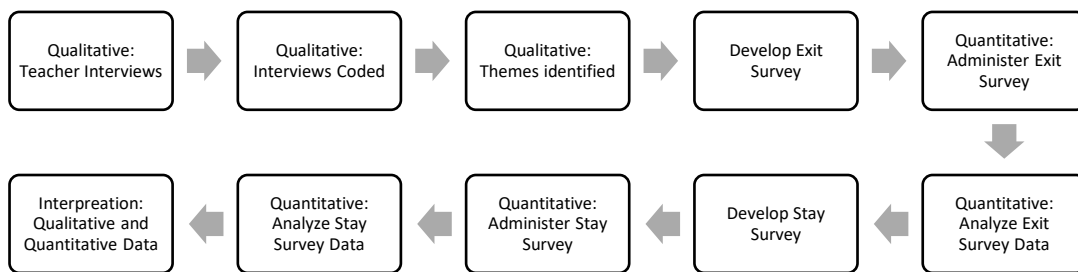
To develop an understanding of teacher retention factors, a mixed-method exploratory design coupled with an instrument development model was used (Creswell & Plano Clark,

2011). This approach concludes with developing a stay survey and analyzing qualitative and quantitative data, as illustrated in Figure 2. Qualitative data from teacher interviews reveals the necessity of developing an exit survey to understand why teachers leave the district.

Recognizing the reactive nature of the data collected from the exit survey spawns the need to adopt a stay survey as a more proactive approach. The data collected from the stay survey played a crucial role in identifying the factors affecting teacher retention.

Figure 2

Mixed-Method Exploratory Design Instrument Development Model



Note. Adapted from Creswell & Plano Clark, 2011.

Evaluation Plan

This mixed-method improvement science dissertation in practice addressed teacher retention for a large suburban school district in Texas. Improvement science is based on implementing iterative cycles of testing and learning, utilizing repeated Plan-Study-Do-Act (PDSA) cycles (Lemire et al., 2017). This study used PDSA cycles to develop an intervention to identify factors influencing teacher retention (see Figure 3).

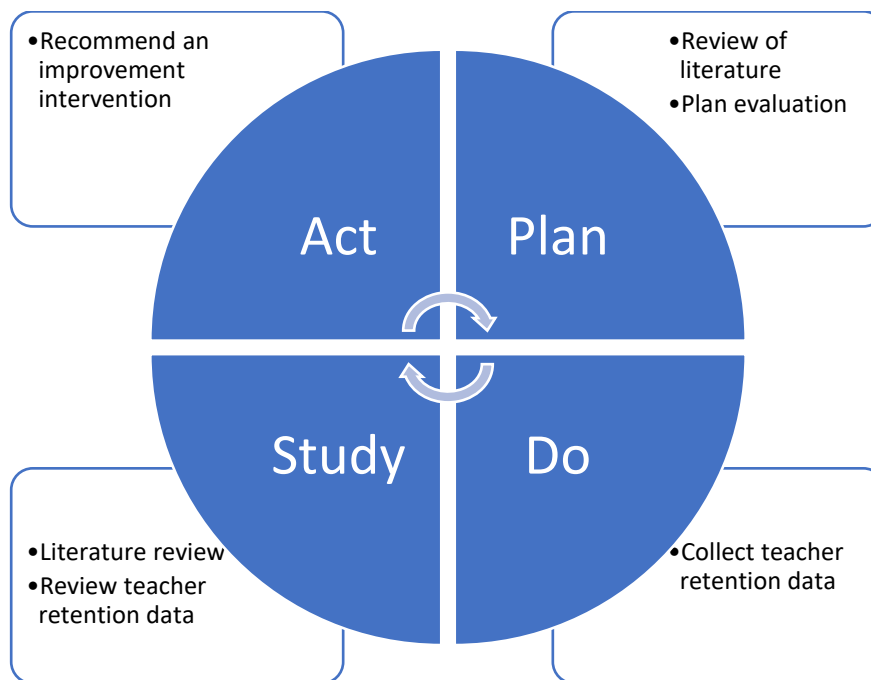
During this improvement cycle's initial phase (plan), we conducted a literature review and developed a preliminary plan to evaluate teacher retention in a large suburban school district. Subsequently, existing teacher retention data was collected to establish a baseline for the

evaluation (do)—the collected data encompass field notes, teacher interview responses, and teacher exit survey responses. The researcher reviewed the collected data in conjunction with the literature on teacher retention to initiate the formulation of an approach to identify the factors influencing teacher retention (study). Lastly, an improvement intervention (act) was proposed.

Teacher retention hinges upon a district's ability to identify why teachers stay and leave. Therefore, through the PDSA cycle, this study's evaluation plan included exit and stay surveys, the field notes of human resource personnel from a large suburban district, and teacher interviews.

Figure 3

Teacher Retention PDSA Cycle



Field Notes

Field notes collected by the Associate Superintendent of Human Resources acted as a catalyst in the development of teacher interview questions and protocols. For instance, they helped select the category of teachers chosen to participate in the teacher interviews and the interview structure. Additionally, the field notes assisted with narrowing the focus of the broad topic of teacher retention.

Teacher Interviews

Teachers of differing career intervals participated in interviews to guide revamping the exit survey and creating a stay survey. These strictly voluntary interviews conducted over Zoom contain approximately 10 interview questions ranging from highly structured to unstructured. Teachers with more teaching experience encountered a more unstructured interview. The interview questions cover teacher demographics, sense of belonging, lesson delivery, classroom management, and buy-in.

Exit Surveys

In today's highly competitive teacher market, learning why teachers stay, why they leave, and the changes needed within the organization are essential (Spain & Grosberg, 2016). Therefore, a network improvement community (NIC) formed to create an online exit survey (Bryk et al., 2017). The NIC consisted of the Superintendent of schools, administrators from the Human Resource department, teachers, principals, and principal supervisors. The NIC aimed to home in on potential teacher retention factors and craft exit survey questions to provide valuable information about teacher retention for a large suburban district.

Along with gathering pertinent information about teacher retention factors, the exit survey could not be overly burdensome on the teacher, and the average response time should be less than 10 minutes to increase participation. Therefore, some questions were designed to force participants to choose from a category to decrease the time required to complete the survey and collect accurate data (see Figure 4). Additionally, the exit survey contained a Likert scale using zero as low and 5 as high to gather teacher beliefs on their experience in the district on the following: working relationship with supervisor, campus support and mentoring, employee salary, employee health insurance, meaningful professional development, evaluation process, opportunity for advancement, district administration support, and overall district experience. Finally, an optional open-ended question completes the survey by asking for additional comments. This question allowed the teacher to share perspectives that may not have been asked in the exit survey.

In addition, upon receiving a resignation, the Human Resources department sent an exit survey link within an email thanking them for their service, explaining the purpose of the exit survey, and ensuring anonymity. Exit survey data were used to find early indicators of teacher retention factors and, additionally, to specify stay survey questions.

Stay Survey

A stay survey aims to ward off the need for an exit survey (Heubeck, 2022). For instance, an exit survey is seen as a reactive measure, whereas a stay survey is more proactive (Bradbury, 2022). Therefore, crafting intentional questions based on previous exit survey data, teacher interviews, and stay interview research is critical.

Figure 4*Exit Survey Forced Category Questions*

What is the nature of your separation? Please check all that are appropriate.

- Certification issues
- Personally/family obligations
- Moving out of the area
- Pursue a career outside of education
- Retirement (TRS)
- Termination
- Employment in another district

If you are accepting a position in another district, please indicate the reason below.

- Promotion
- Pay increase
- Shorter commute
- Better district health insurance
- Improved working conditions
- Increased district support or mentoring
- More purposeful professional development
- Less instructional demands
- More support with student discipline
- More instructional freedom
- Better campus administrator support
- Better district support
- I am not accepting a position in another district

Note. These questions are required to complete the exit survey and allow for more than one choice.

In this study, a one-year review of exit survey data guided the creation of the stay survey. Data gathered from the exit survey and teacher interviews found campus culture and a teacher's sense of belonging arise as probable causes of teacher turnover. Stay survey questions were developed using a variety of existing survey questions. The researcher modified three survey questions based on the Revised School Level Environment Questionnaire (Johnson et al., 2007). Three additional questions were obtained from the School Climate Survey (Liu et al., 2014) and

three additional questions were included in the study from the Teacher Subjective Well-being Questionnaire (Renshaw, 2020). These questions were selected to measure campus culture and teachers' sense of belonging.

Limitations of the Research

The limitations of this research include only collecting data from one large suburban school district in Texas, limiting the perspective of small, rural, or urban teachers. In addition, because this study did not collect identifying demographics in the exit and stay surveys, there is no mechanism to follow up with the participants to determine their teaching status. Further, to achieve this study's desired survey completion rate, the survey did not include any direct questions about the employee's intentions to remain or depart from the district in the upcoming year. Consequently, "I am happy to come to work every day" implies a correlation between employee satisfaction and retention. Finally, this study was conducted during the COVID-19 pandemic made it difficult to delineate between identifying the teacher retention issue as a problem with the education system or the employment market as a whole.

LITERATURE REVIEW

Outside of home factors, teachers are the number one influence on student achievement (Opper, 2019; Robertson-Kraft & Zhang, 2018). The countless ways teachers impact students cannot always be measured; however, students taught by more experienced and highly qualified teachers have greater success than those taught by less experienced teachers (Reichardt et al., 2020). Furthermore, success breeds success, so the support and guidance that experienced teachers provide for newer teachers is another realm to consider in teacher retention (Podolsky et al., 2019). Hiring a new teacher can cost upwards of \$18,000, causing an undue burden on already thin school budgets (Podolsky et al., 2016). Retaining teachers, therefore, is paramount for school improvement.

Although teacher shortages have been identified for over 40 years, there continues to be a shortage (Rose & Sughrue, 2020). Thus, identifying and leveraging critical factors of teacher retention is essential. Consequently, the teacher retention factors of working conditions and administrative support are crucial in keeping teachers (Schwartz, 2021).

Teacher Retention a National Problem

A significant decrease in enrollment in teacher preparation programs and nationwide predictions of teacher shortages in the coming years has prompted many studies to identify ways to retain teachers in the profession (Reichardt et al., 2020). For instance, as early as the 1990s, the number of teachers leaving the profession outpaced the number of teachers entering (Darling-Hammond, 2003). Additionally, teachers compose approximately 4% of the workforce, but their attrition rates are one to three percentage points higher than those of the non-teaching workforce (Ingersoll, 2022). Furthermore, the COVID-19 pandemic has not done teacher retention any

favors—a recent study found one in four teachers was likely to leave their job at the end of the 2020/2021 school year (Steiner & Woo, 2021). Additionally, national statistics show that the number of schools unable to fill a teacher vacancy tripled in five years (Garcia & Weiss, 2019). Finally, to compound the teacher shortage, the number of education degrees dropped by 15.4% between 2008 and 2015 (Garcia & Weiss, 2019).

In addition to evaluating the number of people entering the teaching field, we must also consider increases in student enrollment and staffing ratios. For instance, although student enrollment remained relatively flat in the early 2000s, in the past five years there has been an uptick resulting in a need for more teachers compounding the teacher shortage (Sutcher et al., 2019).

Teacher Preparation Program

Teacher preparation programs have been under the spotlight. For instance, Tygret (2018) indicates teacher preparation programs that allow for student teaching experiences may bolster the confidence of beginning teachers because of their connections between preparation and practice. However, fewer students enroll in traditional college preparatory programs, causing a shortage of teachers entering the field confident in their readiness to teach (Reichardt et al., 2020).

Pandemic

The COVID-19 pandemic 2020 turned the job market upside down, and it doesn't appear to be returning to normal anytime soon (Fox, 2022). As a result, the term Great Resignation was coined to describe the uptick in people quitting their jobs (Chugh, 2021). An industry such as education already had teacher shortages and could not afford even the slightest uptick.

Moreover, "Teaching has always been a demanding profession, and over the past two years, the demands have only increased" (Marshall et al., 2022). Finally, along with the stressors the pandemic put on education, there also began to be a climate change, or a time of uncertainty on how social, cultural, and political instability would impact the role of the teacher (Hill-Jackson et al., 2022). Before the pandemic, Grant (2013) asserted that teacher motivation hinged on their capacity to impact a child's life positively. The pandemic compelled numerous educators to shift to virtual teaching, posing more significant difficulties in establishing connections with students and hindering their ability to witness those "light bulb" moments when students grasp new concepts. Consequently, 42% of teachers indicated they are less motivated to work (Will, 2021).

