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THE PERSPECTIVES OF SECONDARY MATH AND SCIENCE TEACHERS,
ADMINISTRATORS, AND DISTRICT PERSONNEL ON RETAINING HIGHLY
QUALIFIED SECONDARY MATH AND SCIENCE TEACHERS IN
TITLE I DISTRICTS

by

Pamela D. Tarver-Stewart, M.ED.

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Pamela D. Tarver-Stewart

APPROVED BY

Dr. Kent Divoll Ed.D., Chair

Dr. Amy Orange Ph.D., Committee Member

Dr. Shanna Graves Ph.D., Committee Member

Dr. Eric Tingle Ed.D., Committee Member

RECEIVED/APPROVED BY THE COLLEGE OF EDUCATION:

Felix Simieou III, Ph.D., Associate Dean

Joan Y. Pedro, Ph.D., Intern Dean

Dedication

I would like to dedicate my dissertation to my son (Henry T. Stewart III), mother (Lacie Tarver), and late father (Charles Tarver). Throughout this process, they have been my constant cheerleaders and biggest supporters. It has been a long hard yet rewarding road they have traveled with me. Although, my late father is not here to witness this joyous and momentous occasion, I know that he is hugging me with his angel wings and smiling from Heaven saying well done my baby girl.

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ABSTRACT

THE PERSPECTIVES OF SECONDARY MATH AND SCIENCE TEACHERS,
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Pamela D. Tarver-Stewart
University of Houston-Clear Lake, 2021

Dissertation Chair: Dr. Kent Divoll

The purpose of this study was to explore the perceptions of urban secondary math and science teachers, administrators, and district personnel regarding the factors that influence secondary math and science teachers with more than five years of teaching experience to remain in urban Title I districts. The participants were interviewed to gain their perspective of teacher retention through their experiences and roles in the district. The participants discussed: (a) the lack of preparation to teach in urban schools, (b) why teachers leave urban districts, and (c) what districts can do to retain teachers. The outcome of this study is to positively impact teacher retention of secondary math and science teachers in urban districts by selecting teachers who have a desire to work with at-risk students, continuously have a growth mindset, and have students achieve academic success.

Keywords: highly qualified, star teachers, self-efficacy, resilience, grit, at-risk students, Title I, and urban schools

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CHAPTER I:

INTRODUCTION

The 19th and 20th century marked an era where the urban schools were considered the best place to send gifted students from modest backgrounds seeking an excellent education (Rury, 2005). These schools often attracted experienced teachers and offered them better pay in the city (Rury, 2005). Not only were the schools flourishing and thriving, but the areas also surrounding the urban schools experienced healthy economic stability through the booming industrial factories and businesses (Stotko, Ingram, & Beaty-O'Ferral, 2007). However, as the industries grew, and an influx of unskilled workers began living and working in the urban setting, the demographics drastically changed (Rury, 2005). As this change took place, the population of middle-class families began to move from the urban setting into what is now the suburban setting (Peck, 2017). As the factories began to move to other locations and at times overseas, people began to lose their jobs, which resulted in an increase in crime and despair (Rury, 2005; Scott & Holmes, 2016; Wilson, 1987). Due to the steady decline in economics and community dynamics, schools were also affected by the drastic shift in the urban community (Rury, 2005). The significant change in demographics, caused a shift in the way teachers handled the change (Brown, 2007). Students from the various ethnicities were left with educators that were not equipped to teach them (Brown, 2007; Peck, 2017).

Teacher turnover has affected schools for the past century, which became increasingly difficult to retain teachers in the classroom (Carver-Thomas & Darling-Hammond, 2019; Ndoye, Imig, & Parker, 2010). The urban community and schools continued to deteriorate, which led to students, who remained in the urban community, surrounded by poverty, crime, feelings of hopelessness, and less than adequate education (McKinney, Flenner, Frazier, & Abrams, 2006). As of 2020, thirty one percent students in

the United States attend schools in urban districts (Whitaker, 2020). There are 12.6 million children live in poverty and between 51% and 58% of 4th and 8th grade students fail to reach the basic level of achievement on standardized tests in reading and math (Husser et al., 2020). The lack of student achievement for these students is concerning for officials who have implemented a range of initiatives to increase the supply of qualified teachers (Ford, McKinney, & Tomovic, 2020; Ingersoll & May, 2010; Sutcher, Darling-Hammond, & Carver-Thomas, 2019).

Teaching in stressful and unsettled working conditions can be a taxing and demanding endeavor (McKinney, Berry, Dickerson, & Campbell-Whately, 2007; Schmidt & Jones-Fosu, 2019). The lack of student achievement and serious community issues make it very difficult to find highly qualified teachers to handle these challenges (Banks, 2015). When given the opportunity, teachers early in their career, tend to move to schools with higher socio-economic demographics or leave the profession (Carver-Thomas & Darling-Hammond, 2019; Faser-Abder, 2010; McKinney, Haberman, Stanford-Johnson, & Robinson, 2008; Sutcher et al., 2019). This leaves the urban schools with less experienced, unqualified teachers which results in lower student achievement (Ingersoll, 2001; Ingersoll, May, & Collins, 2019).

The No Child Left Behind Act signed by George W. Bush in 2001, mandated that all schools hire highly qualified teachers; however, with the growing demand to increase student achievement, teachers became increasingly dissatisfied and in turn educators began to leave the low performing schools (Husband & Hunt, 2015). When President Obama signed into law Every Student Succeeds Act in 2015, it revised the NCLB Act in the area of highly qualified teachers (Adler-Green, 2019). The ESSA did not require school districts to show that teachers were highly qualified to obtain Title I funds (Adler-Green, 2019). Although ESSA was meant to place certified teachers in classrooms, students were

being taught by inexperienced and ill-prepared teachers due to the widened teacher quality gap (Alder-Green, 2019; Darling-Hammond & Berry, 2006). The lack of preparation and opportunities to develop their skills to become effective teachers, are only a few reasons why there is a revolving door of educators in urban schools (Ingersoll, 2000; Love, 2021; Minor, 2009; Wronowski, 2018).

Garcia and Weiss (2019) indicate districts across the nation will need to hire a total of 316,000 teachers annually until 2025 to meet the demands of the teacher shortage. Ingersoll, Merrill, Stuckey and Collins (2018) stated that math and science have the highest rate of turnover and has increased over the past two decades. These numbers “don’t consider teachers who transfer to what they perceived as better schools- a number almost as high as those who leave K-12 classrooms each year” (Minor, 2009, p.7). The teachers who are leaving the teaching field are taking their expertise with them and in such cases; urban schools are forced to hire uncertified and poorly trained replacements (Ingersoll, 2003; Laine, 2008; Sutcher et al., 2019).

Jacobs (2007) suggested that when less qualified teachers and ineffective teachers are placed in the classroom, it has a drastic effect on student achievement. Chronic teacher turnover not only creates chaos and instability at an organizational level, but it leaves students, who are depending on effective teachers to educate them, with inexperienced and often uncertified educators (Sternoff, Frazier, Martinez-Lara, Atkins, & Keel, 2011). Teachers are overwhelmed by the stressors from teaching at-risk students and are blamed for the low achievement of their students (McLaughlin, 2014). Shernoff, Frazier, Martinez-Lara, Atkins, & Keel (2011) suggested that teaching in urban schools are especially daunting when there are a high number of students with disruptive behavior, large class sizes, low student achievement, scarcity of parental involvement, and deteriorating

conditions in combination with lack of support from administration and quality professional development.

Recruiters try to meet the demands of hiring effective teachers in the urban schools especially in the areas of secondary math and science (Newton, Jang, Nunes, & Stone, 2010). According to Milanowski, et al. (2009), many districts are experimenting with financial initiatives to attract and retain highly qualified teachers in hard to staff schools. Berry (2008) stated the one myth of recruiting and retaining teachers are financial incentives are sufficient to attract teachers in high needs schools. Many urban districts have used lucrative incentives to raise teacher quality; however, they are still losing a high percentage of secondary math and science teachers each year (Almy & Tooley, 2012; Carver-Thomas & Darling-Hammond, 2019). Many districts have the false hope that financial incentives will fix the problems facing their hard to staff schools (Almy & Tooley, 2012). Studies show extrinsic incentives are more effective if paired with long-term capacity building measures (Hayes, 2009). The urban districts have utilized extrinsic financial incentives to recruit and retain effective teachers; however, this has not been a solution to the problem of secondary math and science teachers leaving hard to staff schools at an alarming rate (Almy & Tooley, 2012; Church, Bland, & Luo, 2014).

Haberman (1995) stated that the best way to improve the achievement of 12 million youth in poverty is to employ better teachers. Over the last twenty years, never has there been such a critical demand for quality teachers to meet and overcome the barriers of teaching in urban high poverty schools (McKinney et al., 2008). The goal of meeting the high standards of rigorous testing and improving student achievement, districts must tailor their recruitment and retention efforts around the characteristics and motivation of potential teachers (Stotko et al., 2007). The selections of the right teachers with the right characteristics to teach in high needs schools are more important than trained teachers

(Haberman, 1999; Wronowski, 2018). Effective teachers in the urban schools should have the self-efficacy to succeed, engage their students, and have high expectations for each of their students (Haberman, 1999; Wronowski, 2018).

Urban administrators must hire teachers who have the knowledge, skills, and disposition to succeed in the urban classroom (Stutko et al., 2007). Stutko et al. (2007) believed that “star teachers” is a term used to describe successful urban teachers who have a unique set of characteristics such as problem-solving abilities, tenacity, a sense of urgency, grounded in academic content and the ability to communicate the content to students in engaging and developmentally appropriate ways. Research suggests that effective or “star teachers” can improve the academic outcomes of low achieving and improvised students by providing them with hope and promise for the future (Gehrke, 2005). Effective teachers work to have positive interactions with students which is the core of implementing good instruction (Haberman et al., 2018; Whitaker, 2018). Students are able to thrive when effective teachers are able to set high expectations and implement good teaching practices (Haberman, Gillette, & Hill, 2018)

Need for the Study

The United States has long struggled to meet the high demands for math and science teachers to educate the nation's over 50.7 million school-age children (Hussar & Bailey, 2009; Husser et al., 2020; Ingersoll, 2011). Grappling with improving the nation's educational system, this issue ultimately leads to the United States endangering their continued role as an economic and political power in a globalized society (Futrell, 1999; Hussar et al., 2020). Politicians, business and community leaders, and diverse communities realize that having well-educated citizens allows the nation to compete with other nations in various markets (Futrell, 1999; Sutcher et al., 2019). The challenge comes when educating youth who are considered at-risk, low achieving, and ill-prepared to become

productive citizens in an ever-changing world. These students are coming from low income and impoverished communities that are riddled with high crime, unemployment, gang activity, drugs, and violence (Haberman, 1995; Haberman et. al., 2018).

Dating back to A Nation at Risk in 1980, officials have collaboratively taken on the task of increasing student achievement for all students (Johnson, Berg, & Donaldson, 2005). With the various obstacles already facing the educational system, it is additionally challenging to provide qualified teachers for students in the urban schools especially in the areas of secondary math and science. Statistics show that 30% of new teachers are leaving the teaching profession within the first five years of teaching; however, the statistics are 50% higher for teachers educating at-risk students living in low socio-economic communities (Carver-Thomas & Darling-Hammond, 2019; Ronfert, Loeb, & Wyckoff, 2013). These statistics permit us to question how urban districts can retain qualified secondary math and science teachers to improve the quality of education for students who are left with a revolving door of teachers. If ultimately the nation's goal is to provide an equal and quality education for all students, then the problem of ineffective teachers in the urban schools must be addressed.

Purpose of the Study

The purpose of this study was to explore the perceptions of urban secondary math and science teachers, administrators, and district personnel regarding the factors that influenced secondary math and science teachers with more than five years of teaching experience to remain in the teaching profession. The study took a deeper look at personal and professional factors that encouraged urban secondary math and science teachers to stay in the urban schools despite the challenges they faced. The research for this study can inform districts how to implement best practices to retain their secondary math and science teachers longer than five years.

Research Questions

RQ 1: What perceptions do secondary math and science teachers hold regarding factors that influence them to remain in a Title I urban school more than five years?

RQ 2: What perceptions do secondary administrators hold regarding retaining secondary math and science teachers in Title I urban schools?

RQ 3: What perceptions do district specialists, coordinators, and area superintendents hold regarding retaining secondary math and science teachers in Title I urban schools?

Significance of the Study

Teacher quality and effectiveness is a concern for policy makers as they are implementing initiatives to improve student achievement (Mansfield, Beltman, Broadley, & Weatherly-Fell, 2016). The increased academic expectations of students have also required teachers to improve their knowledge and skill in the classrooms (Stosich, 2016). Efforts to develop teachers' expertise and confidence can happen successfully if they are provided with the opportunities to engage in collective learning with other effective teachers which, in turn, will build the educators' confidence in themselves and ultimately improve student performance (Darling-Hammond, Wei, Richardson, & Orphanos, 2009; Johnson, 2009; Moolenaar, Sleegers, & Daly 2012). High needs schools with a high minority student population have the potential to build and foster continuous professional and collegiate growth; however, those schools are not able to provide strong instructional opportunities for new teachers to change student performance (Stosich, 2016).

Addressing the issue of retaining teachers, districts and schools must establish dependable and high-quality support systems for new teachers (Hannan, Russell, Takahashi, & Park, 2015). Johnson (2009) suggested when teachers have a consistent

collaborative support system with their veteran teachers or work in a professional culture, teachers have higher self-efficacy and are more satisfied in their roles as an educator. According to Church, Bland, and Luo (2014), teachers develop a growth mindset when they are in districts with an ideal work situation that consists of leadership, productive professional developments, meaningful collegiate relationships, and when they feel as though they are making a difference in the lives of their students.