Teacher Retention a State Problem

Because each state has a unique labor market, teacher shortages are sometimes viewed as a state problem (Sutcher et al., 2019). However, in Texas, there is a teacher shortage. Efforts to maintain a strong Texas economy rely on educating students in Texas public schools (Horn et al., 2021). Without qualified teachers, the Texas public school system will be unable to keep up with economic demands. However, the number of teacher certifications in Texas has decreased by 20% from 2010 to 2019, indicating a decline in teachers in the employment market (Horn et al., 2021). Furthermore, the decrease in the number of students obtaining a teaching certificate from a university has drastically declined, leaving the state to look for other ways for teachers to become certified.

Factors Identified in the Research

The literature that informed this study focused on positive campus culture, including teacher input and working conditions, investing in teachers by providing timely, purposeful professional development, and recruiting and hiring practices; all serve as springboards to retention.

Campus Culture

According to research, teacher retention has been studied for many years but remains a problem (Rose & Sughrue, 2020). One of the reasons for the lack of teacher retention may be related to campus culture. The Glossary of Education Reform (2013) defines campus culture as the "beliefs, perceptions, relationships, attitudes, and written and unwritten rules that shape and influence" the school. Furthermore, employees who are happy or satisfied with going to work each day tend to have higher retention rates (Ali, 2008). Additionally, school culture shapes behaviors to carry out meaningful work at the school (Wahyuningtyas et al., 2022). For instance, teachers who believe that the campus's vision and goals effectively cater to students' needs tend to have higher job satisfaction. According to Egalite et al. (2014), teacher perception of leadership and campus culture influences teachers' decisions to remain at the school. These individually formed perceptions make measuring campus culture a challenge. Another challenge to measuring campus culture is the fact that every teacher has different intrinsic and extrinsic motivators (Tran & Smith, 2020). Additionally, influential leaders know teachers do not get into the profession for the paycheck, but rather for the opportunity to impact students positively (Synar & Maiden, 2012). Moreover, to establish a positive campus culture, there should be a perception of fairness for all teachers, and administrators must find ways to connect with teachers (Balyer, 2017).

Consequently, campus culture encompasses various elements, including administrator support, teacher-shared decision-making, and working conditions. Though difficult to quantify, these factors are vital in identifying potential avenues for enhancing teacher retention.

Administrator Support

How principals lead and deal with teacher retention is of utmost importance. Saiz (2021) indicated people do not quit their job; they quit their bosses. Therefore, discussing the principal's role in retaining teachers is essential. Principals who provide culturally responsive instructional leadership, effective hiring strategies, and a positive work culture positively impact teacher retention (Castro et al., 2018). Additionally, the systematic support principals have in place to build campus culture impacts teacher retention (Kaiser & Thompson, 2021). Furthermore, the principal's management style and how teachers perceive it influences teacher quality and retention (Wahyuningtyas et al., 2022). Finally, principals who provide stability for teachers create a climate and culture conducive to school improvement (Urlick, 2015).

In addition, as a part of instructional leadership, principals must regularly provide feedback to teachers. However, although teachers report it is essential to receive feedback, they also need to feel the feedback is fair and consistent with the school's values (Robertson-Kraft & Zhang, 2018). Teachers want to improve and need a leadership team that provides avenues for that improvement—and so the principal must be a skillful leader who understands the importance of providing a focused direction. Of additional importance is the ability to provide clear, concise feedback that aligns with campus goals and to offer coordinated efforts for teacher improvement (Fullan & Quinn, 2016; TNTP, 2015).

Teacher-Shared Decision-Making

Communication with teachers is essential as the primary building block of positive campus culture (Hughes et al., 2014). However, communication alone does not make for a positive culture. Teachers' voices must be heard and, more importantly, valued. For instance, McKeown (2022) maintains empathetic leaders who listen to understand and model trusting behaviors tend to build strong campus cultures where teachers want to stay. Within an integrated communication loop, a campus culture that promotes reflection allows teachers to apply situational meaning and document learning (Reitman & Karge, 2019).

Furthermore, involving teachers in shared decision-making increases teachers' desire to return each year (Moore et al., 2018). Finally, Subramony et al. (2008) maintained that investing in employees yields positive performance, creating a linkage between the time investment needed for teacher input and teacher retention.

Working Conditions

Leaders who create favorable working conditions impact teacher retention positively (Urick, 2020). Moreover, working conditions "are a strong predictor of teachers' decisions about where to teach and whether to stay" (Podolsky et al., 2016, p. 6). Working conditions include an array of teacher support; however, leaders prioritizing emotional support tend to retain teachers at a higher rate (Hughes et al., 2014). Headden (2014) maintains that administrator support is more influential than salary on teacher retention.

However, the rapport established with fellow teachers and administrators seems to be the most beneficial working condition (Reitman & Karge, 2019). Additionally, the social interactions and sense of belonging between humans, in general, are critical in both personal and

professional settings (Moser & McKim, 2020). For instance, some teachers participating in informal positive collaboration reported less stress (Fisher, 2011). In addition, Madrid (2016) has determined that professional friendships impact a teacher's career longevity. Finally, the working conditions of workload and teaching assignments are also factors in retention. Teachers who perceive their workload as manageable and have input on their teaching assignments are likelier to return each year.

Growing Teachers

Zhang (2016) found professional development ranked higher than salary in teachers' decisions to remain in education. Providing teachers with a toolkit and essential teaching skills positively impacts teacher retention. Consequently, those who teach for 10 years will spend the equivalent of an entire school year attending professional development (TNTP, 2015). Teachers who feel they are effective tend to return year after year (Hughes, 2012). Teachers know that meeting education's high demands requires continually improving their craft. Leaders who value providing time and space for teachers to lean on one another and grow together create an environment to increase teacher efficacy (Prenger et al., 2019).

Furthermore, teachers appreciate leaders who provide a nonjudgmental space for teachers to learn and grow together (Fullan & Quinn, 2016). Principals play a vital role in professional development but must not act as gatekeepers (Bredeson, 2000). Additionally, school systems that provide a pathway for advancement or opportunities for leadership within the classroom tend to retain more teachers (Castro et al., 2018). Finally, teachers know professional development is vital to their success, but they want shared decision-making when selecting professional development (Wronowski, 2018). Teachers who feel professional development is being done with them versus done to them have a more positive outlook (Putman et al., 2018).

New Teacher Induction Programs

"New teachers have weaker qualifications and experience" than established teachers, and this causes a reduction in the quality of teaching (Sorensen & Ladd, 2018, p. 27). Leaders who recognize the impacts of an influx of new teachers each year place a high value on creating an effective induction program (Sorensen & Ladd, 2018). Leaders must recognize their influence on beginning teachers and provide support through a robust induction system (Hughes, 2012). These induction systems must be prepared to offer various supports beyond instruction, such as classroom management, differentiated instruction, and parent involvement (Shepherd & Devers, 2017). Professional development personalization impacts retention as teachers progress through their first year's phases (Ergunay & Adiguzel, 2019). Studies have questioned the impact of stand-alone teacher induction programs; instead, they suggested that teacher induction programs combined with other supports, such as mentoring, have higher effects on teacher retention (Ronfeldt & McQueen, 2017). Lastly, one of the most prominent factors in retaining new teachers is the level of support and mentoring provided (Zavelevsky & Lishchinsky, 2020).

Alternative Certification Programs

According to the Texas Association of School Boards (as cited by Rubiera, 2018), more than one-third of all Texas teachers received training from an alternative certification program (Rubiera, 2018). However, an alternatively certified teacher's skillset differs from a university-certified program's. Thus, there is a need for a more personalized approach to professional development for alternatively certified teachers (Rose & Sughrue, 2020). Additionally, Donaldson and Johnson (2011) maintain that beginning teachers need more preservice training than alternative fast-track programs can provide.

Recruiting and Hiring

Recruiting and hiring efforts are often seen as reactions or results of a lack of teacher retention. Compared with other professions, teachers are underpaid; therefore, recruiting the right candidate remains an issue with teacher retention (Garcia & Weiss, 2019). Subsequently, hiring managers seeking to fill a position with a warm body risk creating harmful conditions for teacher retention (Minarik et al., 2003). Therefore, districts' recruiting efforts may seek to find teachers who fit their culture as a strategy for teacher retention. Additionally, exploring personality traits such as positive, humorous, and use of self-efficacy are beneficial in recruiting long-term teachers (Landrum et al., 2017). Another recruitment effort may be to create "grow your own programs," where school districts invest resources into high school pathways that lead to a career in education (Podolsky et al., 2016). According to Synar and Maiden (2012), districts should investigate resource allotment of teacher recruitment versus teacher retention. In addition, there is a need to recruit and hire teachers for schools and districts that serve predominantly minority and economically disadvantaged students (Gais et al., 2018). Finally, recruiting and hiring strategies are considered separate from teacher retention when they could be used to increase retention numbers (Wronowski, 2018).

Identifying Factors of Teacher Retention

Furthermore, avenues to head off teachers' leaving include a robust teacher retention strategy that provides for stay and exit surveys. However, an exit survey acts as an autopsy, whereas the stay survey can be seen as preventive medicine, both of which provide vital information in retention strategies. For instance, an exit survey may provide more authentic responses because the teachers have already submitted their resignations. Conversely, this lends

itself to a disproportionate number of unhappy teachers responding. However, a stay survey may solicit responses from a broader range of teachers.

Stay and Exit Surveys

The overwhelming response to a teacher shortage has been to produce more teachers (Ingersoll, 2022). But using the "find more teachers approach" has not been practical, because the teacher shortage continues to be a problem. Hence, school districts must take active measures to head off teachers leaving. Therefore, as part of a robust retention strategy, exit surveys can act as a data collection mechanism to make adjustments once a teacher leaves (Alexander, 2020). However, a complete exit survey system cannot be an excuse to avoid employee retention conversations (Spain & Groysberg, 2016).

Additionally, if the goal is to retain teachers, providing stay surveys to make necessary adjustments would be more effective so they don't leave (Heubeck, 2022). Therefore, in both exit and stay surveys, well-crafted questions become essential. For example, Kersaint et al. (2007) maintained that questions about the teacher's beliefs, and the priority level of those beliefs, are crucial in gaining teacher retention information. In addition, Johnson et al. (2007) tested the validity of the revised long-standing set of questions known as the School Level Environment Questionnaire (SLEQ) used to measure teacher perceptions.

Conclusion

This review aimed to identify possible factors in teacher retention and ways districts can recognize why teachers leave. Furthermore, fully understanding the dynamic nature of retaining teachers and the past struggles that have led to the current teacher shortage provides a pathway to maintaining more teachers.

For instance, campus culture plays a significant role in a teacher's decision to stay or leave. Additionally, campus culture has many components that are difficult to pinpoint. However, considering the principal's leadership style and ability to form solid relationships with teachers is essential. Balyer (2017) says the connection between the teacher and campus administrators may be the key to teacher retention. More specifically, teachers crave open lines of communication and the ability to provide input on campus decision-making (Hughes et al., 2014; Moore et al., 2018). Additionally, within the campus culture lies the vision of the campus, and teachers want clear goals that promote student achievement (Wahyuningtyas et al., 2022). Finally, providing a culture that invests in teachers by providing professional development, meaningful feedback, and pathways for upward mobility is more likely to have higher retention rates (Castro et al., 2018).

Furthermore, the teacher's emotional well-being and the need for a sense of belonging also impact retention. For example, Madrid (2016) implies that teachers' professional friendships may drive their decision to remain on campus. Additionally, where teachers' emotional support is a priority, campuses tend to fair better with retention (Hughes et al., 2014). Moreover, a campus fostering a supportive and collaborative teaching environment, where effective communication is valued and teachers feel loved and cared for, will likely increase teacher retention (Podolsky et al., 2016). Ultimately, the level of job satisfaction or happiness experienced by an employee has a significant impact on their inclination to remain in their current position (Randhawa, 2007).