The hiring practices of urban districts must be examined to improve the quality of teachers educating students in the high needs' high poverty schools (Ingersoll et al., 2018; Snipes & Horwitz, 2007). Schools are compelled to lower their expectations to fill math and science teaching positions with unqualified teachers which, in turn, lowers student achievement (Ingersoll & May, 2010; Wronowski, 2018). In order to hire highly qualified math and science teachers, districts must hire earlier and know the characteristics they are looking for in a potential candidate (Church, Bland, & Luo, 2014; Jacob, 2007). Districts try to increase the teacher supply with financial incentives; however, setting goals and creating productive programs, have a greater impact on attracting qualified teachers to the urban districts (Church, Bland, & Luo, 2014; Dunn & Downey, 2017; Kohn, 1993).

Reducing the constant revolving door of teachers in and out of high poverty schools is necessary so students can receive the education they deserve (Ronfeldt, Loeb, & Wyckoff, 2013). Classrooms with continuous short and long-term substitutes teachers cause instability, ineffective instruction which leads to low student achievement (Terry & Kritsonis, 2008). Students in the United States have shown declining math and science achievement, subjects that are important to the continued economic growth and technology in this country (Carver-Thomas & Darling-Hammond, 2019; Golden & Katz, 2007). Well-prepared math and science teachers can have a positive effect on student growth and achievement (Carver-Thomas & Darling-Hammond, 2017, 2019).

This study focused on the perceptions of secondary urban math and science teachers, administrators, and district personnel regarding retaining highly qualified secondary math and science teachers. The gap in literature continuously focuses on both elementary and secondary teachers leaving before five years; however, the literature centers on quantitative research with urban high school math and science teachers and gaining their knowledge without truly understanding the perception about why teachers remain in the urban schools despite the challenges they faced. The gap further widens because campus administrators and district personnel's perspective are not considered on what supports districts are implementing in order to supply urban secondary schools with effective teachers in the math and science classrooms.

Definitions

Highly Qualified Teachers are teachers, according to Every Student Succeeds Act, who have met the state required certifications including those who are meeting the requirements for alternative certifications (Adler-Green, 2019).

District Personnel are those individuals responsible for recruiting and selecting, hiring, and provide professional development to support teachers. They also are responsible for other roles and responsibilities regarding leading and managing the district (Defeo & Tran, 2019).

Star Teachers are described as effective educators that have the heart to reach at-risk students. McKinney et al. (2008) states, "Star teachers are able to capture the spirit of learning for all students regardless of their socioeconomic status, background, life circumstances or life experiences" (p.72). The researchers included fifteen different characteristics that star teachers possess such as "gentle teaching in a violent society,

organizational ability, persistence, protecting student learning, and holding high expectations for students at-risk” (McKinney et al., 2008, p.71).

Self-Efficacy refers to “an individual’s convictions (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998, p. 4).

Resilience is a “personal characteristic that enables individuals to stay the course despite the difficulties that they encounter” (Brunetti, 2006, p. 813).

Grit is defined grit as defined as “perseverance and passion for long term goals” which “entails work strenuously toward challenges, maintaining effort and interest over the years in spite of failures and adversities” (Duckworth, Peterson, Kelly, & Matthews, 2007, p. 1087).

At-Risk Students are defined as being “poorly equipped to perform to academic standards” (Bulger & Watson, 2006, p. 24).

Title I is defined when The Elementary and Secondary Act entitled schools with a high percentage of students in low-income households to receive funds that ensured students attending these schools had resources to meet the rigorous state standards (TEA, 2015).

Urban School are “schools have high concentration of students living in poverty, high percentages of single-parent families, the least qualified or credentialed teachers and the fewest school resources (new school buildings, curricular material, and so forth)” (Milner, 2006, p. 346). “Urban context can be defined as one that is heavily populated with culturally and racially diverse learners and has a heavy concentration of English language learners, and large number of poorer students-particularly students of color, high attrition

of teachers, heavy institutional and systemic barriers and meager resources" (Milner, 2006, p. 346).

Conclusion

This study addressed the factors that compelled secondary math and science teachers to remain in urban Title I district longer than five years. There is a growing need to hire highly qualified math and science teachers to decrease the learning gap for students and produce successful adults in a changing world. Many school districts are struggling to hire qualified math and science teachers which impacts student growth and learning.

Urban districts often lower their standards and hire unqualified teachers to occupy secondary classrooms. Districts have tried various strategies to attract highly qualified teachers; however, due to the stressors of the classrooms, many teachers decide to leave the urban schools before their fifth year of teaching to work in high socio-economic demographics. This situation leaves at-risk students with a revolving door of teachers and ineffective instruction which leads to continuous widening of the achievement gap (Ronfeldt, Loeb, & Wyckoff, 2013).

CHAPTER II:

REVIEW OF THE LITERATURE

Urban schools are losing teachers at an alarming rate (Carver-Thomas & Darling-Hammond, 2017; Smith & Smith, 2006). These schools are suffering from low student performance, community crises, and a lack of resources for the students (Poplin et al., 2011). So, when it comes to recruiting and hiring highly qualified and effective teachers, the low socio-economic urban schools find it very difficult to acquire or keep these teachers (Haberman, 1995; Wronowski, 2018). Highly qualified secondary teachers are in high demand for urban schools (Stotko et al., 2006; Whipp & Geronime, 2017).

Many new teachers are either choosing not to teach in urban schools or they leave within the first five years of their career (McKinney et al., 2008; Papay, Bacher-Hicks, Page, & Marinell, 2017). Several factors that cause teachers to leave early in their careers are (a) lack of support, (b) materials and resources, (c) violence and discipline problems in the school, and (d) large class sizes (Poplin et al., 2011). With the confounding issues, some urban districts are trying to turn the situation around by attracting and hiring effective teachers that are motivated to make a difference (Blazer & Kraft, 2017; Smith & Smith, 2006).

Theoretical Framework

This study centers around two theoretical frameworks. The researcher used Herzberg's two-factor theory for job satisfaction and Bandura's theory of self-efficacy. The Herzberg's two-factor theory discussed the job satisfaction (motivation and hygiene) which are essential to job performance and staying in their current position long term (Shaikh, Shaikh, & Shaikh, 2019). Bandura discussed how a person's self-efficacy can either hinder or assist them to overcome difficult challenges (Bandura, 1993). Herzberg's two-factor theory was developed in 1959 by Frederick Herzberg (Yusoff, Kian, & Idris,

2013). According to Dion (2006), Herzberg's the two-factor theory is the most significant analysis of job satisfaction. The theory states that there are two factors, one that points to positive attitudes toward work and the other leads to negative attitudes (Alshmemri, Shahwan-Akl, & Maude, 2017). The two factors are motivation and hygiene (Dion, 2006). Shaikh, Shaikh, and Shaikh (2019) suggest that applying the motivation and hygiene factors people will do their best work when faced with challenges and strenuous circumstances. The motivation factor is the intrinsic component, and the hygiene is the extrinsic component (Alshmemri, Shahwan-Akl, & Maude, 2017). When applying both the motivation factor (intrinsic) and hygiene factor (extrinsic) for professionals that have growth mindsets, there is a boost in their productivity in the workplace (Ozsoy, 2019; Shaikh, Shaikh, & Shaikh, 2019).

The motivation factor strongly connects to job satisfaction (Yusoff, Kian, & Idris, 2013). The motivation factors “are directly related to the job itself” (Ozsoy, 2013, p. 12). Employers must provide their employees with positive work environments and implement successful programs that satisfy the intrinsic needs of the employees (Jahromi, Razmjooei, Managheb, Hosseini, & Salehi, 2018). The motivation factor relates to feelings of a positive mindset due to the intrinsic satisfaction of self-actualization and their need for growth (Herzberg, 1966). The motivation factor relates to a person’s job advancement, the job itself, responsibilities, acknowledgements, and accomplishments (Herzberg, 1966). When provided with the motivational factor at the workplace, people perform their jobs more effectively and efficiently with positive attitudes due to their intrinsic needs being met (Jahromi et al., 2018).

The second factor of Herzberg’s two factor theory is the hygiene factor. The hygiene factor is related to reducing or avoiding the negative feelings at work which could lead to dissatisfaction (Aburumman & Arif 2017; Alshmemri, Shahwan-Akl, & Maude,

2017). The hygiene factor, which is the extrinsic factor, is connected to “interpersonal relations, salary, company policies, administration, relations with supervisors and working conditions” (Alshmemri, Shahwan-Akl, & Maude, 2017, p. 14; Herzberg, 1966). If the hygiene factor is present in the workplace, then there is a reduction in the level of dissatisfaction on the job; however, if these components are not effectively and properly applied for employees, then there will be an increase in dissatisfaction (Shaikh, Shaikh, & Shaikh, 2019).

Retaining secondary math and science teachers is a struggle for many urban districts. Teachers are motivated to remain in the urban school districts if they can grow professionally, are recognized, celebrated for their accomplishments, and motivated by teaching their at-risk students (Jahromi et al., 2018). The teachers also have a decreased level of dissatisfaction if there are fair district policies, effective administration, adequate working conditions, and positive collegiate relations (Shaikh, Shaikh, & Shaikh, 2019). Herzberg’s two factory theory conveys that if the motivation and hygiene factors are in place then there will be an increase level of job satisfaction which in turn could retain effective secondary math and science teachers.

The second theoretical framework was Bandura’s self-efficacy theory which explained a person’s belief in their capabilities and how it affected them (Bandura, 2005). Bandura (1993) stated that efficacy affects how people feel, think, are motivated within their environment, and their behavior. The term self-esteem is often confused with self-efficacy. According to Bandura (2005), self-efficacy is the “judgement of personal capabilities,” (p.26) and self-esteem is the “judgement of self-worth,” (p. 26). A person’s self-efficacy can define whether they are capable of overcoming obstacles within their environment (Bandura, 2005).

Based on the definition of self-efficacy, there are people with high self-efficacy and those with low self-efficacy (Singh & Udainiya, 2009). If a person has high self-efficacy, they are more likely to set goals for themselves, and begin making steps to achieve those goals (Singh & Udainiya, 2009). They will seek opportunities to learn to build their skill set to overcome the obstacles in their environment (Milner & Woolfolk-Hoy, 2003). With high self-efficacy, people tend to focus on the bigger picture and are willing to break down the barriers that prevent them from achieving their goals (Dembo & Gibson, 1985). On the other hand, a person with low self-efficacy is willing to give up on their goals if there are challenges (Bandura, 1993). Teachers with low self-efficacy do not believe they have the capacity to prevail or overcome the challenges they may face (Bandura, 1993).

As students enter a teacher's classroom, the students' educational success will depend on the efficacy of that teacher (Milner & Wooolfolk-Hoy, 2003). Bandura (1993) declared that a teacher with high self-efficacy tends to spend more time on instruction in the classroom rather than focusing on problems that keep them from being a productive teacher. These are the teachers that are more apt to stay with the urban schools where there are many barriers facing the at-risk students (Gibson & Dembo, 1984). Gibson and Dembo (1984) expressed those teachers with high self-efficacy provide students with more opportunities to succeed, willing to take the time to meet the needs of their students, and positively praising them for their achievements. The instructors with high self-efficacy are more likely to remain in teaching due to their tenacity to break the barriers that prevent them from being an effective teacher (Milner & Woolfolk-Hoy, 2003).

At-risk students are often subjected to teachers with low self-efficacy and are willing to leave the teaching profession in the first five years of teaching (Miller, Ramirez, & Murdock, 2017; Milner & Woolfolk-Hoy, 2003). The teachers with low self-efficacy about their teaching abilities of at-risk students tend to focus more on non-academics in the

classroom, do not meet the needs of their students, and readily criticize students for their inability to grasp academic contents easily (Gibson & Dembo, 1984). Bandura (1993) found that teachers with low self-efficacy transfer their efficacy onto students who are already low performing and have self-doubts about their capabilities. Based on the theoretical framework of Bandura, districts should seek teachers with high self-efficacy in their ability to teach at-risk students in the urban schools. They will empower their students and enhance their academic performance. Ashton and Webb (1986) established that a teachers' self-efficacy is directly linked to students' performance. A teacher's self-efficacy can determine students' achievement in various academic areas (Bandura, 1993).

Recruiting Secondary Math and Science Teachers

Recruiting, training, and retaining secondary math and science teachers is a critical problem in urban schools (Newton et al., 2010). Urban schools are finding it very difficult to hire highly qualified teachers (Hayes, 2007; Henry & Redding, 2018). Carver-Thomas and Darling-Hammond (2017) suggested with the serious shortage of qualified math and science teachers, the elevated turnover rates can intensify in urban schools with limited resources to attract quality teachers. Urban schools are four times more probable to have difficulty finding qualified teachers to fill positions in math and science (Carver-Thomas & Darling-Hammond, 2017). The high achievement of urban schools depends on the quality of the teachers placed in the school (Henry & Redding, 2018; Stotko et al., 2007; Whipp & Geronime, 2017).