Lastly, because a teacher's perception and motivators play a significant role in their retention, it isn't easy to pinpoint how to solve it (Egalite et al., 2014; Tran & Smith, 2020). Therefore, seeking input from teachers is paramount. According to Kersaint et al. (2007),

collecting information about the priority levels of teacher beliefs plays a role in teacher retention. Therefore, simply asking teachers their opinion in creating well-crafted exit and stay surveys is a potential avenue for identifying teacher retention factors.

This field of inquiry—teacher retention—is crucial to the future of education. Although it has been researched many times, it remains a problem (Rose & Sughrue, 2020). Consequently, teacher retention significantly influences student achievement; thus, it is essential to identify the elements that contribute to retaining teachers (Reichardt et al., 2020).

EVALUATION OF THE PROBLEM

Retaining teachers has been recognized as a challenge with no definite solution in sight (Rose & Sughrue, 2020). Furthermore, as highlighted by Darling-Hammond (2003), the attrition rate of teachers has exceeded the rate of teachers new to the profession since the 1990s. The human factors within teacher retention make finding the magic answer troublesome. Likewise, delving into teachers' perceptions of why they stay or leave a school does not always paint a clear picture of how to solve teacher retention. Simply asking teachers their opinion on teacher retention is a foundation. Therefore, this improvement science study used teacher interviews and exit surveys to capture teachers' views.

Moreover, how teachers perceive the campus culture plays a role in their choice to stay (Balyer, 2017). Campus culture defined in this study includes the goals and aspirations of the campus. As well, teachers' perceptions of their role in obtaining the goals and the school's commitment to investing in teachers to reach the goals are encompassed in the campus culture. That culture drives the decision-making process, and how teachers fit into that process impacts teacher retention.

Within a campus culture, teachers with a high sense of belonging and connection have stronger ties to the campus and tend to remain longer (Reitman & Karge, 2019). Additionally, a teacher's feelings of belonging stem from collaborating with peers toward a shared objective in a respectful environment. It also involves constructive communication among teachers, who feel their opinions are valued and heard. This study will therefore scrutinize campus culture and a teacher's sense of belonging as pathways to overcoming teacher retention struggles.

Campus culture encapsulates how teachers perceive the support they receive from administrators and the value placed on teacher input. For example, Saiz (2021) maintains that employees do not quit their job; they quit their bosses. Most importantly, campus administrations who value and establish a stable environment for teachers tend to cultivate a campus culture that focuses on school improvement, ultimately increasing teacher retention (Urick, 2015). Administrators who show empathy, actively listen to understand, and exemplify trust-building are more likely to build campus cultures that promote teacher retention (McKeown, 2022). Finally, the establishment of open lines of communication where teachers feel their voices matter in decision-making creates the tenets of positive campus culture (Hughes et al., 2014; Moore et al., 2018).

Because teachers play a pivotal role in shaping the minds of our students and driving academic achievement, our educational future hinges upon the imperative task of identifying effective strategies to retain and support teachers. Therefore, the significance of this intricate course of study cannot be overstated, as it holds immense value and merit.

Method

Research Design

This study uses improvement science mixed-method research to identify the critical factors of teacher retention. The mixed-method research design is defined as an approach to behavioral research that gathers qualitative and quantitative data, integrates the two, and then analyzes the strength of both (Merriam & Tisdell, 2016). Combining qualitative and quantitative data collected and analyzed adequately answers the research questions—

1. What are the main factors that influence teacher retention in a large suburban school district?
2. How can stay surveys be used to identify the critical factors in teacher retention?

For example, field notes and teacher interviews provide qualitative data. In contrast, quantitative data collection came from existing district-wide teacher retention data, teacher exit survey responses, and a large-scale stay survey. Purposeful samplings outlined below give insight into the teacher participants of this study.

Theory of Change

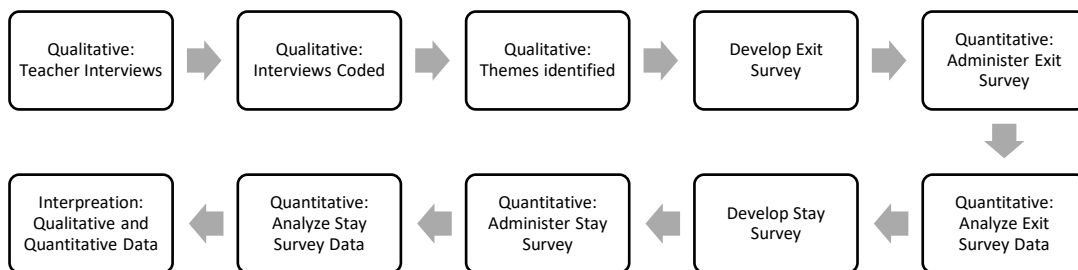
To enhance teacher retention, this study employed a continuous improvement cycle that actively seeks feedback from educators regarding the factors influencing their decisions to remain in or depart from their positions. The process begins by thoroughly analyzing root causes within the school district's control, which can significantly affect teachers' choices. These factors encompass various aspects such as campus culture, compensation packages, staff development and curriculum, and the sense of belonging experienced by teachers.

To understand the factors contributing to teacher retention, this study employed a mixed-method exploratory design with an instrument development model (Creswell & Plano Clark, 2011). This approach culminates in the development of a stay survey and the analysis of both qualitative and quantitative data, as illustrated in Figure 5. The qualitative insights obtained from interviews with teachers highlighted the necessity of an exit survey to investigate why teachers left the district. By recognizing the reactive nature of the data collected from the exit survey, the researcher seeks a more proactive approach, resulting in creating a stay survey. The

data collected through the stay survey can play a pivotal role in identifying the factors that impact teacher retention.

Figure 5

Mixed-Method Exploratory Design Instrument Development Model



Note. Adapted from Creswell & Plano Clark, 2011.

Site

This study investigated teacher retention in a large suburban school district with approximately 49,000 students. The district's student makeup was predominantly Hispanic, accounting for 83% of the population, and pockets of cultural diversity make up the remaining student population of 7% African American, almost 6% White, and 3% Asian. In addition, the district comprises 86% economically disadvantaged students and 29% English Language learners. The teaching staff of 3,800 has an ethnicity breakdown of 50% white, followed by 35% Hispanic, 10% African American, and 3% Asian teachers. Over half of the teaching staff have less than 10 years of teaching experience, and the district retains about 86.2% of its teachers each year.

In some people's eyes, the demographics of this district could warrant low performance; however, most campuses perform above expectations. The Texas Education Agency rated the district B; many campuses received multiple distinctions. However, there is a lack of

consistency in performance across the district; therefore, investigating the role of teacher retention may provide some guidance.

Within the last several years, the district has emphasized the importance of campus culture with leadership teams to improve teacher retention. Although emphasized, there is no apparent systematic plan to improve campus culture. Additionally, the district contributes significant resources to coaching and staff development. These are strengths, and many campuses indicate they contribute to their success. Furthermore, the district prides itself in being a large district with a family atmosphere. However, it is not consistently measured. Finally, the district is currently transitioning to a new human resource program that may have future impacts on the recruiting and hiring processes, thus impacting teacher retention. The site parameters helped to establish the foundation of the exploratory design by beginning with a qualitative lens that drives the quantitative data in this study.

Qualitative

The qualitative data collected and analyzed originated from field notes and teacher interviews. In addition, collected field notes and a literature review helped formulate questions about campus culture for the teacher interviews.

Field Notes

The researcher is an Associate Superintendent of Human Resources in a large suburban school district in Texas. One of her functions is advocating for employees, so employees share concerns regularly. The researcher's field notes, derived from conversations and interactions, served as a catalyst for discerning key elements influencing teacher retention. Noteworthy among these factors were the alignment between a teacher and the campus culture, as well as

their dynamics with their supervisor. Over three months of field notes in conversation-summary handwritten format was then open coded, indicating a need to investigate the impact of campus culture on teacher retention. Please note that these six months occurred during the height of the COVID-19 pandemic. The fear during the pandemic may have played a role in illuminating deficiencies in a campus culture that may not have been otherwise brought forward. It is noteworthy to mention the level of confidentiality expected of the position—that is, no specific demographic information is found in the field notes.

Teacher Interviews

Because the literature showed that the number of years a teacher has in the teaching field impacts professional development and support needed, interview participants had varying years of teaching experience. To recruit interview participants, the researcher solicited principal input on the selection process. The position of the researcher as the Associate Superintendent of Human Resources hindered the willingness for principals to welcome their teachers being interviewed. Therefore, only three teachers were interviewed.

The teacher perspective is paramount in identifying the critical factors of teacher retention; hence, the need for teacher interviews. A literature review indicated that the number of years in the teaching profession impacted their perspective on factors of teacher retention, so the three teachers interviewed had varied years of teaching experience.

Due to the COVID-19 pandemic, it was deemed necessary to conduct the interviews via Zoom to ensure the safety of all participants. Although all participants knew they could participate in the discussion with their cameras off, only one chose that option. Before the interview recording began, the researcher informed each participant of her position in the district

and allowed them not to proceed with the interview. All participants continued with the interview.

Data were collected using three types of interviews: highly structured, semi-structured, and loosely structured, with similar questions employed across all interview formats. The design of the questions came from indicators in field notes and a literature review. The researcher's inquiry into the principals' hesitancy to facilitate teacher interviews prompted a deeper investigation. One principal candidly expressed concerns about subjecting first-year teachers to potential pressure. Consequently, the researcher reassured the principals that interviews with the first-year teacher would follow a highly structured format, alleviating any need for extensive elaboration in their responses. Conversely, the teacher with more than five years of experience participated in loosely and semi-structured interviews, so more in-depth data could be collected with follow-up questions and expanded answers. As shown in Table 1, beginning, midcareer, and veteran teachers participated in interviews.

Table 1

Interview Participants' Years of Teaching Experience

Participant	Years of Teaching Experience	Type of Interview Conducted
1	1	Highly Structured
2	8	Semi-Structured
3	27	Loosely Structured

The interview transcriptions masked identifying demographics but provided rich data through the coding process. The participants' purposeful sampling used demographic descriptors such as the number of years teaching, subject, grade levels taught, and the campus. However, the only data not masked was the number of years of teaching. The open-coding process was used as an initial pass through the three interviews which established the need for additional coding to take place. Then axial coding was used to establish emerging themes. The themes are campus culture, support, and confidence with lesson delivery and classroom management. Additionally, pseudo-names were assigned.

Quantitative

After collecting qualitative data and a study of the literature, this study used existing district-wide teacher retention reports and a pilot exit survey to gather additional data to decipher the critical factors for teacher retention. Data collected from these instruments will serve as baseline and program evaluation data.

District Teacher Retention Reports

In June 2020, district-wide teacher retention data collected gave a percentage of teachers leaving the district and broken down by campus. However, the district cautiously reviews the information yearly as the data does not account for campus or district phenomena. For instance, the district-level data only accounts for teachers leaving the district but not for teachers moving from one campus to another.

Because this study looked at district-level teacher retention, the Texas Education Agency, Texas Academic Performance Report (TAPR) provided teacher retention data. Therefore, it served as a baseline for this study (see Table 2).

Table 2*District Texas Education Agency, TAPR Teacher Turnover Rate*

Year	Percentage
2019-2020	13.8%
2020-2021	10.2%
2021-2022	13.5%

Note. 2020-2021 was the COVID-19 pandemic school year.

Teacher Exit Survey

At the onset of this study, the district's current teacher exit process was antiquated, with a paper exit survey process. In addition, there was no data collection process connected to the paper exit survey. Therefore, to build an exit survey that collects data electronically, the human resource department launched a first iteration pilot exit survey housed on the exiting employee information page on the human resource department's website. The pilot ran from February 2020 to August 2021, and 109 exiting teachers completed the survey. A total of 54 elementary teachers, defined as pre-kindergarten to 6th grade, and 55 secondaries, defined as 7th to 12th grade, completed the pilot exit survey.

Implementing a new human resource software spawned the need to create a more permanent exit survey process. Therefore, a network improvement community (NIC) consisting of the superintendent, associate superintendent of human resources, other human resource department administrators, teachers, and principals convened to develop the current exit survey. The survey was initially manually sent electronically to employees who submitted a resignation letter until the new human resource department software could automate the process.