The question is how recruiters can hire highly qualified teachers to fill the vacancies in low socio-economic schools with issues such as lack of materials, large class sizes, poor working conditions, and student discipline (Morgan, 2012). In response, districts are experimenting with financial initiatives to attract and retain high quality teachers in high need, low achieving or hard to staff urban schools (Cowan & Goldhaber, 2018; Milanowski

et al., 2009). There are several avenues that many districts are taking to improve the recruitment and retaining teachers. Some changes include higher salaries, improved working conditions, and alternative paths to teaching and mentoring (Carver-Thomas, 2018; Jacob, 2007). Jacobs (2007) and Wronowski (2018) suggested that districts and schools could improve their ability to identify effective teachers by using some type of screening process when hiring. There is much work to be done to find highly qualified teachers for students in urban schools (Howey, 2010; Wronowski, 2018). Students in urban districts deserve teachers that are committed to giving them a quality education and setting them up for success (Whitaker, 2018). Howey (2010) suggest that “It is the birthright of every youngster to have competent and caring teachers, and a school culture and climate characterized by harmony, stability, and high performance” (p. 1).

Recruiting teachers in urban schools is a critical task; however, the secondary schools are suffering as well (Chiang, Clark, & McConnell, 2017; McKinney et al., 2007). Many of the teachers in the secondary schools are being recruited through alternative certification program (Chiang, Clark, & McConnell, 2017; Stotko, 2007). Carver-Thomas and Darling-Hammond (2017) suggests that many of the educators in alternative certification programs are placed on a fast track and are not properly trained in the areas of math and science. Divoll, Gauna, and Riberiro (2018) stated that 7% of career changers went through a shortened or an alternative program through a college or university and another 8% went through nontraditional or other programs not associated with university programs.

The “efforts to recruit candidates with strong subject matter knowledge into teaching, face several challenges” (Newton et al., 2010, p.25). The challenges are other career options for people in the science, technology, engineering, and mathematics fields that will provide better pay and other financial benefits (Newton et al., 2010). With these

options, many new teachers will begin their careers in the urban schools, however the teachers may transfer to another school with less challenges or leave the education profession to explore their options (Whipp & Geronime, 2017). Recruiting and retaining teachers will require urban districts to take a comprehensive approach that ensures new teachers are equipped to meet the challenges of teaching, pays them a competitive salary compatible to other professions, and assist them with being effective teachers in the classroom (Carver-Thomas & Darling-Hammond, 2019).

Once the teachers are recruited the urban school districts must retain these teachers (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). The lack of support from one's peers and community are a reason that many teachers decided to leave teaching (Newton et al., 2010; Henry & Redding, 2018; Ronfeldt & McQueen, 2017) Kraft and Zhang (2018) stated that teachers are highly likely to remain in the teaching profession if they have comprehensive supports in the schools such as professional workplace, sufficient resources and materials, feedback on their performance, and adequate professional development. The "effort of creating a professional community among various stakeholders' groups," (Newton et al., 2010, p. 23) helps with the collaborative effort to ensure that beginning teachers have the support needed to provide a high-quality education to the students in the urban schools especially in the areas of math and science (Tai, Liu, & Fan, 2007). According to Henry and Redding (2018), if new teachers have a strong and positive collaborative and peer learning environment, this may deter the teacher's decision to leave the urban district.

Retaining Urban Secondary Math and Science Teachers

When urban schools are recruiting and hiring teachers in the districts and schools, it is important to retain them (Love, 2021; Snipes & Horwitz, 2007). Policy makers often focus on recruiting teachers in urban schools; however, it is just as critical to retain the new

and existing teachers (Sutcher et al., 2016). Ineffective strategies utilized by school districts, have failed to retain teachers and in turn teachers depart from the profession (Fisher, 2011). Support systems such as mentoring programs, professional developments, and collaboration between teachers show some gains in retaining teachers; however, teachers are continuously leaving at an alarming rate (Divoll et al., 2018; Fisher, 2011; Ingersoll & Smith, 2003 Sutcher et al., 2019).

The turnover rate for high need schools is two times higher than the turnover rate in the schools with high performing students (Carver-Thomas & Darling-Hammond, 2019; Darling-Hammond & Sykes, 2003; Ingersoll, 2001). The challenges faced by urban teachers can range from lack of materials, poor facilities, and overcrowding which can increase the rate of turnover in the hard to staff schools (Kini & Podolsky, 2016).

According to research, job dissatisfaction is the major reason teachers leave the teaching profession (Sutcher et al., 2019; Ingersoll & May 2011). With teachers leaving low performing schools, districts must seek and provide strong and highly qualified teachers in classrooms (Ronfeldt et al., 2013).

Working Conditions

Working conditions can be a catalyst for the teacher turnover rates in high needs schools (Ingersoll, 2012). Poor working conditions such as larger class sizes, discipline problems, insufficient facilities, lack of administrative support, and shortage of supplies can impact a teacher's decision to stay or leave the classroom (Loeb, Darling-Hammond, & Luczak, 2005; Sutcher et al., 2018). For teacher retention, it has been noted that school leadership, professional trainings, and mentor programs were very important for teachers to remain in the urban school district (Garica & Weiss, 2019; Ladd, 2001). Teachers want to work in schools where they feel effective, supported, and able to work collaboratively with others (Powell, 2017).

Many teachers are compelled to work in the high need schools with at-risk students, however the poor working conditions drives them to select schools with better working conditions and collegiate support (Allensworth, Ponisciak, & Mazzeo, 2009; Johnson, Kraft, & Papay, 2012). Carter-Rodriguez (2019) suggested teachers are not leaving the high needs school due to their students. The teachers that sought to educate at-risk children in urban schools wanted to ensure the students achieved academic success (Kraft et al., 2015). When teachers make a conscience choice to work in the low socio-economical school and are committed to student success; they chose to remain (Achinstein, Ogawa, Sexton, & Freitas, 2010; Cochran-Smith et al., 2012; Love, 2021). According to Stotko et al. (2007), some teachers and teacher candidates are drawn to the urban schools because they believe they can make a difference in the lives of at-risk students. However, with a lack of administrative support, collegiate collaboration, and lack of resources they decide to seek opportunities in other districts or profession (Sutcher et al., 2018).

Teacher Supports

New teachers aim to make a difference in the lives of children and impact society by educating their students (Callahan, 2016). They are eager to begin their careers and fix the broken educational system (Callahan, 2016). Regrettably, after a few years of teaching, teachers begin to feel the stressors, leave the profession because they feel misguided and defeated (Callahan, 2016; Carver-Thomas & Darling-Hammond, 2019; Garcia & Weiss, 2019). Hughes (2012) states that experienced teachers are equipped and able to produce growth in student performance. Callahan (2016) suggested that in order to grow new teachers into experience teachers, districts need to provide the supports necessary to compel them to remain in the profession.

Mentoring programs and collegiate support. Kent, Green, and Feldman (2012) suggested that successful mentoring programs are an essential part of the induction phase to

ensure teachers are encouraged to remain in the profession. According to Winters and Cowen (2013), quality teachers must be developed within the first five years of their teaching career. Mentors, that are assigned to work with new teachers, provide them with the necessary tools to adjust to the teaching environment when working with diverse students, understand their responsibilities, and become professionally competent as soon as possible (Carver-Thomas & Darling-Hammond, 2017 McGlamery & Sheillingstad, 2016). Divoll et al. (2018) found that mentoring programs could prevent teachers from leaving the education profession. Callahan (2016) suggested that once schools recruit, hire, and provide professional trainings to new teachers, the schools must pair them with a highly qualified mentor to continuously help improve the instruction of the new teacher.

Teachers participating in mentoring programs have a clear understanding of the school expectations, demands placed on teachers, and can improve their instructional skills (Barth, Dillon, Hull, & Higgins, 2016; Divoll et al., 2018; Ingersoll, 2016). As new teachers continue to participate in a mentoring program, they are committed to the profession, have higher job satisfaction, and are more likely to remain in the profession (Ingersoll & Strong, 2012). Research has shown when new teachers participate in the mentor programs, there is an increase in implementing meaningful lessons to students, have good classroom management, and students show growth on rigorous standardized testing (Carver-Thomas & Darling-Hammond, 2019; Ingersoll & Strong, 2012; Ronfeldt & McQueen, 2017). If urban districts implement effective mentor programs, then the more successful those teachers are in the classroom, and the likelihood of the teachers remaining in the teaching profession increases (Carver-Thomas & Darling-Hammond, 2017; Darling-Hammond et al., 2017; Ingersoll & Strong, 2012).

Collegiate support is a way in which new teachers can collaborate with other teachers to enhance their teaching practice (Love, 2021). Teachers meet, collaborate, and

plan lessons, discuss student achievement, and support each other which is vital in the retention of new teachers when instructing students in low socioeconomic urban schools (Chaney et al., 2020; Darling-Hammond et al., 2017; Noonan, 2018). When teachers have strong and meaningful collegiate support and relationships, they feel a greater sense of school community and are able to provide students with a positive learning experience (Wronowski, 2018). The support system that is established with new and veteran teachers is appreciated and compels the new teachers to remain in the high need schools and strive to close the achievement gap of at-risk students (Kraft et al., 2015; Wronowski, 2018).

Professional development. The transition from being a preservice teacher to having the full responsibility of a classroom setting can be challenging (Chaney, Braun, & Jenkins, 2020; Wronowski, 2018). As teachers enter the teaching profession, many feel ill prepared to teach in urban schools (Callahan, 2016; Whipp & Geronime, 2017). Garcia and Weiss (2019) suggested that as a result of the lack of effective professional development being provided, teachers are making the decision to leave the urban schools. In response to this lack of support, urban districts are implementing ways in which they can provide the proper professional development to increase a teacher's teaching practices and close the achievement gap for students (Darling-Hammond, Hyler, & Gardner, 2019). While the participants are in the professional development, they should receive the same learning so that there is cohesiveness for the classroom settings, schools, and districts (Noonan, 2018). The trainings are viewed by teachers, administrators, and other stakeholders as crucial to improving the teachers' instruction and student achievement (Borko, Elliott, & Uchiyama, 2002; Darling-Hammond et al., 2017). Retaining the new teachers is critical; however urban district must also provide professional developments for the veteran teachers as well (Defeo & Tran, 2019; Guin, 2004). Noonan (2018) stated "within any single learning environment, there are as many unique learning experiences as

there are learners themselves.” Hochberg and Desimone (2010) advised that the stakeholder that design the professional developments for teachers, need to be mindful of the teachers’ background, experience, and current knowledge. Darling-Hammond et al. (2017) stated that implementing valuable professional development fulfill the needs of teachers in which significant learning can take place.

One example of professional development for teachers are culturally relevant and responsive training. Teachers working in urban schools with at-risk students must have a true understanding of how to teach their students. Milner (2017) stated urban teachers must “deeply understand how to approach teaching and how students in poverty responds” (p. 62). Teachers that are not equipped to work with diverse students often blame them and their families for the achievement gaps and apparent shortfalls (Darling-Hammond, 2010; Ladson-Billings, 2000; McKenzie, 2001). Effective teachers educating diverse students, must understand that “content impacts the culture of their students (Culturally Relevant Pedagogy) while also understanding what pedagogical moves they must make to improve student learning in relation to students’ cultural and linguistic practices that are brought into the classroom to be subsequently leveraged by the teacher (Culturally Responsive Teaching)” (Brown, Boda, Lemmi, & Monroe, 2019, p.782).

Student Achievement

Closing the achievement gap for urban students is critical which makes retaining effective teachers are extremely important (Carter-Rodriguez, 2019). Experienced and highly qualified teachers in highly diverse urban schools play a significant role in student achievement, especially in the areas of math and science (Demir, Gul, & Czerniak, 2019; Rice, 2010; Young, 2018). The high turn-over rate in the urban schools, causes a disruption in students’ learning experience and negatively affects student achievement (Rodfeldt et al., 2013; Whipp & Geronime, 2017). Districts are often left with hiring

inexperienced and unqualified teachers to teach in the urban classrooms. According to Demir et al. (2019), in the areas of math and science, the quality of teachers is significantly lower in urban schools than the math and science teachers in the suburban schools. The quality of the teacher in classrooms is directly related to student achievement (Rivkin, Hanushek, & Kain, 2005). Ronfeldt et al. (2013) states when it comes to student poverty and language status, a teacher's preparation and certification have a deep correlation to student achievement, especially in the area of math and English.

With the increased student population growing to an estimated 53 million, the teacher-student ratio will also increase (Sutcher et al., 2016). As there is a drastic decrease in teachers completing the preparation programs, decline in applicants in the urban districts and increased number of teachers leaving the urban district for other districts or the profession, districts are struggling to hire qualified teachers to improve the achievement gap of urban students (Garcia & Weiss, 2019; Ingersoll et al., 2018). With teachers leaving at an alarming rate, the teacher preparation programs have seen a decrease in enrollment by 23% from 2008 to 2016 (American Association of Colleges for Teacher Education, 2018). If this trend continues over time, there will be a continued increase in the teacher shortage (Sutcher et al., 2016).

High turnover rates in high needs schools often have a disproportionate number of inexperienced teachers (Carter-Rodriguez, 2019). Kini and Podolsky (2016) suggest that when teachers leave hastily, it affects students' performance which is related to the teachers' inexperience and overall unpredictability. Severe teacher turnover rates negatively affect not only the students in the teacher's classroom, but it also affects the overall student population of the campus. The achievement gap widens for urban students when impacted by high teacher turn-over rates when they have years of consistent ineffective, inexperienced, and unqualified teachers (Haberman, 2017; Whitaker, 2020).

With the ever-changing and high demands in the math and science careers, it is important that urban students have highly qualified teachers in the classrooms to prepare them to work in a competitive job market of other skilled workers (Demir et al., 2019; Hussar et al., 2020; Sutcher et al., 2019).

Effective Teachers in Urban Secondary Schools

Having an effective teacher in every classroom should be priority for high-poverty schools which is critical for improving student achievement in the urban schools (McKinney et al, 2008). Effective urban educators believe and understand that it is not easy to improve student learning and performance (Stotko et al., 2006). Haberman (1995) stated that effective teachers are those that perform duties that quitters and ineffective teachers would not perform. These educators refuse to give up on their students and set high expectations for them. Gehrke (2005) suggested that teachers in urban poor schools must understand two factors. The first factor is their desire to meet students' learning needs in an individual and personal manner and second there must be a system that requires uniform conduct, treatment, and outcomes.

Self-Awareness

The self-awareness is when educators know themselves in terms of their level of frustration and their coping capabilities (Gehrke, 2005). Effective teachers in urban schools are educators that can establish relationships with diverse students, have the ability to improve student achievement, and persist with meeting the needs of their students (Haberman et al., 2017; McKinney et al., 2008). As they are teaching in urban schools, teachers understand that they have a purpose to educate low performing students. Effective urban educators are very protective of their students' learning and are flexible when it comes to ensuring the instruction fits the needs of the student (Haberman, et al., 2017; Milner et al., 2017). Haberman (1995) stated that effective educators believe that it is their

responsibility to find ways to engage their students. They accept responsibility for making their classrooms interesting, engaging, and involving their students in their learning (Haberman, 1995). In order to build this type of classroom environment for their students, effective teachers believe in professional development and lifelong learning (Stotko et al., 2006). They are constantly engaged in activities designed to improve their knowledge and skills (Stotko et al., 2006).

Self-Reflection

Gehrke (2005) stated that self-reflection is when teachers are aware of their own beliefs systems and assumptions about the students they are teaching, especially when their social backgrounds and experiences differ from their diverse students. These effective teachers believe it is their responsibility to bring hope and a sense of positive self-efficacy to students in the urban schools (Gehrke, 2005). They reflect on their own teaching practices by continuously learning how to influence their students to gain a love of learning (Haberman, 1995; Haberman, Gillette, & Hill, 2017). Poplin et al. (2011) believed these effective teachers encourage students to think about their futures and to practice particular virtues such as respecting themselves, working hard, being responsible, and hopeful. These teachers can teach these virtues through explaining their stories of perseverance, which helps the students, understand that although they have troubles in their lives, they can work through them and reach their goals in life (Ford, McKinney, & Tomovic, 2020; Poplin et al., 2011). Haberman (1995) expressed that effective urban teachers are consistently searching for what works best for their students.

Strong Beliefs

Effective teachers in the urban schools believe they are able to make a difference in the lives of their students. The approach for at-risk students for effective teachers “is very different from the quitters and failures” (Haberman, 1995). Quitters are those teachers that

do not believe they have the capacity to improve the learning environment of their students and not able to teacher in the low performing urban schools (Haberman et al., 2018). The effective teachers, however, begins to build strong and respectful relationships with their students (Poplin et al., 2011). They believe that all their students can learn (Gehrke, 2005). The effective teachers have a set of beliefs that are central to their teaching practices (Poplin et al., 2011). These five beliefs are: (a) every student has more potential than they use; (b) they have not been pushed to use it; (c) it is the teacher's responsibility to turn the situation around; (d) the teachers believe they can make a change; and (e) they really want to do this for their students (Poplin et al., 2011).

Persistent Teachers

Persistent and effective teachers are equivalent to star teachers because they understand the factors that impact the learning and development of urban students (Gehrke, 2005; Haberman et al., 2017; Whitaker, 2020). Gehrke (2005) expressed those factors are hunger, anger, conflict, and fear. For effective teachers to make changes, the students whom these teachers are assigned are the winners (Ford, McKinney, & Tomovic, 2020; Stotko et al., 2006). Effective teachers are also willing to work with parents and leaders in the community to allow students to see a vision of their best selves (Poplin et al., 2011; Stotko, 2006). The ineffective educators, known as the quitters and failures, blame their students for the circumstances in which they are in such as poverty, violence in the community, and dysfunctional families (Haberman, 1995; Milner et al., 2017). Effective teachers see past a student's circumstances and set high expectations for them (Gehrke, 2005; Milner et al., 2017). Teachers in the urban schools say that feeling sorry for students because of their environment and lowering expectations does a disservice to the students (Blazer & Kraft, 2017; Gehrke, 2005). Gehrke (2005) further discussed that successful urban teachers do not allow excuses like poverty or socio-economic factor to interfere with

the students' learning. Stotko et al. (2006) suggested effective teachers set high standards for their students by aligning instruction to meet standards and assessments and are willing to change their practice to ensure that students are learning concepts and skills articulated in state and district expectations. Milner et al. (2017) believes that when students have high expectation set before them, by their effective teachers, they take pride in their work and the students begin to raise the bar themselves.

Resilience

Resilience is a characteristic that new teachers have within themselves to overcome the difficulties of teaching at-risk students in the urban districts (Mansfield et al., 2012). Resiliency has been defined as the ability to achieve goals in the face of adversity (Patterson, Collins, & Abbott, 2004). Teachers who are resilient can overcome challenging obstacles, have a strong sense of competence, efficacy, feelings of accomplishment, and humor (Mansfield et al., 2012). The purposeful career decision made by new teachers enables them to cope with challenges they may face as they are teaching in the urban school setting (Mansfield et al., 2012).

Pre-service teachers are well prepared through their education experience to join the workforce; however, the dissatisfaction comes when they are unable to cope with the challenges they may face in the workforce (Hong, 2012). Many of the dissatisfactions are poor salary, workload, discipline, lack of support, and the diverse needs of the students (Hong, 2012). The mentoring programs are one way that many schools are assisting new teachers to build their resiliency (Castro, Kelly, & Shih, 2010). Despite these mentoring programs that many schools offer, the programs are flawed (Castro et al., 2010). Pre-service teachers are help-seeking, wanting meaningful support and networking which will provide them with resources they will need to problem solve in their classrooms (Castro et al., 2010). The mentors are often neglectful and offer minimal help (Castro et al., 2010).

The mentors can play a vital role in the decision for new teachers to leave or remain in teaching (Divoll et al., 2018). The first five years for a new teacher are when they are the most vulnerable (Mansfield, 2016), so working in intense conditions with greater pressures can leave inexperienced teachers incapable of maintaining their motivation and effectiveness in the classrooms (Hong, 2012). According to Bandura (1977), teachers with low self-efficacy are unable to handle stressful situations, and it will be hard for them to become effective and resilient educators.

Characteristics of resiliency. The teachers who have remained in secondary urban school settings possess certain characteristics of resiliency to remain in a challenging teaching environment (Patterson et al., 2004). Teachers' mindset must shift from the challenges, stressors, and burnout to how they can become a resilient teacher which allows them to maintain their motivation and commitment to teaching (Achor, 2013; Divoll & Ribeiro, 2021; Dweck, 2006; Gu & Day, 2007). The education profession is considered such an emotionally charged work environment in which many teachers take the challenges of teaching personally (Hong, 2012; Divoll & Ribeiro, 2021). The dominant emotional stress of teaching begins to reduce a teacher's effectiveness in the classroom (Divoll & Ribeiro, 2021; Hong, 2012; McCarthy, Lineback, & Reiser, 2015). The negative emotions of teaching causes many of teachers to leave the teaching professional or seek jobs which causes less emotional stress for teachers (Hong, 2012; Sutcher et al., 2016).

According to Fredrick (2004), positive emotions such as joy, interest, contentment, and love enhance the possibilities of teachers learning to successfully cope and survive challenges in the workplace. Gu and Day (2007) believed teachers' positive emotions have a profound impact on their teaching in the classrooms. Teachers with positive emotions provide students with a classroom that is pleasurable, creative, challenging, and filled with joy (Achor 2013; Divoll & Ribeiro, 2021; Gu & Day, 2007). This type of classroom

setting means that teachers are invested in their students and do not blame them for not meeting the rigorous standards that have been set for students (McCarthy et al., 2015; Patterson et al., 2004). Instead of blaming the students, the teachers want and are committed to ensure the success of their students (Patterson et al., 2004). Teachers are willing to seek professional opportunities that will help them self-adjust their teaching strategies and build their students' capacity (Patterson et al., 2004; Smith et al., 2018).

Teachers experience burnout early in their careers, which leads to a significant difference between educators who remain in teaching or leave (Divoll & Ribeiro, in press; Ingwalson, 2016). The pressure from working in a low socio-economic school and the struggles with balancing a personal life, can ultimately lead to burnout for new teachers (Carver-Thomas & Darling-Hammond, 2019; Hong, 2012; Ingersoll, 2014). Hong (2012) stated that teacher burn out is not a minor problem. It plays a significant role in whether a teacher becomes unmotivated to continue in the educational profession (Kraft et al., 2015; Sucher et al., 2019). The observable behaviors of a teacher that has become burned out is a reduction in personal and professional growth, emotionally detached, and a change in attitude and effort in the classroom setting (Hong, 2012).

Teachers, who decided to remain in the profession, must draw an emotional line or boundary to balance their professional growth and become emotionally involved in building student success (Aultman, Williams-Johnson, & Schutz, 2009; Divoll & Ribeiro, 2021; Ellerbrook, 2016; Smith et al., 2018). The professionals who have remained in teaching have experienced burnout; however, many of them are resilient and established appropriate emotional line, which enabled them to decrease burnout and stress (Albright et al., 2017). However, with some teachers, who are considered leavers have not established appropriate emotional lines and are not resilient, take their emotions, stress, and burnout

with them into their personal lives and into the next day which continues the negative cycle in their classrooms (Aultman et al., 2009).

The teachers who have remained in teaching longer than five years attribute their resilience to their love and commitment to the children they teach (Haberman et al., 2018; Stanford, 2001). The teachers believe their purpose is to have their students learn and develop, along with the desire to make a meaningful difference in the lives of their students and see them succeed (Stanford, 2001). Effective teachers that are educating urban students want them to prosper and become productive citizens of society (Haberman et al., 2018; Whitaker, 2017). These effective teachers create a loving and learning environment in which students can thrive both academically and emotionally. Students are able to flourish in a caring environment where the teacher has set high expectations where they can make academic progress (Milner, et al., 2017)

Grit

Grit is defined as the “tendency to sustain perseverance and passion” (Robertson-Kraft & Duckworth, 2014, p.6) for long-term goals with maintained effort over a period of time (Duckworth & Kern, 2011). Educators who persist through difficult tasks are more likely to remain in the teaching profession (Carter-Rodriguez, 2019). Early in a teacher’s career, grit plays an essential role in teacher retention (Robertson-Kraft & Duckworth, 2014).

Grit and resilience are not the same (Carter-Rodriguez, 2019). Resilience is the ability to overcome or recover from obstacles and grit is the ability to have stamina (Carter-Rodriguez, 2019). People with grit tend to work harder over a span of time, maintain commitments during challenges and adversities, and finish difficult tasks more effectively (Duckworth et al., 2007). Robertson-Kraft and Duckworth (2014) believed that teachers

with grit are able to tolerate challenges of teaching and continue their careers in the teaching profession.

Teacher-Students Relationships

Students having social interactions are important to a student's learning environment (Divoll, 2010; Vgotsky, 1987). Classrooms where students have positive interactions with their peers and teachers are essential to students' growth (Divoll, 2010; Watson & Battistich, 2006). Classrooms where teachers provide a caring environment, students are committed to meeting or exceeding the teacher's and classroom expectations (Divoll, 2010; Noddings, 2005). For teachers to produce a caring classroom, teachers must also build a meaningful and positive relationship, know them, and have a setting that gives each student an opportunity for behavior and academic success (Divoll, 2010; Wolk, 2002). Urban teachers feel their success and satisfaction at work depends on their students' growth and the caring environment they give to their students (Kraft et al., 2015). Students' "abilities, interest, backgrounds, learning needs, attitudes, and effort" vary within the classroom setting; however, teachers are frequently "encouraging, diagnosing, promoting and managing the engagement and progress" (Kraft et al., 2015, p.754) of their students to ensure they continue to promote a classroom of caring.

Urban students living below the poverty line face many challenges such as living in impoverished communities, facing discrimination, and dealing with the stress of living in a neighborhood of violence (Berliner, 2009; Milner et al., 2017; Rothstein, 2004; Yoshikawa, Aber, & Beardslee, 2012). Milner et al. (2017) suggest that urban teachers must realize "the potential, intellect, talent, creativity, resilience, and overall knowledge these students possess and bring into the schools and classrooms" (p. 51). Understanding the needs and challenges of urban students, teachers must continue to have high expectations and deep dedication for their students (Drury & Baer, 2011). Teachers must also continuously work

to improve students' academically and provide them opportunities to show growth on standardized test (Kraft et al., 2015).

Teachers working in high poverty schools want to see their students academically, socially, and behaviorally make progress (Whitaker, 2017). However, when teachers do not see the rewards of their work, then some teachers decided to leave their current school either for another campus or leave the profession offering greater benefits to their hard work (Johnson & Birkeland, 2003). When teachers decide to leave, the turnover rate for low-socioeconomic districts can be costly and have a negative effect on both the schools and students (Ronfeldt et al., 2013). Kraft et al. (2015) believed that schools can encourage teachers with proper, purposeful, and logical approaches to teaching in the urban schools. The schools that ensure this happens, are able to attract effective educators, develop their skills, and build their expertise in the classroom will guarantee that students gain from skilled and committed educators (Kraft et al., 2015).