The initial district exit survey was conducted via paper and uploaded into the employees' personnel file. However, the paper format did not allow for usable data collection. Therefore, the human resource department launched a pilot exit survey housed within the human resource website. Employees were neither encouraged nor discouraged to take the survey. The survey asked exiting employees to rate their experience in the district as poor, fair, average, above average, or excellent in multiple categories. By converting the scale to numeric values, with poor being the lowest and excellent the highest, the study found the average rating of each category to pinpoint the most critical factors of teacher retention for the district (see Table 3). The data indicated opportunities for advancement, and the teacher evaluation process may be a growth area to improve teacher retention. Furthermore, professional development opportunities for employees are a strength of the district.

Table 3*Pilot Exit Survey District Ratings*

Category	Average Rating
Working relationship with supervisor	4.07
Campus support and mentoring	4.08
Employee benefits and salary	4.06
Professional development opportunities	4.38
Evaluation process	3.96
Opportunity for advancement	3.52
District administration support	4.02
Overall district experience	4.16

Note. This table demonstrates the average responses of exiting employees, with 5 being the highest rating.

Additionally, to improve the exit survey process, the NIC reviewed data and decided to tweak the questions and automate the process through new human resource software. First, the exit survey required basic demographic information such as name, campus, and number of years working in the district. Then, participants were asked to share their reason for separation from the following:

- Certification issues
- Personal/family obligations
- Moving out of the area
- Pursue a career outside of education
- Retirement (TRS)
- Termination
- Employment in another district

Next, if teachers indicated they would work in another district, they were asked to share the reason. Lastly, the exiting employee was asked to rate the district on a scale of 0 to 5, with five being the highest on the following topics:

- Working relationship with supervisor
- Campus support and mentoring
- Salary
- Health Insurance
- Meaningful professional development
- Evaluation process
- Opportunity for advancement

- Overall experience

Finally, there was an opportunity for the employee to share additional comments. The exit survey results in September 2022 were lower than the results of the initial pilot (see Table 4). Because of the tweaks made between the pilot and final exit survey, not all questions have a comparison.

Table 4

District Ratings Comparing Pilot and Current Exit Survey

Category	Pilot Exit Survey Average Rating	Current Exit Survey Average Rating
Working relationship with supervisor	4.07	3.82
Campus support and mentoring	4.08	3.67
Evaluation process	3.96	3.57
Opportunity for advancement	3.52	3.00
District administration support	4.02	3.36
Overall district experience	4.16	3.75

Note. This table demonstrates the average responses of exiting employees, with 5 being the highest rating.

The exit survey captured valuable information to drive decisions related to teacher retention but did so after an employee leaves the district (Alexander, 2020). Since the primary aim of this study was to identify factors of teacher retention, the researcher recognized the value of asking current teachers about their reasons for remaining in the district.

Findings

The quantitative and qualitative findings indicated that more research was needed to pinpoint factors of teacher retention for this suburban school district. The current teacher exit survey system does not explain why a teacher left the district. Therefore, expanding the pilot teacher exit survey system to gather data is necessary to get a more accurate picture of targeted teacher retention factors.

However, the current pilot exit survey data indicated that professional development opportunities were ranked the district's best experience, with an average ranking of 4.38 on a 5-point scale. In comparison, the opportunity for advancement ranked the lowest, with an average ranking of 3.52. Although the literature did not indicate that the opportunity for advancement impacted teacher retention, the survey data showed otherwise. In addition, the opportunity for advancement may have been out of the district's control, so it wasn't easy to utilize this data point. However, this may be a topic for future study. Furthermore, the working relationship with the supervisor, campus support and mentoring, and district administration support all ranked below the overall district experience of 4.16, indicating a need to dive deeper into the culture and sense of belonging as a factor of teacher retention.

After analyzing interviews with three teachers in different stages of their careers, three themes emerged as teacher retention factors. The themes were campus culture, support, and confidence with lesson delivery and classroom management. Within the campus culture theme, there was the need for two subthemes of a sense of belonging and teacher buy-in. Finally, confidence with lesson delivery and classroom management had a subtheme of professional development that replaced the lesson delivery and classroom management theme.

Campus Culture

Campus culture emerged as a factor of teacher retention that needed subthemes to capture data adequately. The subthemes were Sense of Belonging and Teacher Buy-In.

Sense of Belonging. Opportunities to plan with their colleagues during the school day helped each participant with a sense of belonging. Sarah and Courtney added that although planning together as a team is mandatory one time a week, their teams typically come together informally several days a week. They both felt coming together with their colleagues helped them feel a part of the team. Sarah went on to say—

"The environment the teachers around make you feel like you are on the same page. I've had a positive experience on my campus where teachers are always lifting each other up with encouragement; feel like on the same team, there's not a lot of negative talk."

Christy and Courtney spoke of opportunities to come together in a noninstructional or "fun" way. Courtney's campus instituted a unity team to boost morale and provide opportunities for teachers to come together in a social setting. Christy's campus does "Friyay instead of Friday where they do fun things like bring snacks or do incentives throughout the year."

A surprising observation came about with sense of belonging. Courtney shared she was transferred from one campus to another due to enrollment numbers. Her previous campus was an older building where all classrooms were in a long hallway, while her current campus was more modern, with the classroom layouts in grade-level pods. The long hallway did seem like a long walk from one location to another, increasing transition times. Still, it provided opportunities to see other grade-level classes and their work displays. The grade-level pods at her current campus allow for less transition time and distractions, but interactions with the different grade levels were minimal. Courtney shared, "The con with pods is you can feel like

you are on an island with your team." My hunch is that the authentic interactions created by the long hallway allowed for a sense of belonging to develop with more than just her grade-level team.

Teacher Buy-in. Both Sarah and Christy shared perspectives about campus leaders providing opportunities to voice their opinion resulting in teachers having a voice and buy-in with decisions. Christy described her administrator's willingness to go above and beyond hearing teachers' concerns through climate control meetings every six weeks. She shared:

"Our voice is heard through climate control meetings...very much feeling it's a partnership. They want us to know they work for us and want to know how to make our jobs easier."

Sarah and Christy felt their voices were heard and bought into the campus administration's decision-making. However, both mentioned situations with student discipline where they were not as bought into the decision-making. Sarah included the following statement in her interview:

"I would say the only thing that is lacking that would make it a disciplinary actions the administrator takes more of the lead when the teacher is the one on the ground with it, so that may be the only thing that teachers' voices could be heard more."

Courtney did not share information about her campus providing teacher voice or buy-in opportunities but stressed the importance of having the administrator's support.

Support

Another critical factor in teacher retention emerged as more support from leaders. All three participants spoke of how campus leaders supporting their efforts impacted their decision to stay at the campus, as evidenced by the following quotes:

"The support made me trust my administrator. She was always doing temperature checks just to make sure I was ok."

"It's all of the support that makes me feel like I can do this job. It is not an easy job, but it is doable."

"I feel pretty blessed, and the supports are there. I have friends who teach in other districts, and we have it really good."

Courtney shared a story about a time when her administrator came into the room to do a walk-through. A student had spilled milk on the carpet, and her class was chaotic—she equated it to a "dumpster fire." The principal politely said, "It looks like you have your hands full right now. I will come back in a bit." Courtney felt this type of support was a factor in her decision to stay at the campus.

Christy, a veteran teacher of 27 years, pointed out that her principal supported her by allowing her the autonomy to teach the way she knew best. She indicated that the principal did not require her to use the district curriculum because she had successfully taught the course for many years.

Confidence with Lesson Delivery and Classroom Management

As expected, the most veteran teacher indicated that she was comfortable with both lesson delivery and classroom management. In contrast, the first-year teacher quickly pointed out classroom management as an area of need. Each participant spoke of their confidence level through a lens of professional development, and so the profession development subtheme emerged.

Professional Development. Sarah, the first-year teacher, found professional development as something to look forward to in becoming a better teacher, and identified a recent session she found purposeful. She indicated that she would like to dive more into content professional development when she became more confident with classroom management. The willingness to plan for future growth as a teacher indicated her plans to remain a teacher.

On the contrary, Christy and Courtney viewed professional development as something they must endure, with occasional learning opportunities. Christy stated, "Staff development is what it is," Courtney said, "I feel like I wasted an entire day listening to how to do small group reading, then have to spend a half-day trying to feverishly plan out a schedule." My hunch is that professional development must be purposeful and personalized to be considered a factor in teacher retention.

My findings on the three themes of campus culture, support, and teacher confidence in lesson delivery and classroom management provide a road map for future study. The campus structures put in place by leaders matter greatly in whether teachers want to remain at their campus. It was interesting to see the impact of professional development on teacher retention. Many districts tout strong professional development as a retention tool, but I found it necessary to be purposeful and personalized to retain teachers.

Trustworthiness

The researcher took measures such as member checking, triangulation of data, and reflexivity to enhance trustworthiness (Tygert, 2018). For member checking, the interviewees reviewed a copy of the interview transcription to check for accuracy in interpretation. As a means of triangulation, teacher surveys, and interview data were used to find evidence of the

emerging factors for teacher retention. Finally, throughout the study, the researcher was transparent in the purpose of this study and her role in the district.

Ethics

The researcher's purposive efforts to adhere to ethical principles in addressing both conflicts of interest and the perception of power are acknowledged. However, the researcher's position in the district as the Associate Superintendent of Human Resources can skew the data by not eliciting authentic participant responses. Transparency efforts made to lessen this included the researcher's informing participants of her position and the purpose of interactions with the teacher surveys and interviews.

Discussion

This study set out to identify the factors of teacher retention and the impact of campus culture and sense of belonging on teacher retention. With so many human aspects to consider, narrowing down the factors of teacher retention proves to be difficult. Rose and Sughrue (2020) points out teacher retention being studied for years but continues to be a problem.

The exploration of several themes throughout this study demonstrated that teacher retention is a complex problem. This study's quantitative and qualitative data uncovered campus culture complexities and a connection to teacher retention. The literature reviews and teacher interviews show that teachers value having input on decision-making, want to feel supported by their campus administrators, and need a sense of belonging.

Input on decision-making or teacher's voice, identified as a possible factor of teacher retention in the literature review, did not appear significant in this study's data. The data may not accurately convey the teacher's voice being a priority with teacher retention because most

participants specified, they would return to the same campus next year. An extension of this study should include participants who plan to leave the campus or district.

Egalite et al. (2014) elucidate the fact that teacher perception of leadership and campus culture influences teachers' decisions to remain at the school. For example, one interviewee pointed out that a prior campus's lack of administrator support was the deciding factor for leaving. At the same time, survey data showed administrator support is a reason for staying. Although this study did not focus on administrator support per se, it does show the need for future studies that might include an operational definition and exemplars of administrator support.

There is a strong need for teachers to have a sense of belonging. The participants in both the survey and the interviews felt their current campus made efforts for teachers to connect professionally and personally. However, as one interview indicated, the physical layout of a school building impacts connecting with others. For example, the long hallway design of older buildings allowed for connections with teachers outside of one's team. At the same time, newer pod designs allowed for deeper relationships within the group but limited access to others in the building. Although not a concentration of this study, it is interesting that the design of a building could impact teacher retention.

Field notes spawned the need to investigate how professional development impacts teacher retention. Zhang (2016) found professional development higher than salary when ranking factors of teacher retention. However, this study found that professional development, while valuable, can also be viewed as compliance. When asked about purposeful professional development, veteran teachers had long pauses. They affirmed a need for professional development but preferred a more personalized or differentiated approach.

Although themes of teacher retention emerged in this study, the intricacies of each theme could result in additional research. Findings imply the need to design a system to measure campus culture with teachers planning to remain at the campus and those planning to leave. Additionally, a teacher's inherent need for connection made it abundantly clear that bolstering one's sense of belonging has a place when studying teacher retention.

Conclusion

The results of this study give both factors of teacher retention and a starting point for a deeper dive. The factors of teacher retention identified in this study are campus culture and a sense of belonging. The literature review indicated another factor, recruiting and hiring practices, but this study did not find that to be a factor. Campus culture emerged not only as critical in teacher retention but extremely difficult to define and measure. Furthermore, a teacher's sense of belonging may have as great of an impact but is often overlooked in structures and systems.

Recommendations

Having analyzed the data collected and reviewed the literature, it is essential to proactively gather teachers' insights before they decide to stay or leave the district; this is to improve the understanding of factors influencing teacher retention and inform future decision-making. I therefore recommend administering a stay survey as a proactive, systematic way to gain insight into teachers' perceptions that influence where they teach.

Although data is available through an exit survey, it acts as an autopsy. It does not allow the district to intervene before an employee resigns. In addition, an exit survey, if not mandatory, may draw responses from negative employees only. This skew in data might spawn

the district to provide nonproductive interventions to improve teacher retention. Hence, routinely providing opportunities for teachers to share their perceptions via a stay survey would be a more proactive measure. A stay survey tends to solicit responses from happy and unhappy employees, creating a more well-rounded reply. Finally, introducing a stay survey will allow teachers to freely share their opinions and foster a sense of ownership and engagement, establishing a system of teacher buy-in.

DESIGN BASED IMPLEMENTATION RESEARCH STUDY

Teacher retention plays a crucial role in the overall success of the education system. However, determining the precise elements contributing to retaining teachers can be challenging due to the multifaceted nature of the various factors involved. Nevertheless, identifying specific factors for school districts to focus their efforts, rather than relying on trial and error, can yield a significant payoff. By narrowing down their approach, school districts can enhance their understanding of the factors that directly impact teacher retention, ultimately leading to more effective and targeted retention initiatives.

Problem of Practice

The annual attrition rate of 13% among teachers within a large suburban district presents a significant challenge, exerting adverse effects on student achievement and imposing financial constraints. Thus, it is imperative to identify the factors that contribute to teacher retention. To gain insights into the reasons that influence teachers' decisions to stay or leave, it is crucial to ask teachers themselves directly. This study will employ a teacher stay survey as an intervention to uncover the key factors affecting teacher retention within the district. By understanding these factors, targeted adjustments and strategies can be deployed to improve teacher retention and create a more stable school system.

Review of Literature

Beyond external factors related to students' home environments, teachers significantly influence student achievement (Opper, 2019; Robertson-Kraft & Zhang, 2018). A dollar value cannot be placed on teachers' impact on student achievement and their future successes.

However, Reichardt et al. (2020) maintained that students who receive instruction from

experienced and highly qualified teachers tend to achieve at higher levels than those taught by teachers with less tenure. Because of teachers' pivotal role in our education system, keeping high-quality teachers in the classroom is vital.

In the 1990s, Darling-Hammond (2003) identified that the rate of teachers leaving the profession exceeded the speed at which teachers were entering. Since then, researchers have studied teacher retention, yet they have not discovered a definitive solution (Rose & Sughrue, 2020). The multitude of human factors contributing to teacher perceptions could be why recognizing a specific cause for high teacher turnover rates is challenging.

For instance, the elements of campus culture, administrator support, teacher-shared decision-making, and working conditions are difficult to measure effectively because of their reliance on human nature. Nonetheless, teachers' decisions to stay at a school are influenced by their perceptions of leadership and campus culture (Egalite et al., 2014). Kaiser and Thompson (2021) say the systematic support principals implement to foster campus culture directly affects teacher retention. Leaders who demonstrate empathy, actively listen to understand, and exemplify trusting behaviors tend to cultivate strong campus cultures that improve teacher retention (McKeown, 2022). Although listening is essential, a leader must rely on teachers to participate in decision-making, creating an environment where teachers want to stay (Moore et al., 2018). However, according to Podolsky et al. (2016), establishing favorable working conditions can significantly predict teacher retention. Within the wide range of working conditions, the relationship among teachers and social interactions to develop a sense of belonging is critical (Reitman & Karge, 2019; Moser & McKim, 2020).

The predominant approach to addressing the teacher shortage has been focused on increasing the production of new teachers (Ingersoll, 2022). However, this approach has not

worked. Therefore, capturing the voice of teachers is crucial since each educator has a unique perception of the factors that contribute to their decision to stay in a district. One way to gain input from teachers is by using an exit survey as a data collection method when an employee leaves (Alexander, 2020). However, this approach primarily serves as a reactive measure and fails to implement preemptive measures for teacher retention. Heubeck (2022) maintains that providing teachers the opportunity to participate in stay surveys allows a district to proactively gather data to make informed decisions on how to keep teachers.

By understanding the dynamic nature of teacher retention and reflecting on the challenges that have led to the current teacher shortage, we can establish a clear path to retaining a larger pool of teachers. Recognizing the substantial influence of teacher retention on student achievement, it becomes essential to identify and address the key elements contributing to retaining educators.

Method

This improvement science Design-Based Implementation Research (DBIR) uses a mixed-method research design to ascertain the primary drivers of teacher retention. Improvement science revolves around the implementation of iterative cycles of testing and learning, employing the repeated Plan-Do-Study-Act (PDSA) framework (Lemire et al., 2017). The methodology of DBIR research aims to tackle ongoing problems of practice by fostering a connection between scholars and practitioners, thereby facilitating the integration of innovative solutions into practical settings (Hinnant-Crawford, 2020). A mixed-method research design is an approach in behavioral research that employs both qualitative and quantitative data collection techniques, integrates them, and assesses the collective effectiveness of each (Merriam & Tisdell, 2016).

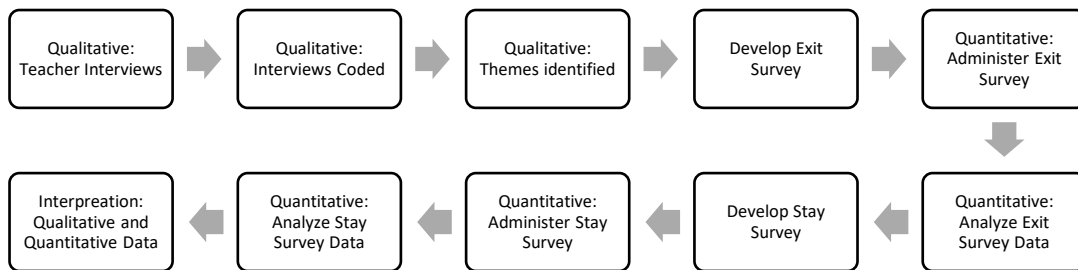
Combining qualitative and quantitative data can adequately answer the following research questions through comprehensive collection and analysis.

1. What are the main factors that influence teacher retention in a large suburban school district?
2. How can stay surveys be used to identify the critical factors in teacher retention?

Theory of Change

This study employed a continuous improvement cycle to strengthen teacher retention by actively soliciting feedback from educators on the factors influencing their decisions to stay or leave. The process initiates with an in-depth analysis of root causes that fall within the control of the school district and can impact teachers' choices. These factors encompass aspects such as campus culture, compensation packages, staff development and curriculum, and the sense of belonging experienced by teachers.

To comprehensively understand the factors contributing to teacher retention, a mixed-method exploratory design was utilized in conjunction with an instrument development model (Creswell & Plano Clark, 2011). This approach culminated in creating a stay survey and analyzing both qualitative and quantitative data, as depicted in Figure 6. The qualitative insights from teacher interviews highlighted the need for an exit survey to understand why teachers leave the district. Recognizing the reactive nature of the data obtained from the exit survey, a proactive approach was adopted, creating a stay survey. The data collected from the stay survey played a pivotal role in identifying the factors that impact teacher retention.

Figure 6*Mixed-Method Exploratory Design Instrument Development Model*

Note. Adapted from Creswell and Plano Clark (2011).

Study Setting

This study examined the issue of teacher retention within a large suburban school district comprising approximately 49,000 students. The teaching staff in this district consists of 3,800 individuals with a diverse ethnic composition. Among them, about 50% identify as White, followed by 35% as Hispanic, 10% as African American, and 3% as Asian. A significant portion of the teaching staff, more than half, have less than 10 years of teaching experience. The district manages to retain approximately 86% of its teachers annually. Student demographics indicate a significant majority of Hispanic, accounting for 83% of students. The remaining student population comprises diverse cultural backgrounds, including 7% African American, nearly 6% White, and 3% Asian. In addition, 29% of students in the district are emergent bilingual learners. Furthermore, almost 80% of students are economically disadvantaged.

In recent years, the district has significantly emphasized fostering a positive campus culture through professional development efforts for campus administrators to enhance teacher retention. However, there are no current systems to measure campus culture adequately. Significant resources provide teachers with professional development and coaching

opportunities, viewed as a district strength. Additionally, the district uses the motto of "family atmosphere," but no measures are in place to verify the atmosphere.

The Texas Education Agency has assigned a "B" rating to the district. However, there is notable inconsistency in academic achievement across different campuses. Therefore, exploring teacher retention may offer valuable insights and guidance in addressing this issue.

Research Design

During this study's Plan-Do-Study-Act (PDSA) cycles, the need to develop a proactive data collection instrument, specifically a stay survey, surfaced in the third and concluding cycle. In the initial cycle, we collected existing teacher retention data and conducted a thorough literature review. Moreover, the second cycle involved an extension of the teacher exit survey, field notes, and the facilitation of teacher interviews to gather additional insights.

Cycle One

The initial cycle of this study included examining already existing data. For example, district teacher retention reports and field notes collected by the researcher in her Associate Superintendent of Human Resources position in a large suburban district were examined to identify areas of need. Due to the nature of the researcher's role, the teachers she communicated with were typically unsatisfied with their teaching roles. Therefore, the examination of field notes yielded unhappy teachers' opinions but did not uncover trends in the factors of teacher retention. But instead, they illuminated the need to create an effective way to solicit and capture teachers' opinions.

The district's teacher retention reports, stored within their human resource system, exhibited inaccuracies in teacher retention data. Consequently, the researcher relied on data

from the Texas Education Agency's Texas Academic Performance Report (TAPR) as a source of baseline teacher retention information (see Table 5).

Table 5

District Texas Education Agency, TAPR Teacher Turnover Rate

Year	Percentage
2019-2020	13.8%
2020-2021*	10.2%
2021-2022	13.5%

Note. * Denotes COVID-19 year.

The lack of accurate data spurred the researchers to investigate ways to survey teachers about why they left the district, leading to another PDSA cycle.

Cycle Two

Cycle one illuminated the need to find a way to effectively collect teacher opinions about why they stay with the district. The researcher then investigated the district's practice of exit interviews and found an antiquated system that did not provide a mechanism to collect data effectively. Furthermore, the researcher interviewed three teachers to gather their insights and perspectives on why they remain in the district.

Exit Survey

To combat the need for an updated exit interview process, the researcher created an electronic exit survey housed on the Exiting Employee website within the Human Resource

page. Employees were neither encouraged nor discouraged from taking the exit survey. Nonetheless, the survey administered to departing employees asked them to evaluate their experience in the district across various categories, utilizing a rating scale ranging from poor to excellent. The scale was converted into numeric values to facilitate analysis, assigning the lowest value to poor and the highest to excellent. By calculating the average rating for each category, the study found a starting point for identifying crucial factors influencing teacher retention in the district (see Table 6).

Table 6

Pilot Exit Survey District Ratings

Category	Average Rating
Working relationship with supervisor	4.07
Campus support and mentoring	4.08
Employee benefits and salary	4.06
Professional development opportunities	4.38
Evaluation process	3.96
Opportunity for advancement	3.52
District administration support	4.02
Overall district experience	4.16

Note. This table demonstrates the average responses of exiting employees, with 5 being the highest rating.

The superintendent, associate superintendent of human resources, other human resource department administrators, teachers, and principals came together to form a Network Improvement Community (NIC) to evaluate the exit survey instrument. In addition to slightly

adjusting the questions, the NIC proposed automating the exit interview process to collect more comprehensive data. Table 7 shows data collected from the updated exit survey.

Table 7

District Ratings Comparing Pilot and Current Exit Survey Results September 2022

Category	Pilot Exit Survey Average Rating	Current Exit Survey Average Rating
Working relationship with supervisor	4.07	3.82
Campus support and mentoring	4.08	3.67
Evaluation process	3.96	3.57
Opportunity for advancement	3.52	3.00
District administration support	4.02	3.36
Overall district experience	4.16	3.75

Note. This table demonstrates the average responses of exiting employees, with 5 being the highest rating.