Administrative Support

Principal leadership is vital in retaining new and experienced teachers (Carter-Rodriguez, 2019; Darmody & Smith, 2016; Wang et al., 2018). Leaders must be able to assign the right teachers to the appropriate grade levels, subject areas, influence teaching practices, allocate school funding, and create structures that supports effective teaching (Divoll & Ribeiro, 2021; Donaldson & Johnson, 2011). Administrators should also serve as mentors to novice teachers and teacher leaders as they continue to develop their expertise and build meaningful relationships in the school community (Santamaria & Santamaria, 2013). In addition, within the school community, principals should build a tone of trust, collaboration, and shared decision-making (Simon & Johnson, 2015).

The leadership of principals is essential in high needs schools due to the obstacles schools face (Grissom, 2011). Principals must be able to hire effective educators, develop

their staff, and provide a clear vision for the campus environment in which the staff can improve their skill set (Tingle, 2016). The topic becomes more of an issue when the principal is leading a high poverty school and is inexperienced (Loeb, Kalogrides, & Horng, 2010). Grissom (2011) found teachers working with effective principals in the low socio-economic schools are more content than teachers working in high socio-economic schools. Grissom (2011) concluded that an effective leader “completely offsets” teachers leaving high needs schools. Principals can effectively counteract teacher turnover with implementing positive school climate, having a pulse for teacher moral in their building, provide authentic professional development, and having a meaningful and collaborative mentor program (Divoll & Ribeiro, 2021).

Principals that are able to retain teachers think of them as learners and committed to assisting them continuously improve (Borman & Dowling, 2008; Cochran-Smith et al., 2012; Johnson & Birkeland, 2003). They allow teachers to meet and plan collaboratively to improve instructional practices in the classroom for student learning (Simon & Johnson, 2013). Effective principals purposefully develop and sustain a unified professional culture on their campus (Kardos, Johnson, Peske, Kauffman, & Liu, 2001) which benefits new teachers with constant guidance and support from more experienced educators who enjoy their roles as mentors to the new teachers (Simon & Johnson, 2013). When principals provide a connection between school collaboration and teacher retention, students will have a learning environment that will be conducive for learning (Tingle, 2016).

Summary

This literature review discussed the experiences of urban secondary math and science teachers and school leaders related to the factors that compel the retention of secondary math and science teachers. Throughout this literature review, the researcher examined the importance of retaining highly qualified teachers for at-risk students. The

literature upheld that teacher retention has an impact on students, teachers, and school leaders. The literature also established that teachers leaving early in their career effects low performing urban schools with at-risk students. Also, throughout the literature review, the researcher discussed the importance of retaining highly qualified math and science teachers. The gap in the literature is how a teacher's self-efficacy can be used to retain teachers and how urban districts can build capacity within those teachers. Another vital gap in the literature is how can urban districts continue to provide supports for their new teachers which centers around their needs to improve their teaching practices and compel them to remain in the teaching profession for longer than five years. Overall, the literature provided evidence that urban schools must provide teachers with a safe work environment, collaborative culture within the school setting, which includes a support system for teachers.

CHAPTER III:

METHODOLOGY

The purpose of this study was to explore the factors that encourage secondary math and science teachers in urban Title I schools to remain in the teaching profession for longer than five years. This qualitative study explored the following questions:

RQ 1: What perceptions do secondary math and science teachers hold regarding factors that influence them to remain in a Title I urban school more than five years?

RQ 2: What perceptions do secondary administrators hold regarding retaining secondary math and science teachers in Title I urban schools?

RQ 3: What perceptions do district specialists, coordinators, and area superintendents hold regarding retaining secondary math and science teachers in Title I urban schools?

According to literature, many secondary math and science teachers leave the education profession within five years of their careers. According to Rumschlag (2017), the overall teacher turnover rate is 30% higher than other highly stressful occupations. In the areas of math and science, the teacher turnover rate is 70% higher in Title I schools, than non-Title I schools (Carver-Thomas & Darling-Hammond, 2019). However, the literature does not adequately identify the factors that compel secondary math and science teacher in Title I schools to remain in the teaching profession longer than five years.

This qualitative study added to the literature by capturing the perceptions of secondary math and science educators with more than five years of experience in the Title I district. Teachers explained why they were compelled to continue to teach in the hard to staff Title I urban district. The researcher explored different points of view from campus administrators and district personnel.

This chapter addressed the research design, site and participant information, data collection, analysis of the data, ethics, and validity.

Research Design

This qualitative research study utilized the case study approach. The case study was most appropriate for this research due to the knowledge gained about various phenomenon (Yin, 2014). The case study approach permitted the researcher to capture from teachers, through semi-structured interviews, why they remained in Title I schools. The researcher also sought the perspective of administrators and district personnel on efforts to retain secondary math and science teachers.

The specific type of case study for this research was the multiple case study approach. The multiple case study approach was used to make comparisons within site, cross-site, and between sites (Miles & Huberman, 1984). This approach allowed the researcher to develop strategies to look for patterns and emerging themes (Miles & Huberman, 1984). Multiple case studies were appropriate for this exploration because participants, from multiple school sites, were able to discuss and explain from their perspective on teacher retention through their experiences and roles in the district. Teachers, administrators, and district personnel gave the researcher greater insight from their various perspectives about retaining secondary math and science teachers.

Site and Participant Selection

Jefferson School Independent District is an urban district located in southwest Texas with a population of 45,000 students. The district covers about 36.6 miles and is surrounded by apartments, businesses, and diverse communities. Between 1970 and 1988, the Jefferson ISD community population quadrupled. As the population rose, there was a shift in demographics and a decline in economic stability, which caused a large percentage of the student population to live at or below the poverty line. The district is composed of

approximately 29% African American, 54% Hispanic, 4% White, 1% American Indian, 12% Asian, and 1% other ethnicities. The student population is 84% economically disadvantaged and 79% are at-risk students (TEA, 2019). Within the district, more than 80 different languages are spoken, the Hispanic and Asian languages are the most dominant (TEA, 2016).

The researcher chose this particular Title I district because of the widely diverse population of both staff and students. The longevity of the educators in the district ranges from first year teacher to over thirty years or more teaching experience. Secondly, Jefferson ISD was selected as it is known for the amount of research, incentives, and resources they have invested into retaining their teachers of all levels.

The district has a total of 43 schools including 14 secondary schools. Out of the 14 schools, six of them are middle schools, two schools serve 10th-12th graders, four schools serve 9th-12th graders, and two schools serve only ninth graders. In Jefferson ISD, the seventh-grade students' names are entered into the district's computer-based program and randomly selects the high school they will attend. This method is referred to as a lottery system. Three of the nine high schools participate in the lottery. The school chosen for students may not be the closest to their residence. Students who attend the early college high school, the magnet high school, or the high school for juveniles do not participate in the lottery.

The researcher used purposive sampling and selected a total of eight secondary math and science teachers (four middle school and four high school). Math and science teachers were selected due to the high demand for highly qualified teachers to prepare students to perform in the global market in the math and science careers (Futrell, 1999; Hussar et al., 2020). The criteria for selecting the participants were as follows: (a) taught math or science in grades 7-12 and (b) had five or more consecutive years of teaching

experience in a Title I district. The teachers gave their perceptions regarding their decision to remain in a Title I district for longer than five years. The researcher expanded the study to include district administrators, area superintendent, professional development coordinator, and district content coordinator to add their perspectives on retention of secondary math and science teachers to deepen data for this study.

Data Collection

Prior to data collection, the researcher applied for and obtained Committee for Protection of Human Subjects (CPHS) and Institutional Research Board (IRB) approval from the participating school district and university. Once the approvals were obtained, the researcher worked with the district's IRB representative and compiled an email to send to the potential participants. The approved email was sent to district personal and campus administrators. The researcher began interviewing the district personal and campus administrators. After each interview with the campus administrators, the researcher asked for a staff list of math and science teachers. The researcher began contacting teachers from various middle and high schools to ask for volunteers to participate in the study. The researcher was able to obtain eight teacher participants and began collecting data through individual interviews with teachers.

Before the interviewing the participants of this study, the researcher constructed specific sets of questions to guide the interviews for the teachers, administrators, and district personnel. After constructing the questions, the researcher allowed other professionals (university professor; Jefferson ISD personnel; and a teacher with more than five years of experience not participating in the study) to review the questions. The review of the questions ensured that the researcher gained the data needed to answer the research questions for this study. This process added validity to the interview questions for the teachers, administrators, and district personnel.

The researcher asked the participants for permission to record the interview for accurate transcription later. All teacher interviews were held through the audio recording through the Zoom platform. The interviews lasted anywhere from 20 minutes to 90 minutes per session. The topics for the interview questions were based on teachers' pre-service programs, supports they have received, and their perceptions of remaining and retaining teachers in the urban district. District personnel and administrator interviews lasted approximately 20-30 minutes through Zoom. The interview questions covered their teaching experience, perceptions of teacher retention, mentoring programs, and continuous supports for new and veteran teachers. The researcher asked permission from these participants to audio record the interviews for transcription prior to analysis.

Data Analysis

After conducting the individual interviews, the researcher transcribed the audio recordings. During the analysis of the transcription, if any responses were unclear, a member check was conducted with the participants to ensure clarity.

The constant comparative method was utilized to analyze the data in this study. Lincoln and Guba (1985) stated the first step is to examine the interviews and begin coding for themes. Once the transcriptions were complete, the researcher began identifying patterns and themes through open coding until the data was saturated. Braun and Clarke (2012) stated that thematic analysis identifies and organizes information into patterns across the data collected. The analysis allowed the researcher to seek similar themes and experiences (Braun & Clarke, 2012). The researcher began to go deeper into the data through axial coding which led to differentiating the themes.

As the researcher coded the interviews, the data was consistently compared to the previous interviews for codes with similar themes. Glaser (1965) suggested that during the constant comparison of the data, the researcher began to develop theories about each of the

themes. The next step was to begin merging the themes and their theories (Glaser & Strauss, 1966). The researcher combined the similar themes and their theories from each of the interviews. Kolb (2012) stated the axial coding procedures are completed after the open coding to allow the researcher to connect across themes. The final step of data analysis was the selection of core categories pertinent to the research questions of this study. Strauss and Corbin (2008) defined this as selective coding which is systematically finding similarities and relationships between themes in data. After the coding process, the researcher compiled the data to discuss the various perspectives of teachers, administrators, and district personnel of secondary math and science teachers remaining in Title I schools.

Validity

The researcher enhanced the validity of this study by audio recording the interviews and transcribing them verbatim. Professional peers were utilized to review the transcribed data. The researcher took the data collected from the various interviews and triangulated across participants to answer the research questions.

Member checking with the participants after the interviews were transcribed further ensured the accuracy of the data. Using this method, the researcher made certain responses from participants were transcribed accurately. The researcher used peer review to add validity to the data. The researcher will safeguard all interviews, recordings, and transcripts in a locked file cabinet for five years. After the keeping all data for the five-year time period, all items will be destroyed.

Ethical Issues

The researcher obtained CPHS and IRB approval prior to conducting the study. Once approval was obtained, the researcher composed a consent letter for participants in this study. The letter stated the purpose of the study, they would participate in an interview, and their responses were audio recorded only. Participation was strictly

voluntary, and consent could be revoked at any time. Participants were identified by numbers instead of names to protect identities. Pseudonyms were used to protect the identities of the participants, schools, and district when results are reported. The teachers, district personnel, and administrators were aware that all information was confidential and would be in a secure location for five years. After the permission was obtained from the participants, the study began.

Limitations of the Study

The first limitation of this study was the researcher, who is an administrator. Some participants did not completely answer the interview questions due to the researcher being an administrator in the district. Also, some participants may have inflated the responses to make them seem more effective educators. Another limitation was the time span and the number of participants the researcher interviewed. The research was approved by the district and university to begin collecting data; however, the district would not allow the researcher to begin interviewing until all participants were back on their contractual time which was mid-July. The researcher only had a few weeks to collect the data before school began. The last limitation was the number of teachers, administrators, and district personnel interviewed. The dramatic change in the education platform, many participants were working to adapt to the work environment and prepare for students in the virtual form.

CHAPTER IV:

RESULTS

The purpose of this qualitative study was to analyze the perceptions of teachers, administrators, and district personnel on teacher retention for educators in the Title I district for longer than five years. The researcher interviewed four middle school teachers, four high school teachers (Table 4.1), one middle and two high school administrators, and three district personnel. The names of the school district and participants are all pseudonyms for confidentiality purposes. During those interviews, participants shared the factors that contributed to educators remaining in the hard to staff Title I district, teaching at-risk students longer than the five years. These factors included purposeful district trainings, desire to teach at-risk students, support from district and mentors, and wanting to make a difference in the lives of students.

Table 4.1

Teacher Participants Demographics

Participants	Years of Experience	Certification Program
Middle School		
William	12 years	ACP Program
Bret	16 years	ACP Program
Dean	7 years	ACP Program
Christina	24 years	College Program
High School		
Daryl	18 years	ACP Program
Maria	16 years	ACP Program
Regina	25 years	Deficiency Plan
Samuel	14 years	ACP Program

Note. The names of all teacher participants are pseudonyms for confidentiality.

Teacher Preparation

The Texas Education Agency requires all schools to have highly qualified teachers in the classroom for all schools. Teachers must go through either a teacher education program or an alternative certification program (ACP) to receive their certification to teach in any school setting. Seven teachers received their bachelor's degree either in the science or math field and one with a degree in education. There were eight certified teachers interviewed; however, seven gained their certification through an alternative certification program (ACP) and one went through a teacher education program with a college or university. Six teachers stated that their ACP program did not prepare them to teach at-risk students in the urban school districts. The remaining two teachers felt as though the college certification program, deficiency plan, or ACP did prepare them for a realistic experience to teach in any school setting. The teachers throughout this section discussed their lack of preparation through ACP, how the college certification program prepared them to teach, and the district's professional development supported them in the classroom.