The exit survey serves as a valuable tool for gathering information that informs decisions regarding teacher retention, but it does so after an employee has already left the district (Alexander, 2020). Recognizing the primary objective of this study, which was to identify factors influencing teacher retention, the researcher acknowledged the importance of seeking input from current teachers regarding their reasons for staying in the district.

Teacher Interviews

Reichardt et al. (2020) state that teachers with greater experience significantly impact student achievement. Thus, the researcher sought the perspectives of teachers with varying

levels of teaching experience. The researcher interviewed three teachers, employing various interview structures tailored to their respective years of teaching experience (see Table 8). The most experienced teacher underwent a loosely structured interview protocol, allowing her to elaborate on her extensive knowledge. Conversely, the least experienced teacher participated in a highly structured interview protocol.

Table 8

Interview Participants' Years of Teaching Experience

Participant	Years of Teaching Experience	Type of Interview Conducted
1	1	Highly Structured
2	8	Semi-Structured
3	27	Loosely Structured

Conducting teacher interviews yielded a deeper understanding of the factors influencing teacher retention. Three prominent themes emerged from these interviews: campus culture, support, and confidence in lesson delivery and classroom management. Two subthemes emerged within the campus culture theme: a sense of belonging and teacher-shared decision-making.

Using exit surveys and teacher interviews offered valuable insights into the factors impacting teacher retention. However, they did not fully address the research questions at hand. As a result, the researcher explored alternative approaches to address these research inquiries. Moreover, recognizing the retrospective nature of the exit survey administered to teachers after

they had already decided to leave the district, it became necessary to develop and conduct a proactive teacher stay survey.

Cycle Three

To address the issue of teacher retention, an intervention in the form of a stay survey was developed and administered with the objective of gathering data on the influence of campus culture and a teacher's sense of belonging on teacher retention. Stay survey questions were selected from multiple sources and compiled to create a 13-question stay survey using Likert-scale responses ranging from "Never" to "Always" (see Figure 7).

The researcher implemented a short survey design to increase the response rate. The survey was emailed to teachers in February, allowing for voluntary and anonymous participation. The researcher adapted three survey questions (2, 10, and 11) from the Revised School Level Environment Questionnaire (Johnson et al., 2007). Furthermore, the researcher derived questions 1, 3, and 4 from the School Climate Survey (Liu et al., 2014). Lastly, questions 9, 12, and 13 were sourced from the Teacher Subjective Wellbeing Questionnaire (Renshaw, 2020).

Results

The qualitative results provided great value in guiding the development of the stay survey. Moreover, the quantitative results of this study identified two statistically significant factors of teacher retention.

Qualitative

The qualitative data in this study originated from field notes and teacher interviews. The researcher, who held the position of Associate Superintendent of Human Resources in a large

suburban school district, collected the field notes. Compiling these field notes over three months established a groundwork for the study. The researchers later coded the handwritten notes where the importance of exploring campus culture in relation to teacher retention became apparent.

Figure 7

Anywhere ISD Teacher Stay Survey

Stay Survey

Retaining teachers is a priority in Anywhere ISD. We value your opinion and ask that you take this Stay Survey to help us better serve you.

Likert scale

Always, Almost Always, Often, Sometimes, Seldom, Never

Campus Culture

1. I look forward to each working day at my school.
2. Teachers are frequently asked to participate in decisions.
3. Goals and priorities for the school are clear.
4. The principal consults with staff before making decisions affecting teachers.
5. I feel satisfied with how students are treated at our school.
6. I am given opportunities to learn and grow.
7. My school invests in me as a teacher.
8. I am provided regular feedback that helps me become a better teacher.

Sense of Belonging

9. I am treated with respect at my school.
10. I have regular opportunities to work with other teachers.
11. There is good communication among teachers.
12. I can really be myself at our school.
13. I feel like people at our school care about me.

Note. Teachers were given the survey in an electronic format.

Furthermore, teacher interviews were conducted with three teachers, then coded for analysis, and pseudo-names were assigned for the study. The data analysis revealed three themes that emerged as significant factors influencing teacher retention. These themes encompassed campus culture, support, and confidence in lesson delivery and classroom management. Two

subthemes surfaced within the campus culture theme: a sense of belonging and teacher-shared decision-making. Additionally, the subtheme of professional development replaced the original theme of lesson delivery and classroom management.

Campus Culture

The factor of campus culture surfaced as a crucial element affecting teacher retention, necessitating the inclusion of subthemes to capture the data effectively. These subthemes are a teacher's sense of belonging and shared decision-making.

Sense of Belonging. Sarah and Courtney expressed that the opportunities to engage in collaborative planning with their colleagues during the school day significantly contributed to their sense of belonging. They further mentioned that while there was a mandatory weekly team planning session, their teams typically gathered informally and planned together multiple times throughout the week. Both Sarah and Courtney emphasized that these regular interactions with their colleagues helped foster a strong sense of being part of a team. Sarah elaborated by stating—

"The environment the teachers around make you feel like you are on the same page. I've had a positive experience on my campus where teachers are always lifting each other up with encouragement; feel like on the same team, there's not a lot of negative talk."

Christy and Courtney highlighted the importance of noninstructional or "fun" activities that allow teachers to come together in a social context. Courtney's school implemented a unity team to boost morale and facilitate opportunities for teachers to connect beyond their instructional duties. On the other hand, Christy's school celebrated "Friyay" instead of Friday, incorporating enjoyable elements such as snacks and incentives throughout the year. These initiatives serve as

opportunities for teachers to engage in enjoyable activities and further strengthen the sense of camaraderie within their respective campuses.

Teacher-Shared Decision-Making. Both Sarah and Christy expressed their views on campus leaders, providing opportunities for teachers to voice their opinions, leading to a sense of empowerment and buy-in regarding decision-making. Christy specifically mentioned her administrator's exceptional commitment to addressing teachers' concerns by conducting climate control meetings every six weeks. She further elaborated by sharing this:

"Our voice is heard through climate control meetings...very much feeling it's a partnership. They want us to know they work for us and want to know how to make our jobs easier."

Sarah and Christy experienced a sense of their voices being valued and actively participating in the decision-making processes of the campus administration. However, they both acknowledged instances, particularly regarding student discipline, where their level of buy-in was not as strong. Sarah emphasized her perspective on this matter by including the following statement during her interview:

"I would say the only thing that is lacking that would make it a disciplinary actions the administrator takes more of the lead when the teacher is the one on the ground with it, so that may be the only thing that teachers' voices could be heard more."

Support

All three participants identified increased support from campus leaders as another crucial factor influencing teacher retention. They emphasized the positive impact of receiving support from their leaders on their decision to remain at the campus. This is evident from the following quotes provided.

"The support made me trust my administrator. She was always doing temperature checks just to make sure I was ok."

"It's all of the support that makes me feel like I can do this job. It is not an easy job, but it is doable."

"I feel pretty blessed, and the supports are there. I have friends who teach in other districts, and we have it really good."

Additionally, Christy, an experienced teacher of 27 years, spoke of the support she received from her principal, particularly in granting her the autonomy to use her preferred curriculum. She mentioned that her principal did not enforce the use of the district curriculum for her because she had a proven track record.

Confidence with Lesson Delivery and Classroom Management

As anticipated, lesson delivery and classroom management were areas of confidence for the veteran teachers. Conversely, the first-year teacher promptly identified classroom management as needing improvement. Each teacher discussed their confidence level with a focus on professional development, leading to the emergence of the subtheme of professional development.

Professional Development. Sarah, a first-year teacher, expressed a positive outlook on professional development as an opportunity to enhance her teaching skills. Sarah mentioned her desire to engage further in content-focused professional development once she becomes more confident in classroom management. Her willingness to plan for future growth as a teacher demonstrates her commitment to remaining in the profession.

In contrast, Christy and Courtney perceived professional development as something they had to endure, with only sporadic opportunities for genuine learning. Christy stated, "Staff development is what it is," Courtney said, "I feel like I wasted an entire day listening to how to

do small group reading, then have to spend a half-day trying to feverishly plan out a schedule." Based on this insight, I believe that for professional development to be a significant factor in teacher retention, it needs to be purposeful and personalized to meet the individual needs of teachers.

I have identified a roadmap for future studies based on my findings regarding the three themes of campus culture, support, and teacher confidence in lesson delivery and classroom management. It became evident that the campus structures established by leaders play a significant role in influencing teachers' desire to remain at a particular campus, springboarding the need to further investigate campus culture and a teacher's sense of belonging.

It was intriguing to observe the impact of professional development on teacher retention. While many districts emphasize the importance of robust professional development as a retention tool, my research highlighted the necessity for it to be purposeful and personalized to retain teachers effectively.

Trustworthiness

To ensure the study's trustworthiness, the researcher implemented several measures, including member checking, data triangulation, and reflexivity, as Tygret (2018) recommend. For member checking, the interviewees were provided with the opportunity to review the transcripts of their interviews to verify the accuracy of the interpretations made. To employ triangulation, both teacher surveys and interview data were utilized to corroborate the emerging factors influencing teacher retention. Furthermore, throughout the study, the researcher maintained transparency regarding the purpose of the research and her role within the district.

Ethics

The researcher's diligent commitment to upholding ethical principles and addressing conflicts of interest and power dynamics is duly recognized. Nevertheless, it is essential to acknowledge that the researcher's role as the Associate Superintendent of Human Resources in the district could potentially influence participant responses, potentially leading to skewed data. To mitigate this, transparency measures were implemented, including the researcher's disclosure of her position and the clear communication of the purpose behind the teacher surveys and interviews. These efforts aimed to foster an environment of openness and ensure that participants were fully informed about the research process.

Quantitative

This study utilized the stay survey as an intervention for teacher retention and as the primary data collection tool, drawing on the information gathered from three PDSA cycles. Approximately 3,800 teachers received the survey via email, resulting in 1,518 responses, with 1,040 of them being complete. This study exclusively utilized complete responses. Within the scope of this study, it is essential to acknowledge that teacher demographics were not investigated.

An exploratory factor analysis (EFA) was conducted to determine the latent structure of a teacher stay survey designed to measure the effects of campus culture and teachers' sense of belonging on teacher retention. Before data analysis, the assumptions of the technique were evaluated. The results of Mardia's test of multivariate normality indicated issues with multivariate skewness, $p < .001$ and kurtosis, $p < .001$. Additionally, the results of Barlett's ($\chi^2(8) = 7251, p < .001$) and the Kaiser-Meyer-Olkin (MSA = 0.899) tests suggest that the data

are sufficiently correlated. Finally, the sample size is well above the threshold of 300, and the Likert scale has five categories.

The principal-axis-factoring estimation method was used because the Maridia multivariate normality test is violated due to skewness and kurtosis being statistically significant with $p < .001$. An oblique rotation (Promax) was also used because the extracted factors were expected to be correlated. Factor loadings above .30 signaled that an item loaded onto extracted factors meaningfully.

The number of factors to retain was determined using Kaiser's little jiffy, scree plot, and parallel analysis. The scree plot and parallel analysis indicated three factors should be extracted, while Kaiser's little jiffy suggested a 2-factor solution was optimal. I selected the 3-factor solution based on the findings of the parallel analysis, which indicated the necessity of retaining three factors. Parallel analysis is widely recognized as the most accurate method for determining the number of factors, hence my decision. The pattern coefficient matrix was formed (see Table 9).

The first factor, titled "Campus Culture," was designated as such because the questions were organized in a manner that encompassed what Eller and Eller (2017) referred to as the "soul of the school." In contrast, the second factor, "Sense of Belonging," revolved around teachers' opportunities to collaborate, be treated with respect, and experience a sense of care. Lastly, the third factor, "Shared Decision-Making," emerged from questions that focused on soliciting teacher input.

Cronbach's alpha was used to measure reliability. The campus culture subscale consisted of five items ($\alpha = .87$), the sense of belonging subscale consisted of four items ($\alpha = .80$), and the

shared decision-making subscale consisted of two items ($\alpha = .89$). All subscales fall in the range of acceptable internal consistency. Therefore, the stay survey's reliability is sufficient.