Many of the educators interviewed for this study believed the various certification programs focused on perfect scenarios in the classroom and not enough on the reality of teaching. Dena Bell, a veteran middle school math teacher stated, "I do feel that walking into teaching, the certification program [ACP] didn't necessarily prepare me for at-risk students because everything seems to be for that perfect scenario." The participants who went through an ACP program explained that their preparation programs offered short observations, accelerated courses, and did not provide opportunities to expose the participants to challenging situations that happens in real classrooms. Bret White, a 12-year veteran middle school math teacher, describe his experience in ACP as accelerated and involving few observations in classrooms with at-risk students. He stated, "Student teaching would be ideal but then it would take away from the accelerated program." The

teachers felt that having the chance to understand the reality in the classroom would have an impact on teachers remaining in the district longer than the five years. Maria Boyd, a math teacher for 16 years, spoke about the main struggle for new teachers:

For the most part, I don't feel that is the content that the teachers struggle with. It's the classroom management, especially if you're not an education major, then you've probably had little to no training with classroom management.

The teachers felt that giving teachers the opportunity to interact with students would give them the realities of the classrooms and learn how to handle different situations.

Samuel Reyes, a 14-year high school science teacher, recalls his experience in the ACP program. He stated that his program did not prepare him to teach in the Title I district nor teach at-risk students. Although he attended Jefferson ISD as a student, he was only prepared to teach in a “perfect” setting. When discussing the week-long program, Samuel expressed:

The program was a week-long at the time and everything was based off of what would happen in the perfect world of the perfect situation. So, I don't know who they were preparing because I don't think any educational setting is a perfect situation.

As Samuel stated in his comment, his experience in the ACP program did not prepare him for the urban school setting.

When the teachers were discussing the perfect scenario, many of them described learning about the perfect classroom scenario as good students from good family structures with few challenges and the way to meet those challenges was through textbook solutions. Daryl Green, a secondary physics teacher with 18 years of experience, expressed that during his experience in ACP, the program looked at the world as if it were perfect and students had the “same background and same family structure...of course when you are in

the classroom you quickly realize that is not the case.” Regina Holloway, a secondary math teacher with 25 years of experience, also believed that students coming from the wealthiest backgrounds to the poorest backgrounds come with both academic and behavioral challenges. She conveyed that it is important that as educators we do not place them in the “same neat little box.... your goal as a teacher is to always meet them where they are and try to move forward.”

While the majority of the teachers felt thrown into teaching without actually knowing what it meant to teach in an urban Title I district, two teachers interviewed felt as though going through a college program or the deficiency plan, better prepared them for teaching in the urban schools. With 24 years of secondary math experience, Christina Soto articulated that her college program allowed her to interact with various classroom settings and student demographics:

We did have to go into these classes and do observations. And I will make sure that some of the schools we went to were considered low economic schools and then they would send us to schools that were not considered the disadvantaged schools. So, you had a wide variety of different schools and different types of students that you that you got a chance to interact with. And so that just gave me the experience of, you know, being able to teach in any environment, basically.

Having this experience in the traditional college program, provided Christina with the skills to teach in various school environments.

Regina discussed that although she went through a deficiency plan, “she [the professor] worked with us a lot of times, like on Saturday. You know, even when we didn't have class. You know, it was things to make sure we were prepared to help those children.” Both Regina and Christina discussed how having those experiences helped them learn how to teach all students.

William Jones, a secondary math teacher, expressed that ACP prepared him for teaching; however, the district helped as well, “I think it prepared me to teach, but also just being from the district where I am, it helped me a lot as well.” A number of participants shared that the district provided trainings to help novice teachers become prepared to teach at-risk students, as well as to acquaint them with the district’s approach to education. Dena agreed that the district focuses on their first-year teachers by having them go through an extensive training program for more than one year, “Well, with my district, they focus a lot on their first-year teachers. We do. I mean, we have to go through an extensive training program and not just one year of it.” Tamera Johnson, district personnel, stated that the new teachers are taking three years of professional development to get and keep them prepared to teach in the district:

New teachers are asked to take more professional development than we require experienced teachers to do, just because they need to catch up fast. They need to figure out what the district’s way is and how do we do that. We've been doing this for four years and you've never heard of it before. So, you know, we need you to catch up.

According to the participants, the three-year professional development focused on learning the district’s way and prepared them to teach at-risk students.

Dena emphasized that the district has prepared her to become a teacher. She stated that she definitely learned along the way and from professional development programs:

Well, with my district, they focus a lot on their first-year teachers. We do go through an extensive training program and not just one year of it. We go through training over classroom management, different strategies for the at-risk students, different scenarios, just different things for English language learners. The district itself is actually, what is preparing me for teaching at-risk students.

The comments Dena shared about the district's professional development contrast with her perceptions of her ACP, which she felt did not prepare her to be an effective teacher in an urban school district. However, the support she received from her district makes her feel prepared to teach students with a range of needs, abilities, and backgrounds.

According to district administrators and personnel, they have various methods in which they are able to continuously support teachers' growth such as developing growth plans, prescribe specific professional developments for them, and looking at student data for instructional need. Neal Waters, a secondary administrator, stated that when looking at students' data, an administrator or specialist can develop a "smart growth plan" which includes professional development that would help support the teachers with instructional strategies. Neal expressed when looking at creating the growth plan:

We tend to do a smart growth plan, but it's kind of like this...what's the environment like at this point? Has things changed? Are we still the same? Has there been any improvement? If there's been an improvement, then let's go to the next level and try something different. You know where the more the struggle is getting improvement. Let's go back to the drawing board and let me hear your input.

Along with developing a smart growth plan, Renee Foster, district personnel, suggests "classroom observations that's a good indicator for where you need to be able to suggest to people what kind of professional development." With the classroom observations, Victor Anderson, an administrator in Jefferson ISD, stated "looking at student data allows us to track if the supports and professional developments are being effective."

In summary, the teachers' experience with an ACP program and the college certification program were very different. The lack of preparation through the ACP certification program did not train the participants for the realities of teaching at-risk

students. The teachers learned through district trainings and on the job experiences. The teachers that were able to go through a college certification program felt better prepared through good professors and student teaching in various classroom settings. Although seven of the teacher participants received their degree in either in math or science and completed the ACP program to receive their certification, they chose to teach in the urban schools instead of working in a field that would provide more money. The participants explained that they wanted to prepare their students to work in a competitive work market and able to perform at the same level or better than their counterparts. Overall, this is why all of the teachers believed it is important to provide future educators with realistic classroom experiences, good district training, and support to retain teachers for longer than five years in the urban schools.

Perceptions of Teacher Retention in Urban Title I Schools

This section will discuss the teachers, administrators, and district personnel's perceptions pertaining to the factors that contribute to teachers remaining in the urban Title I schools. The teachers describe the factors that compelled them to remain in the urban district are meaningful relationships with the students, having strong and seasoned mentors, and a collaborative supportive team of co-workers. The district's personnel and administrators' perceptions of teachers remaining in the urban district are similar to the teachers' such as relationships with the students; however, there are additional factors such as valuing and celebrating the teachers along with having a strong support system influences veteran teachers to remain in urban Title I district longer than five years.

Desire to Teach Urban At-Risk Students

Many teachers interviewed for this study admitted that teaching in an urban Title I district can be challenging. They are faced with discipline issues, lack of parental involvement, lack of resources, and supports; however, teachers say it is all worth it when

it comes to making a difference in the lives of the students. In this section, teachers went into detail explaining why they wanted to teach in an urban school district where students are considered “bad.” The teachers expressed they wanted to teach at-risk students due to their childhood, previous career experiences and wanting to give back to make a difference in the lives of their students.

The teachers interviewed for this study expressed that their childhood and career experiences compelled them to begin teaching at-risk students in the urban district.

William and Samuel both stated they wanted to return to Jefferson ISD because they were both born and raised in the area therefore, they could relate to the experiences of the students. William compared the similarities of his childhood with those of his students:

I understand I can relate to the kids what they have going on at home, whether it's a single parent at home where they are big brother, big sister had the key to unlock the apartment to let little brother and sister in. And gotta cook, gotta clean, get to vacuum, you know, everything before mom gets home. And get their homework done. So, you know, I can relate a whole lot to the kids I teach.

Additionally, Samuel felt that coming back was out a sense of “loyalty” and “it [Jefferson ISD] has always been home for him.” He is “able to build these guys and girls and just...watch them grow and blossom into successful adults.”

Although the majority of the teachers interviewed did not grow up in the Jefferson ISD district, they experienced growing up with or around some of the challenges, the students may face outside of the school setting. Bret believes he is where he should be:

Students [that] don't look like me and I can relate to some of the different challenges that they may have...I'm a foreigner as well. I grew up in a foreign setting or home...so I have a twofold...to relate to my students on a different front.

Bret understands that he is able to offer all students the tools they need to be successful both in and out of the classroom. Christina, on the other hand, who grew up in a rural area in Kentucky, came from a two-parent household with good jobs; however, she explained that her experiences growing up impacted her decision to help others, “I saw some of the living environments...so I wanted to help students that I grew up with that didn’t have someone to tell them that you can do something else.” Christina wants her students to understand the life of poverty can be changed through education. Like Bret, she wants to provide options for her students that will change their lives for the better.

Unlike the other teachers interviewed, who grew up in the urban environment, Regina and Maria had previous work experiences and switched to education. Regina, who worked in the business sector, began teaching because she did not get the fulfillment in the business world as she would in doing what she considered her calling, “I want to always teach the children that need the most help to make sure those students are not lost and that they don’t fall through the cracks.” Regina further affirmed that she is “teaching because I want to because [business] managers make very good money, so it’s not about the money.” Maria, who came from a private school and the business world, said that working in the urban classroom was “an eye opener;” however, she also indicated that teaching made her happy:

I didn’t get the same feeling [in business] because I felt like if I don’t show up tomorrow, they’ll replace me and keep going. I won’t be missed. You don’t feel like you’re giving back and that was important to me and that’s how I was raised.

For both of these teachers, making a difference in the lives of their students is important not only for their generation but for the future generations as well. It was made clear by teachers that they are not in education for the money but for the love of the students.

Overall, the teachers interviewed admitted that teaching in the urban district does have many eye-opening challenges; however, they are teaching because they want to make a meaningful impact on the lives of their students. It would be easy for them to work in other districts with less stressors or in the business world making more money; however, neither would be as fulfilling as loving what they do, wanting to make a difference in the lives of their students and being able to see the growth and success of their students.

Relationships in the Workplace

According to the participants, building strong positive relationships in the workplace is another factor that retains teachers in the urban districts. Those relationships are with students, math and science specialist, co-workers, and building and district administrators. The teachers expressed that having strong relationship connections within the workplace, allows the teachers to continuously have strong self-efficacy, build their skillset, and have a willingness to learn from others.

Students. Teachers interviewed for this study emphasized having positive student relationships allow students to prosper and grow as individuals. Having those, strong relationships, give the teachers opportunities to have conversations not only about the content in which they teach but honest discussions about the students' future. Daryl believed that when you speak hope into students, "they start carrying themselves with a little more pride in how they talk to their parents and their friends." William believed that "giving them that encouragement that there is a way out" of their given situation and students are able to make a successful life for themselves.

According to some administrators and district personnel interviewed, the teachers stay in the urban district because they make meaningful connections with the students. As previously discussed, the teachers desire to teach and guide at-risk students, so they are able to be successful adults. The administrators recognized that the students need those

teachers because it helps them have a consistent guiding adult in their lives that desire to see them reach their full potential. Lacie, from district personnel, understands that at-risk students need consistent adults in their lives:

I think the people that stay there really do enjoy the energy that comes from teenagers. Some people that drive us crazy. Others thrive on it and teenagers need lots of adults in their life to help them. And I think...what I found is people who stay on the campuses really like the kids.

Victor, a district administrator, validated Lacie's comments. He recognizes that teachers want to not only build those meaningful relationships but also wants to prepare them for their future. Victor believed that meaningful relationships that are built with students leave a lasting and positive impact on the lives of those students:

Another factor that influenced teachers to teach on a secondary level is just the students being older and being able to make those meaningful connections. I'm not saying you can't make this with the kids that are in elementary, but secondary. You kind of get them ready, prepared for college and beyond. And so just kind of getting them prepared and ready for life and so being able to have those conversations and those students understand what a teacher is coming from.

According to the district personnel and administrators, building meaningful relationships with students, helps prepare them for future through guidance and conversations about their goals.

The teachers, in this study, understand that the process of building relationships to change the mindset of students is not easy. They have acknowledged that it becomes frustrating and challenging. It is very important to the teachers that they are giving the students the necessary skills to succeed content wise and tools to survive the ever-changing

world in order to discontinue the generational poverty in the urban community. Regina realizes that ending generational poverty is vital to the future of her students:

I see it [the current generation] deteriorating from when I went to school as a young child and even this coming up. I'm just afraid of if we don't get a handle on this generation with wanting education as a whole. If we don't get a handle on them then, you know, you don't repeat history. At this point, the minds are becoming enslaved, as opposed to the shackling of the physical body. I just feel like I just owe it back to now and then returning that if I'm going to a teaching capacity, then I need to make sure that the generation that comes behind me that I'm preparing them, you know, that's paying it forward and paying it backwards. If we don't prepare them...Then again, we as they become the adults that we turn out into the world...We continue to feed the prison pipeline system and we continue to have generational poverty.