Table 9*Teacher Retention Pattern Coefficient Matrix*

	Campus Culture (Factor 1)	Sense of Belonging (Factor 2)	Shared Decision- Making (Factor 3)
Learn and Grow, Q6	0.913		
Feedback, Q8	0.829		
Invests in Me, Q7	0.754		
Student Treatment, Q5	0.637		
Be Myself, Q12	0.612		
People Care, Q13		0.850	
Treated with Respect, Q9		0.806	
Communication b/t Teachers, Q11		0.704	
Work with Other Teachers, Q10		0.524	
Principal Consults Teachers, Q4			0.775
Teachers in Decision-Making, Q2			0.765

Note. The applied rotation method is Promax.

Ordinal logistic regression was performed in JAMOV I to determine the impact of campus culture, sense of belonging, and shared decision-making on a teacher's decision to stay at a campus. The logistic regression model was statistically significant, $\chi^2(3) = 469, p < .001$, suggesting that the independent variables had a statistically significant effect on the likelihood of moving to a higher teacher stay category. McFadden's R-squared values were calculated to examine model fit. Adequate predictive quality is indicated when the R-squared values of

McFadden's model surpass the threshold of .20. McFadden's R-squared values suggest the regression model approaches a good fit to the observed data ($R^2_{mf} = .18$).

Wald's Criterion revealed a significant relationship between campus culture and a teacher's decision to stay at a campus, with $\chi^2 = 14.01$, $p < .001$. The odds ratio indicated campus culture values correspond with increasing odds of moving up categories ranging from "Never" to "Always" ($OR = 1.38$). The higher the campus culture values, the more likely the respondent is to respond with "Always." Additionally, the results indicated a significant relationship between shared decision-making and a teacher's decision to stay, with $\chi^2 = 2.61$, $p = .009$. The odds ratio indicated shared decision-making values correspond with increasing odds of moving up categories ranging from "Never" to "Always" ($OR = 1.11$). The higher the shared decision-making response value, the more likely the respondent is to respond with "Always." Sense of belonging was not a significant predictor of a teacher's decision to stay. Regression coefficients are presented in Table 10.

Discussion

This study intended to identify factors of teacher retention and how stay surveys could impact teacher retention. By conducting multiple PDSA cycles, quantitative and qualitative data collection methods were utilized to uncover critical insights into teacher retention factors. The analysis revealed the emergence of significant factors such as campus culture, teacher sense of belonging, and teacher-shared decision-making. While acknowledging that these factors are not exhaustive in determining a teacher's decision to stay or leave, it is essential to recognize that school districts have the ability to exert influence and take steps to improve these areas.

The analysis of initial qualitative data immediately highlighted the significance of campus culture as a critical factor in teacher retention. However, defining and understanding campus culture proved challenging because of its multifaceted nature. To unravel the complexities of campus culture, qualitative methods such as field notes and teacher interviews played a crucial role. These methods provided valuable insights into campus culture's various components and subthemes. One such subtheme identified was a teacher's sense of belonging, which is integral to understanding how teachers fit into the more extensive system of the school. Including teachers in the decision-making process was also identified as another crucial aspect of campus culture. Despite the intricate nature of campus culture, these two factors emerged as significant stand-alone components within the broader context of campus culture.

Table 10

Ordinal Logistic Regression Predicting a Teacher's Decision to Stay on Campus Culture, Sense of Belonging, and Shared Decision-Making

Variable	b	SE	Wald	p	Odds Ratio
Campus Culture*	0.32	0.02	14.01	< .001	1.38
Sense of Belonging	0.01	0.01	0.75	0.44	1.01
Shared Decision-Making*	0.10	0.04	2.61	0.00	1.11

Notes. * Indicates statistically significant.

Although the initial intent of the stay survey was not to gather data on teacher-shared decision-making, the exploratory factor analysis (EFA) revealed it as a separate factor of teacher retention. Additionally, the ordinal regression found teacher-shared decision-making statistically

significant, indicating that it impacts teacher retention. Furthermore, the analysis of the stay survey noted that campus culture also influences teacher retention. Surprisingly, a teacher's sense of belonging did not show statistical significance in this study, raising questions about the contrasting quantitative and qualitative results surrounding a teacher's sense of belonging.

Conclusion

The findings of this study revealed that both campus culture and teacher-shared decision-making are significant factors in teacher retention. Including the stay survey as a research tool proved valuable in identifying these retention factors. However, it is noteworthy that the current analysis did not replicate the previous qualitative data findings regarding a teacher's sense of belonging contributing to their decision to stay or leave.

Recommendations

I recommend the continued use of the stay survey as a valuable tool to delve deeper into the factors contributing to teacher retention within the district. To enhance the survey's effectiveness, it is suggested that its scope be expanded by incorporating specific questions that can shed light on the impact of a teacher's sense of belonging on their decision to stay or leave. Additionally, collecting demographic data through the stay survey would enable a more personalized approach to identifying and targeting areas for improvement. This approach recognizes that the factors influencing the retention of veteran teachers may differ significantly from those affecting beginning teachers.

CONCLUSION AND RECOMMENDATIONS

Teacher retention is essential because of the impact teachers have on student achievement. However, more teachers are leaving the profession than entering (Darling-Hammond, 2003). The most prevalent solution to this problem has been to produce more teachers (Ingersoll, 2022). Unfortunately, the "produce more teachers" approach has not worked, for there continues to be a teacher shortage (Rose & Sughrue, 2020). Hence the need to focus on ways to retain teachers.

Discussion

This study's objective was to address teacher retention within a large suburban district, where the annual teacher attrition rate stands at approximately 13%. The departure of teachers not only poses a significant challenge for the district but also places a substantial financial burden on an already constrained budget, with the cost of onboarding a new teacher estimated to be upwards of \$18,000 (Podolsky et al., 2019). Furthermore, research has demonstrated the positive impact of experienced teachers on student achievement (Reichardt et al., 2020). Identifying factors influencing teacher retention has the potential to drive district improvement and enhance overall educational outcomes for students.

A robust approach to analyzing both quantitative and qualitative data, shedding light on the complex dynamics associated with teacher retention, was used in this study. Extensive exploration of existing literature revealed the intricate nature of teacher retention, making it challenging to attribute it to a single cause. Because of the human factors that motivate a teacher to stay or leave, a thorough investigation is necessary to examine the interplay of multiple interconnected human factors that influence teacher retention. These human factors are hard to

define and prove harder to identify; therefore, this study needs to develop a mechanism to ascertain input from teachers.

Implementing a series of iterative Plan-Do-Study-Act (PDSA) cycles ensures a focused and refined study scope to unfold and blossom into usable information so the district can make positive changes that impact teacher retention. The initial cycle involved reviewing relevant literature and examining field notes, serving as valuable guidance for subsequent investigations. Although there were hunches about why teachers leave a district, the literature helped narrow this study's scope—using this iterative process to help to recognize the importance of capturing teachers' perspectives as the most effective means of understanding teacher retention. By prioritizing teachers' insights and experiences, the study aimed to uncover valuable insights that can inform strategies and interventions to improve teacher retention in the future.

Therefore, in the second PDSA cycle, an exit survey and teacher interviews were used to gain valuable insight. These two instruments served as practical tools for examining the influence of campus culture and teachers' sense of belonging as potential contributors to teacher retention. While the literature highlighted teacher-shared decision-making as a possible factor, the data collected in cycle two from teacher interviews and exit surveys did not corroborate this finding. This intriguing result might be attributed to the timing of the exit survey, which was administered after a teacher had already decided to leave. Consequently, a more proactive approach to collecting teachers' perspectives is warranted.

During the third cycle, a teacher stay survey was developed and implemented. The survey specifically targeted aspects related to campus culture and teachers' sense of belonging, which were determined as significant factors in teacher retention based on a thorough review of literature, teacher interviews, and analysis of exit survey data. With an impressive response rate

of over 1,000 complete surveys, the study was able to leverage an ordinal logistic regression statistical analysis model. This model allowed for predicting a teacher's decision to stay based on their responses to questions within the categories of campus culture, teacher-shared decision-making, and teachers' sense of belonging.

The analysis revealed that higher scores on questions related to campus culture and teacher-shared decision-making questions positively impacted a teacher's inclination to stay within the district. Conversely, the quantitative analysis did not demonstrate a significant correlation between higher scores on teachers' sense of belonging and their decision to stay. However, I believe that creating an environment where solid interpersonal relationships exist among teachers does play a role in a teacher's decision to remain on a campus.

This study effectively answered the research questions of identifying factors of teacher retention and how a stay survey could aid in the process. However, this study does not give guidance or identify strategies to improve campus culture, teachers' sense of belonging, or teacher-shared decision-making.

Conclusions

The findings of this study revealed that campus culture plays a crucial role in predicting a teacher's decision to stay at a particular campus. Campus culture encompasses other significant factors, including teacher-shared decision-making and teachers' sense of belonging. Additionally, this study identifies teacher-shared decision-making as a predictor of teacher retention, but teachers' sense of belonging was not so identified. Interestingly, qualitative analysis suggested that teachers' sense of belonging influenced teacher retention, but the quantitative analysis using ordinal logistic regression did not support this finding. Therefore, the

disparity surrounding the impact of teachers' sense of belonging necessitates further investigation before making any definitive conclusions about including or excluding it from the equation of predictors for teacher retention.

Recommendations

While this study successfully identified campus culture and teacher-shared decision-making as influential factors in teacher retention, it did not propose specific solutions. Instead, it primarily focused on recognizing the problem. Moving forward, to address the issue of teacher retention effectively, it is imperative to allocate significant attention and resources to these identified factors. By proactively addressing and improving campus culture and enhancing teacher-shared decision-making practices, meaningful progress can be made in solving the challenge of teacher retention.

School Improvement

Due to teachers' influence on student success, a district must prioritize teacher retention by establishing ongoing feedback mechanisms with teachers. Furthermore, the district must demonstrate a willingness to make necessary adjustments to practices based on the received feedback. While exit and stay surveys can offer valuable and comprehensive data, their potential for driving improvement remains untapped if the input is not acted upon. Therefore, I recommend the continued use of exit and stay surveys to capture teachers' perceptions regarding the factors that contribute to their decisions to remain within the district.

The findings of this study indicate that campus culture and teacher-shared decision-making impact teacher retention, with the responsibility for these factors lying essentially with campus administrators. Therefore, I recommend that districts allocate resources to enhance the

capabilities of their campus administrators. More specifically, districts should offer continuous opportunities for administrators to refine their skills in servant leadership practices. By investing in the development of campus administrators, districts can create an environment conducive to positive campus culture and collaborative decision-making, thereby fostering teacher retention.

Future Research

Due to the lack of agreement between the qualitative and quantitative data regarding teachers' sense of belonging on teacher retention, further investigation is warranted. In addition, since this study did not consider teacher demographics, I recommend incorporating demographic variables to facilitate targeted adjustments in teacher retention efforts. For instance, tracking teacher responses over time can serve as a means to validate the finding of the stay survey and provide additional insights into the factors that contribute to teachers' decision to remain in the district.

References

- Alexander, J. (2020). The importance of exit interviews or strategic retention. *The Driller*, September 4, 2020.
- Ali, N. (2008). Factors affecting overall job satisfaction and turnover intention. *Journal of Managerial Sciences*, 2(2), 239-252.
- Balyer, A. (2017). School principals' views on administration work, their "frequent turnover" and its effects on their work. *The Qualitative Report*, 22(5).
- Bradbury, M. D., Martin, M., & Yokley-Krige, E. (2022). Book Review: The stay interview: A manager's guide to keeping the best and brightest. *Review of Public Personnel Administration*, 42(4), 789-794. <https://doi.org/10.1177/0734371X221093612>
- Bredeson, P. V. (2000). The school principal's role in teacher professional development. *Journal of In-Service Education*, 26(2), 385-401. doi: 10.1080/1367458000200114
- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2017). *Learning to improve: How America's schools can get better at getting better*. Harvard Education Press.
- Castro, A., Quinn, D. J., Fuller, E., & Barnes, M. (2018). Policy brief 2018-1: Addressing the importance and scale of the U.S. teacher shortage. *University Council for Educational Administration, UCEA Policy Brief, January 2018*.
- Chugh, A. (2021, November 29). *What is 'The great resignation'? An expert explains*. World Economic Forum. <https://www.weforum.org/agenda/2021/11/what-is-the-great-resignation-and-what-can-we-learn-from-it/>
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Sage Publications, Inc.
- Darling-Hammond, L. (2003). Keeping good teacher: Why it matters and what leaders can do. *Educational Leadership*, 60(8), 6-13.

Donaldson, M. L., & Johnson, S. M. (2011). Teach for America teachers: How long do they teach? Why do they leave? *Phi Delta Kappan*, 93(2), 47-51.

Egalite, A. J., Jensen, L. I., Stewart, T., & Wolf, P.J. (2014). Finding the right fit: Recruiting and retaining teachers in Milwaukee Choice Schools. *Journal of School Choice*, 8, 113-140. <https://doi.org/10.1080/15582159.2014.875418>

Eller, J., & Eller, S. (2017, August 3). *School culture: The essential elements of successful schools*. Solution Tree Blog. <https://www.solutiontree.com/blog/school-culture/>

Ergunay, O., & Adiguzmel, O. C. (2019). The first year in teaching: Changes in beginning teachers' vision and their challenges. *Qualitative Research in Education*, 8(3), 276-314. doi:10.17583/qre.2019.4016

Fox, M. (2022, May 10). *The great resignation has changed the workplace for good. 'We're not going back,' says the expert who coined the term*. CNBC. <https://www.cnbc.com/2022/05/10/-the-great-resignation-has-changed-the-workplace-for-good-.html>

Fisher, M. H. (2011). Factors influencing stress, burnout, and retention of secondary teachers. *Current Issues in Education*, 14(1).

Fullan, M., & Quinn, J. (2016). Coherence making: How leaders cultivate the pathway for school and system change with a shared process. *School Administrator*, June 2016.

Garcia, E., & Weiss, E. (2019). *The teacher shortage is real, large and growing, and worse than we thought*. Economic Policy Institute. <https://www.epi.org/publication/the-teacher-shortage-is-real-large-and-growing-and-worse-than-we-thought-the-first-report-in-the-perfect-storm-in-the-teacher-labor-market-series/>

Gais, T., Backstrom, B., Malatras, J., & Park, Y. J. (2018, March 22). The state of the New York teacher workforce. *Rockefeller Institute of Government*.

Glossary of Education Reform. (2013). *School culture*. Great School Partnership. <https://www.edglossary.org/school-culture/>

Hattie, J. (2023). *Visible Learning: The sequel a synthesis of over 2,100 meta-analyses relating to achievement*. Routledge.

Grant, A. (2013). *Why helping others drives our success: Give and take*. Penguin Books.

Headden, S. (2014). *Beginners in the classroom: What the changing demographics of teaching mean for schools, students, and society*. Carnegie Foundation for the Advancement of Teaching.

Heubeck, E. (2022). The stay interview: How it can help schools hold onto valued staff. *EdWeek*, June 22, 2022.

Hill-Jackson, V., Ladson-Billings, G., & Craig, C.J. (2022). Teacher education and "Climate change": In navigating multiple pandemics, is the field forever altered? *Journal of Teacher Education* 73(1), 5-7. Doi: 10.1177/002248712111060138

Hinnant-Crawford, B. N. (2020). *Improvement science in education: A primer*. Myers Education Press, LLC.

Horn, C., Burnett, C., Lowery, S., & White, C. (2021). *Texas teacher workforce report*. Raise Your Hand Texas. <https://www.raiseyourhandtexas.org/research/texas-teacher-workforce-report/>

Hughes, A. L., Matt, J. J., & O'Reilly, F. L. (2014). Principal support is imperative to the retention of teachers in hard-to-staff schools. *Journal of Education and Training Studies*, 3(1). doi:10.11114/jets.v3i1.622

Hughes, G. D. (2012). Teacher retention: Teacher characteristics, school characteristics, and organizational characteristics, and teacher efficacy. *Journal of Education Research*, 105(4), 245-255.

Ingersoll, R. M. (2022). The teacher shortage: A case of wrong diagnosis and wrong prescription. *NASSP* 86(631).

Johnson, B., Stevens, J. J., & Zvoch, K. (2007). Teachers' perceptions of school climate: A validity study of scores from the revised school level environment questionnaire. *Educational Psychological Measurement*, 67(5), 833-844.

- Kaiser, F. J., & Thompson, R. (2021). Slowing the burn: Principal leadership supports to reduce attrition. *School Leadership Review*, 16(1), 6.
<https://scholarworks.sfasu.edu/slr/vol16/iss1/6>
- Kersaint, G., Lewis, J., Potter, R., & Meisels, G. (2007). Why teachers leave: Factors that influence retention and resignation. *Teaching and Teacher Education*, 3, 775-794.
doi:10.1016/j.tate.2005.12.004
- Landrum, B., Guilbeau, C., & Garza, G. (2017). Why teach? A project-ive life-world approach to understanding what teaching means for all teachers. *Qualitative Research in Education*, 6(3), 327-351. Doi: 10.17583/qre.2017.2947
- Lemire, S., Christie, C. A., & Inkelas, M. (2017). The methods and tools of improvement science. In C. A. Christie, M. Inkelas, & S. Lemire (Eds.), *Improvement Science in Evaluation: Methods and Uses. New Directions for Evaluation*, 153, 23-33.
- Liu, Y., Ding, C., Berkowitz, M. W., & Bier, M. C. (2014). A psychometric evaluation of a revised school climate teacher survey. *Canadian Journal of School Psychology* 2014, 29(54). DOI: 10.1177/0829573514521777
- Madrid, D. (2016). A case study of the influence of professional friendships among teachers on teacher retention, school culture, teacher performance, and student performance. [Unpublished doctoral thesis]. University of Houston.
- Marshall, D. T., Presseley, T., Neugebauer, N. M., & Shannon, D. M. (2022). Why teachers are leaving and what can we do about it. *Kappan* 104(1), 6-11.
- McKeown, S. G. (2022). *Teacher perceptions of empathy in educational leadership and its impact on school culture and climate: A qualitative case study* [Unpublished doctoral dissertation]. St. John's University.
- Merriam, S.B., & Tisdell, E.J. (2016). *Qualitative research: A guide to design and implementation*. Jossey-Bass.

Minark, M., Thornton, B., & Perreault, G. (2003). Systems thinking can improve teacher retention. *The Clearing House*, 76(5), 230-234.

Moore, L., Rosenblatt, K., Badgett, K., & Eldridge, J. (2018). Urban Texas teacher retention: Unbelievable empirical factors tied to urban teacher persistence and retention. *Literacy Information and Computer Education Journal*, 9(2), 2923-2931. doi:10.20533/licej.2040.2589.2018.0384

Moser, E. M., & McKim, A. J. (2020). Teacher retention: A relational perspective. *Journal of Agricultural Education*, 61(2), 263-275. <https://doi.org/10.5032/jae.2020.02263>

Opper, I. M. (2019). Teacher matter: Understanding teachers' impact on student achievement. *Rand*. www.rand.org/t/RR4312

Podolsky, A., Kini, T., & Darling-Hammond, L. (2019). Does teaching experience increase teacher effectiveness? A review of U.S. research. *Journal of Professional Capital and Community* 4(4), 286-308. Doi: 10.1108/JPC-12-2018-0032

Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). Solving the Teacher Shortage: How to attract and retain excellent educators. *Palo Alto, CA: Learning Policy Institute*. <https://doi.org/10.54300/262.960>

Prenger, R., Poortman, C. L., & Handelzalts, A. (2019). The effects of networked professional learning communities. *Journal of Teacher Education*, 70(5), 441-452. doi:10.1177/0022487117753574

Putman, H., Ross, E., & Walsh, K. (2018). Making a difference: Six places where teacher evaluation systems are getting results. *National Council on Teacher Quality, October 2018*, 28.

Randhawa, G. (2007). Relationship between job satisfaction and turnover intentions: An empirical analysis. *Indian Management Studies Journal*, 11(2), 149-159.

- Reichardt, R., Klute, M., Stewart, J., & Meyer, S. (2020). *An approach to using student and teacher data to understand and predict teacher shortages* (REL 2021-052). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. [Http://ies.ed.gov/ncee/edlabs](http://ies.ed.gov/ncee/edlabs).
- Reitman, G., & Karge, B. (2019). Investing in teacher supports leads to teacher retention: Six supports administrators should consider for new teachers. *Multicultural Education*, 27(1), 7-18.
- Renshaw, T. L. (2020). *Teacher Subjective Wellbeing Questionnaire (TSWQ): Measure and user guide*. Open Science Framework. <https://osf.io/6548v>
- Robertson-Kraft, C., & Zhang, R. S. (2018). Keeping great teachers: A case study on the impact and implementation of pilot teacher evaluation system. *Educational Policy*, 32(3), 363-394. Doi: 10.1177/0895904816637685journals.sagepub.com/home/epx
- Rondfeldt, M., & McQueen, K. (2017). Does new teacher induction really improve retention? *Journal of Education*, 68(4), 394-410. doi:10.1177/0022487117702583
- Rose, A. L., & Sughrue, J. A. (2020). Promoting retention of alternative certified teachers through professional development. *NASSP Bulletin*, 104(1), 34-54. doi:10.1177/0192636520913624
- Rubiera, C. (2018). Teachers by preparation route. *Texas Association of School Boards*. <https://www.tasb.org/services/hr-services/hrx/recruiting-and-hiring/teachers-by-preparation-route.aspx>.
- Saiz, G. (2021). Employees don't quit their jobs, they quit their bosses. *Betterworks*. <https://www.betterworks.com/magazine/employees-dont-quit-their-jobs-they-quit-their-bosses/>
- Schwartz, S. (2021). Pay raises and pandemic bonuses: Can they keep teachers in the classrooms? *Education Week*, 40(32), 10-12.

- Shepherd, D., & Devers, C. J. (2017). Principal perceptions of new teacher effectiveness. *Journal of Education*. <https://doi.org/10.1177/002205741719700205>
- Sorensen, L. C., & Lad, H. F. (2018). The hidden costs of teacher turnover. *National Center for Analysis of Longitudinal Data in Education Research*. Working Paper No. 203-0918-1.
- Spain, E., & Groyberg, B. (2016). Making exit interviews count. *Harvard Business Review*, April 2016, 88-95.
- Steiner, E. D., & Woo, A. (2021). Job-related stress threatened the teacher supply: Key findings from the 2021 state of the U.S. teacher survey. *Rand Corporation*. https://www.rand.org/pubs/research_reports/RRA1108-1.html.
- Subramony, M., Krause, N., Norton, J., & Burns, G. N. (2008). The relationship between human resource investments and organizational performance: A firm-level examination of equilibrium theory. *Journal of Applied Psychology* 93(4), 778-788.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives*, 27(35).
- Synar, E., & Maiden, J. (2012). A comprehensive model for estimating the financial impact of teacher turnover. *Journal of Education Finance*, 38(2), 130-144.
- TNTP. (2015). *The Mirage: Confronting the hard truth about our quest for teacher development*. New York.
- Tran, H., & Smith, D. A. (2020). Designing an employee experience approach to teacher retention in hard-to-staff schools. *NASSP Bulletin*, 104(2), 85-109. doi:10.1177/0192636520927092
- Tygrret, J. A. (2018). The preparation and education of first-year teachers: A case study. *The Qualitative Report*, 23(3), 710-729. <https://nsuworks.nova.edu/tqr/vol23/iss3/15>

Urick, A. (2020). What type of school leadership makes teachers want to stay? *NASSP Bulletin*, 104(3), 145-176. doi:10.1177/0192636520949682

Wahyuningtyas, T., Maryono, D., Adinda, K., Sambiono, D., & Sriyono, S. (2022, June 20). Strategy to build organizational culture to improve teacher performance during the COVID-19 pandemic. *ICIGR Conference Proceeding, KnE Social Sciences*. DOI 10.18502/kss.v7i10.11258

Will, M. (2021). As teacher morale hits a new low, schools look for ways to give breaks, restoration. *Education Week*, 40(17), 3-7.

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

Zavelevsky, E., & Lishchinsky, O. S. (2020). An ecological perspective of teacher retention: An emergent model. *Teaching and Teacher Education*, 88. doi: 10.1016/j.tate.2019.102965

Zhang, G. (2016). A longitudinal investigation of the relationship between teacher preparation and teacher retention. *Teacher Education Quarterly*, 43(2), 73-92.