As stated above, Regina believed that if she can change the mindset of her students in order to prepare students for their future goals, then she is not continuously feeding the school to prison pipeline.

The teachers are confident that through education, changing how students behave, and think, transforms the stigma society has about at-risk students from urban districts. Samuel discussed his view of having those strong relationships with students by teaching them life lessons that will assist them with breaking the cycle of poverty and judgment:

I love the relationships that I'm able to build with these guys and girls and just once again watch them grow and blossom into just successful adults. I'm not asking you to be a biology major or anything like that. I just want you to be a successful person of color in this world. I teach my kids all the time, you got to break these stigmas that they have on us. You know, you walk into a situation and

people are automatically going to judge you, but the best feeling in the world is being able to sit there and have political discourse with somebody or just be able to just be like them and just shocked them. Whereas, you know, they're going to assume everybody makes assumptions where human beings are going to make an assumption. When you see somebody, but once you open your mouth you have the ability to change whatever perception that person has a view of other or of your culture. And I think that is our duty and our responsibility, because I say, guys, whether you're black or brown. They're looking to take us out right now. And I said, you have to find a way to break that cycle. And you can break that cycle just by just accepting knowledge and listening if you just listen. Somebody asked me the other day I was in a family group chat. Matter of fact, we do these family Zoom meetings and those like what's most of the best thing somebody ever told me? And you just listen, because when you take time to listen, all right, you gain that knowledge or you learn something that you might have blocked, you might have blocked. And whether you decide to use that knowledge or not, that knowledge is still there. So, you never know when it's going to come into play.

Meaningful relationships with students for teachers are a way to educate their students and provide them with the lifelong lessons that will carry them for generations. Their goal is to give them the tools to be successful adults and break the generational poverty and the stigma that has been set upon them by society.

Professional relationships. The participants interviewed emphasized the importance of having respectful and positive connections with the mentors, campus content specialist and administration. These relationships can have a meaningful impact on teachers and their decision to remain in the district or a negative impact, which can compel a teacher to leave within their first five years of teaching. The teachers, campus

administrators, and district personnel offered their perceptions of how professional relationships have influenced teachers to remain in Jefferson ISD.

Campus support. The teachers in this study explained that having mentors, content specialist, and a cohesive team helped them become an effective teacher in the classroom for at-risk students. When discussing support, William indicated, “that support helped me get through those first few years because they say if you get through those first few years, you will make it all right.” As the teachers began their careers, they were assigned mentors by the building administrators. According to Lacie, a secondary administrator in the district, she likes to “put them with someone on their team that they feel comfortable talking to that way they will confide in that person and feel comfortable asking for assistance or don’t mind going to watch that person teach. That way they have their own go to person.” Regina stated she was assigned “a seasoned mentor in which she taught across the hall.” It was beneficial for her because she could hear how her mentor related to the students and taught the lessons. Samuel specified that his mentor “she held my hand. She pretty much guided me through the process.” Having a strong work relationship with the mentors, which guided them through those hard first few years, helped them become effective educators in the classroom.

The mentors were one significant relationship that compelled teachers to remain in the urban district. Along with having mentors, teachers and administrators collaboratively stated that having a supportive and cohesive math or science team in which they planned with contributed to them becoming successful teachers. Bret verbalized how his school was supportive and addressed his concerns:

My school is very supportive of trying to address my needs and my concerns. But usually I'm self-reliant, you know, I kind of figure things out, but whenever needed, the team the math team has been great. You know, for resources and things of that

nature, moral support. So. the things that come naturally with the camaraderie you have with the cohort, the camaraderie that I've had with my present and past co-workers, that's been more the most rewarding thing I can say that they've offered because we all struggle together.

Christina also stated that working with her team has been very helpful. She believed that having a supportive team that collaborates and assists each other with the increased need for technology in the classroom, due to the COVID crisis; they are enduring at this time. She described how her team worked well together:

We all work on a team of great seventh grade teachers and we work together, especially with this virtual learning. We have some teachers that are great with technology who was not that good at management in their class. We see them stepping up now with this virtual learning. They're teaching us so many different things that now we can take into our classrooms as well. I have a great team of teachers.

Victor connects with Christina's comments when he expressed that when the teachers work well together, they are also ensuring students gaining content knowledge and all students on the grade level are getting their academic needs met:

Our math team on my campus have always been known to have the highest scores in the district. And it kind of works at that campus now. Makes sense because it's a strong team of math teachers. You know, these are teachers that are passionate about teaching math. They love it. They are the type when those students are in a principal's office, they call and wonder what a student is it and ask if that student can return to their class. Teachers are definitely hands-on. They definitely try to make sure they keep it where it's hands on and building their vocabulary. I think that team dynamic helps as well with both math and science teams. I think that the

support with one another, they get along with each other, better support each other as well. Combined with the fact that they have a supportive specialist as well.

Marsha, from the district, concurs with Victor that team dynamics plays a significant role in teachers remaining in the district:

The other thing is they love having camaraderie with each other. So having that ample time where I can have like teachers where biology teacher meets biology teachers or 7th grade teacher meet 7th grade teachers having that network built in place is what I think really keeps my teachers here not money.

Victor and Marsha comments validated that teams that have time to work and plan together leads to student success.

Teachers, campus administrators, and district personnel jointly conveyed that having the support and professional relationship with their mentor teachers and teams contributed to them surviving their first five years of teaching and why they continue to teach in the urban district.

District and campus leaders. District and campus leaders believe that having a supportive and positive relationship with teachers is very important to retain both new and veteran teachers. They define professional relationships with their teachers as building capacity in them, making them feel valued, and making them aware they are making a difference in the lives of the students. Lacie discussed supporting teachers at her campus:

I just try to support the teachers. I just remind them of the great things they are doing with the kids. It is a bit of encouragement because sometimes when you work with kids and see the lack of success, for so long you start to doubt your own ability and the impact they can have. So, I try to remind them of their success stories, and I show them the growth where the kid started and where they are now, and they did make a difference. Their presence is needed, they do matter so we can

the following year we can pick up where the kid come into us performing and let's make the same difference in those kids lives. It is about making differences and not just about hitting a particular standard. It is the growth mentality. So, I support and encourage the teachers and remind them of the great things, they are doing and that we do need them. Other kids at other district, at other campuses may already be performing at this level. So, when you walk in you want to see a difference in a kid from the day you met them do you think you will have a huge effect on a kid that is already performing at the top or will you make a greater gain with the kid that is struggling and never seen success. What will fulfill you as an educator the most?

Lacie's above statement signals that as an administrator, she is adding value to her teachers and they are making an impact on the lives of at-risk students. Neal, another secondary administrator, also believes that teachers grow and develop when he "put[s] value in them." Samuel, a teacher, validated the point of the administrators by saying:

I've built relationships with those people, and they let us know. Let me know how much they appreciated me. They were there to support me and help. And there wasn't a gotcha situation where, you know, you did have I still felt at certain times it was, you know, they have a job to do, but I think having that relationship once again with your appraisers and people that you work with, we're trying too. We're here to support you.

The participants validated that the relationship between a teacher and administrator builds capacity in teachers through the support that is offered and given.

The teachers have someone they can depend on to meet their needs and challenges, but also someone that will listen to their concerns or new ideas. Marsha, from district personnel, understands that having administrative support is the number one factor that teachers remain in the district. She defined administrative support:

It is an open-door policy, so your teachers should feel like you're an advocate for them knowing that they're needs are going to be addressed and listened to. It is also making sure that you celebrate your staff in terms of like I've accomplished this point maybe the kids didn't grow as far as I wanted them to, but you still celebrate them along the way.

Marsha's comment explained that having administrative support plays an important role in retaining teachers for longer than five years.

Overall, according to the participants, the professional relationship with mentors, district and campus leaders is very important in the development of solid teachers that will remain in the hard to staff urban districts. When the teachers are able to flourish successfully with the support of campus and district leaders, in turn they are able to celebrate the students' success whether it is small or big. Through the supportive relationships they have developed and gains in student achievement, the teachers realize they do have a meaningful impact on the lives of students.

Summary

The perceptions of teachers, campus administrators and district leaders all conclude that teachers remain in the urban school district are due to several factors. The teachers describe their factors as meaningful relationships with the students, having strong and seasoned mentors, and a collaborative supportive team of co-workers. The district and campus leaders believe the same factors are true however, they also described valuing the teachers, celebrating, and supporting the teachers compels them to remain in Jefferson ISD for longer than five years.

Perceptions of Why Teachers Leave the Urban Title I District Early in Their Careers

When the researcher interviewed the veteran teachers, administrators, and district personnel, they were asked about their perceptions of what factors caused teachers to exit

the education field before their fifth year of teaching. Some of the factors were perceptions vs. reality, challenging students, more opportunities with better pay, and lack of work/life balance.

During the teacher interviews, they confirmed all of these factors were valid and they also contemplated leaving the district or teaching within their first five years; however, they stayed because they felt it was their calling and the students needed them. The middle and some high school teachers stated when they contemplated leaving the district early in their careers, it was to pursue their personal goals. Many of the leadership positions are limited in Jefferson ISD, so often people must leave the district to advance their educational careers. However, two teachers had a different experience. They expressed that they contemplated leaving due to discipline issues not being addressed and the feeling of not reaching the students.

Perceptions Versus Reality

Perception versus reality was an important discussion point made by teachers when asked their perception of teachers leaving early in their careers. Bret stated that a teacher's perception of teaching is that they, "like the perception of what teaching is and what it requires." This statement clarifies that many new teachers have an idea of what they think it is and the possible easy requirements it takes to be a successful teacher. Dena agreed that new teachers "have to be open minded and you have to be able to kind of understand that is not that perfect scenario all the time." Regina expressed the new teachers' misconception is:

They think that, you know, I come in and I do a lesson, you know, I put a child on a computer and then I sit behind a desk. I've got three months off. I got Christmas off. I got Thanksgiving off. And they haven't looked into the majority of teachers that are good and all about the kids right.

Bret continued to state that “this job can be stressful and takes a lot out of a teacher; however, teaching is not easy, but you must stick with it to gain success.” He also expressed that at times a teacher will feel like they are being thrown in with limited resources and little training for what they are about to endure:

In reality what and how much it does require and how much it does take and how the energy absorbs from you initially, then put it back. Then you start looking at financial gain and whatever that individual needs to do from a financial standpoint. You know, the stress that comes with the job and the pay doesn’t match up a lot. A lot of people, though, one can always find another stressful job that pays more. I understand that. I don’t know if there is a way to really prepare someone or not to use this. Welcome to the jungle. But you know, I’m thrown into the jungle with minimal resources and minimal tools to survive that’s kind of like a fight or flight.

Bret understood that teaching is not an easy job. According to him, it can be stressful however, the teachers should not give up on their careers but continue to forge ahead.

Dena understands that the new teachers must be willing to adjust and adapt when they are in the teaching profession:

You have to be open minded and you have to be able to kind of understand that is not that perfect scenario all the time. And so being willing to adjust, being willing to adapt and sometimes just think about again, what’s important will help you stay in the district for five years.

She also declared if teachers often reflect on why they ultimately pursued teaching and what is important, it will keep them focused and they will be able to survive the first five years of teaching, “So when you think about the year, your goal and the focus and what your why... students are my first priority” When teachers are able to focus on their why they keep their focus on teaching. Along with focusing on their why, Daryl explained the

teachers should also “give it some more time” because “there will be bumps in the road along with way.” William added that the teachers need to “find that good support system and stick to it, you know, lean on yet your leadership.”

In summary, the teachers felt that it is important that new teachers take the time to reflect on why they wanted to teach. This reflection will help them focus on breaking down the barriers they are facing. The perceptions of teaching and the reality is very different; however, according to the participants, a teacher must decide to give it more time and lean on a support system to assist with the challenges they may face.

Challenging At-Risk Students

According to the participants, it is very difficult for some teachers to overcome challenges in urban schools and often seek opportunities in other professions or in districts where the students have strong family structures and there is not a wide learning gap. The participants interviewed offered insight on their perceptions of new teachers not making meaningful connections with challenging students. Some of those factors are they do not have a heart for kids, they feel as though they are not making meaningful impacts on students, and they are unable to close the achievement gap. As the researcher interviewed the participants, they discussed new teachers feeling as though they are not making meaningful connections with students. Regina emphasized that when see teachers leave, “it is disheartening” for students. She also expressed that students have a “home life is [that] already chaotic,” which causes “another disruption in a child's life...when teachers either jump districts every other year or they leave.” Students need continuity and according to Samuel, the students “need good adult mentors and good teachers.” He also verbalize that often teachers say they “just can't do, deal with these kids.”

According to the teachers, they must take the time to teach the whole child and not just the content aspect and take the time to talk with the students and show them that they

are cared about. Samuel emphasized that you should have “love and compassion, empathy However, Dena stated “not everyone can relate or find a way to connect... and you have to be able to kind of understand that is not that perfect scenario all the time.” The teachers interviewed understand many students may come to school hungry from not eating the night before or tired from working a job after school to help their family financially. Regina met the needs of those students by “keep[ing] snacks, so when they are hungry, [they] know [they] can go to my room.” At times, that may mean having a snack readily available for students that come to school hungry and they know they can go to that teacher to get something to eat until lunch. Daryl also explained that had a student that would come to school tired because he had “just gotten off from work a few hours before [school].” According to these teachers, teachers have to know the students by building that relationship, understanding them, and then they are able to teach the whole child.

As the researcher interviewed the teachers, it was very apparent that they have helped students with passing classes, home life, feeding them and their families, and taught the students life’s lessons; the most important piece to the puzzle was the relationships they built. When those relationships were formed, students were motivated to learn and be more than their environment outside of school. As Daryl stated students, “start carrying themselves with a little more pride in how they talk to their parents and their friends around them when they know someone cares about their future and “there are people who recognize my talents and my skills.”

As the researcher interviewed the teachers, administrators, and district personnel emphasized that teachers must have a clear understanding of the clientele they are teaching each day. Tamera, from the district, discussed the district’s population:

I also think that our wide variety, you know, it'd be one thing if we were all African American, if we were all Hispanic. We can all be Hispanic and poor. But because

we have the same kind of place, it's easier to teach that. And when we have you have all different cultures, all different, you know, income levels. We have everything in [Jefferson ISD] and all different home family structures that makes it really difficult for a teacher to have as much impact as they could in a more homogeneous setting. So, I think that they want to have an impact. And when they feel like they don't, they look for something else.

Lacie, an administrator, pointed out that teachers are met with a lot of challenges that causes them to begin looking in surrounding suburban district. She emphasized that there is parental support, proper resources, and students that are able to grasp the curriculum. However, with the challenging Title I schools she expressed:

Title I schools themselves are already riddled with extensive challenges, attendance, funding, parent involvement, [and] engagement so when you pop in a subject, kids just don't get or see a need for the apathy plays into the other factors and it is just a tsunami of tragedy and lack of success.

With the Title I districts having many obstacles teachers must face day to day, Christina, a secondary teacher, stated:

I mean, my heart is being 24 years and I still have that same heart. Every time I meet a new student, is that passion to want to help these kid, to show them that you can achieve anything that you want. It just takes hard work and you can't give up.

Christina's statement above confirms, teachers love and care about the students that they are teaching.

Bret adds to this by saying that they will not see the instant gratification of what they have done for those students that they had impact and if that is what they are looking for "they are in the wrong profession." Regina sums it by stating teachers need to know and understand the setting they are teaching in and know their why:

They need a full understanding of what Title 1 is...Why are you teaching? And then, you know, it's outside our doors. You need to refer to that and you know, the why. And in that, why, and this probably is something that maybe colleges, even ACP programs, and do some soul searching. Why do I want to teach? I mean, am I just in it because it is an easy professional to get into, so we need to get into why. Do I really want to make a difference? As a lot of times, you don't see the fruits of your labor, if you will, until some years down the line when they come back and say, Miss [Halloway] you told me and look or you see them teaching. And they say it was because of you. So, I think, you know, they really need to understand. And we will be whoever is doing the teaching, or the guiding. We don't need to sugarcoat the profession because it's not it's not easy. You know, it has to come from. But you do have the intrinsic ease as an individual. Like we say, you know, we say students need to be internally intrinsically motivated. They need to have that internally or they will be one of the ones in five years or first five years.

The comments above from Regina explains that teachers need a true understanding of what Title I is and why they are teaching. If they do not find their why and be intrinsically motivated to teach, the teachers will leave early in their careers.

Another challenge teachers are facing, according to Lacie, a secondary administrator, "Title I schools themselves are already riddled with extensive challenges attendance funding parent involvement, engagement... a tsunami of tragedy and lack of success." Furthermore she believed with such a large learning gap, it is difficult for some new teachers to close such a large achievement gap:

I believe that they go other places where they have more support from parents and kids are better prepared for and not off grade level for whatever the content is, so they are not already trying to fill in gaps. They can pick up wherever their

curriculum says and take off and not have to go back in and fill in learning gaps or learning loss.

Another secondary administrator, Victor also emphasized that when he thinks about where some of his secondary students are and where they should be:

A lot of the math and science teachers are having to do a lot of re-teaching, a whole lot of trying to fill in the gaps, because [students]... they're not as prepared or not as equipped like they should be at whatever level they are to be successful."

William, a secondary teacher, also verbalized the need for the teachers to have passion and practice patience when educating students with such large learning gaps:

Understand the clientele that you're working with, let you know you got kids with academic gaps two, three, four years... You've got to work what you have and try to fill in those gaps and, you know, go from there."

With such large learning gaps, William emphasized that teachers must have compassion for their students and meet them where they are to build upon their learning.

In summary, working with challenging at-risk students can be very difficult to many new teachers. According to the participants interviewed, it takes a lot of hard work, dedication, and a true understanding of Title I districts. According to the interviewees, the teachers must be self-reflective and ask themselves why they began teaching in order to see the bigger picture, which is the success of their students.

Financial Gains and More Opportunities

During the interviewing process, the researcher asked the participants about their perception of teachers leaving education early in their careers. Many participants in this study stated a teacher's perception vs. reality and teaching challenging at-risk students, however with those obstacles another was revealed; it was making financial gains and having more opportunities in another district or in another career path.

Renee, from district personnel, verbalized that many teachers “want to teach but do not make enough money.” For teachers to survive and support their families, they many must take side jobs such as tutoring to combat the rising gas and food prices. Maria added that teachers are trying to support their families, “A person could leave teaching and make a better living…work for a company and make six figures.” Neal, a secondary administrator, also indicated that one of his math teachers left teaching, went into the private sector as an accountant and made more money, “We had a math teacher leave and we have some go to do accounting, some go do the private sector if I can make more money and not have to deal with challenging children.” The participants expressed that this change for the teachers allows them to make more money to support their families and they do not have to deal with the challenges of teaching at-risk students.

According to Bret, teachers began looking at the financial standpoint of teaching and what their needs are at the time. He also believed that teaching in a high-level stressful job, causes people to re-evaluate their job and the money in which they make:

Then you start looking at financial gain and whatever that individual needs to do from a financial standpoint. You know, the stress that comes with the job and the pay doesn’t match up a lot. A lot of people, though, one can always find another stressful job that pays more.

Bret’s comment shows that many teachers leave the teaching profession because they believe if they are working in another stress leveled job at least they would have better pay.

As teachers continue to evaluate their careers as teachers when teaching in an urban Title I district, they also look at their long-term goals as well. Dena, a secondary teacher, stated that she contemplated leaving the district not because she did not love working in Jefferson ISD or the students, however she wanted to train teachers how to teach at-risk students:

It goes back to your personal goals. What do I want to do next? I would love to be in the classroom. I would love to work with the children, but then when I think about my personal goals, I would like to I guess what we're talking about, now, is coach those teachers and help other teachers, kind of be able to work with urban students and working in a Title I district. And I feel in my district those positions are limited. And so, if I did want to do that, I would need to leave the district too for personal reasons to elevate or to change, you know.

Samuel also discussed that he thought about leaving the district for the same reasons as Dena. He loves being in the urban district teaching students and enjoyed teaching however he knew that eventually, in order to achieve his desires, he would have to leave the district. Samuel expressed his desire for a new challenge, "I'm currently right now I am possibly thinking about leaving. It's not because of the kids or anything like that. I wanted a new challenge, a new opportunity." Both Samuel and Dena collectively stated some new teachers leave for personal reasons and the positions are limited in the district.

Overall, when discussing teachers leaving early in their careers there are many factors that the participants discussed. One of those factors is leaving to pursue other opportunities and career path. Many teachers that leave early in their careers realize that the stress they are under does not match the pay they are receiving. The participants expressed that in urban school districts, teachers understand that they can go to the oil companies or private accounting firms and make more money than teaching especially with so many people struggling to pay their basic essential bills. Some teachers also set their eyes on bigger prizes and want to achieve career goals however with the limited positions in the district they must go elsewhere to fulfill those goals. The lack of funds and positions in which a teacher can advance is another reason teachers leave the urban Title I schools within their first five years of teaching.

Lack of Home/Work Balance

Teaching in an urban Title I school district can be very stressful according to the participants in this study. Many teachers that are in the early stages of their careers are planning, going to meetings, setting up their classrooms for the next instructional day, and spend countless hours trying to prepare to teach and reach their students; however, this leads to stress and burn out early in their careers. According to the teachers in this study, new teachers begin to burn out because they have not learned how to balance their work life with having a home life.

Victor, an administrator, stated that burnout is “one of the main reasons why they leave is because of just burnout. I know that math and science, just the curriculum...that demands [a lot].” He continued to emphasize that knowing where the secondary students are on his campus, the teachers are under a lot of pressure to teach and re-teach to fill learning gaps:

The math science teachers are having to do a lot of re-teaching, a whole lot of trying to fill in the gaps, because [the students] get to the secondary level, they're not as prepared or not as equipped like they should be at whatever level they are to be successful.

Christina provided the researcher with an example of what not having a work and life looked like for a fellow teacher and how quickly he burned out:

Well, I had a similar experience. One of my childhood friends was also a teacher. We graduated high school together. We both took on our first-year teaching jobs together. And what I saw him do, he would overload himself. He would stay after school to six, seven o'clock at night. Always, always, always about school. And he didn't know how to separate his personal from his job. And I think that's what burned him out. I think it's the overload of paperwork, of different things that we

are expected to do. But as a teacher myself, I had to learn that I do have a life outside of school and I had to concentrate on life as well as my education in my teaching profession.

As mentioned above by Christina, teachers feel overloaded with paperwork, lesson plans, etc. and compelled to stay at work. She continued to suggest from the comment that their work life begins to take over their personal life and they have no way of relieving the stressors of the day. The participants also expressed, when burnout sets in for those teachers, they begin to seek opportunities in other districts or take a different career path. From the example provided by Christina, she concluded that teachers early in their careers want to teach and do well at their jobs; however, they take work home with them to continue working after working a stressful day.

In summary, teachers want to work in the urban schools; however, not having a work and life balance makes it difficult to maintain when they feel overwhelmed and stressed. They must find a way to maintain their work ethic and have a life outside of the work environment.

Summary

The researcher posed this question to the participants of this study and the responses were very honest and candid. The participants stated the teachers' perceptions versus reality, teaching challenging students, financial gains and opportunities, and lack of work/life balance were reasons why many new teachers leave with five years of their careers. The teachers in this study emphasized the importance of truly understanding what it means to teach in an urban district with at-risk students. They continued to state the teachers should not quit when obstacles are in their way but learn how to re-evaluate the situation and adjust.

Perceptions of How Title I Districts Can Retain Math and Science Teachers

When interviewed participants in this study, the researcher asked, what can Title I district do to support and retain teachers. There were three simple and basic ways in which they discussed. The participant responses were investing in teachers, authentic professional development, and extending and expanding on the district's mentor programs.

Investing in Teachers

With the rising prices in food, gas, and basic living expenses; the participants' responses were not totally based on financially investing in teachers. Lacie, an administrator, provided the researcher with ways the district can invest in their teachers:

It is a big investment because if they (teachers) are truly struggling with being at a Title I campus or working with that particular caliber of students, when we invest in that teacher and then we lose them we have lost our investment. So, with the financial commitment, comes with emotional commitment. We have to couple that with the I believe in you, the attitude of you are not alone, there is a “we” in team, so we don’t watch our investments and dollars go out of the door.

Lacie's statements above verbalized that Title I districts must make the financial and emotional investment in their teachers that are already having difficulties with being in the district. Neal, another administrator in the district, statement of "I think teachers need to feel valued. I think they need to feel purposeful" aligns with Lacie's discussion of making the emotional investment in the teachers. Neal also stated that his job "is to provide an environment where they can teach and flourish and do well... it's all about relationships." Victor adds, celebrating the teachers and showing them, "We appreciate what you all are doing. We want you all to continue that momentum." According to the administrators, teachers in urban districts need to feel as though the hard work and effort they have

invested in their students is also invested in them. The small gestures that show appreciation for them matter.

Another type of investment discussed by the participants was support from the district. Regina, a secondary teacher, stated that at her campus they began a separate program from the mentors' program for new teachers in which they do frequent check-ins:

We meet with them at the beginning of school and then we go back to rooms and check on them. We help them with the grading system when it's time for progress reports. But definitely some type of system in place where there's somebody checking on it, because administrators get bogged down, and even sometimes a mentor.

Marsha, district personnel, stated that when beginning math and science teachers are hired, she meets them at the beginning teachers' district training then builds a relationship with them from there. She believes it is important they have that support system in place for them:

I think one of the first things I do, I love to meet with all my new teachers throughout the school year. I don't care how many teachers there are. So, I like to go in their classrooms as well before school first starts and we do have the [district training], which is great so that's my first touchpoint. But then I like to go visit them each in their classroom and then if they have an off period and they allow me to I'll go visit with them, talk with them, say okay what are your needs. I don't overwhelm them right away but maybe like the first six to nine weeks I do like to make a touchpoint. And then we have our big district PLCs. And then I give them my cellphone number. You know, here is my personal cellphone number if you have an immediate need let me know. Sometimes they don't feel as comfortable talking to just their specialist or their principal so I'm just another avenue of support

for them. So, I try to make it more not like a, you know, like a boss or like supervisor but just like hey, I'm here to be your advocate. I'm here for you.

With Marsha building relationships with the new teachers from the beginning, it gave the new teachers someone they could depend on to support them.

The support is not only what they are getting from their fellow co-workers or specialists, it comes in the form of relieving the pressure of having so many items on their plate. Many times, the district may begin a new initiative which entails more paperwork; however, nothing is taken away to ease teachers' workloads. Christina discussed teachers being overloaded with task:

A lot of it has to do with overloading the classrooms teachers and just too much.

Extra paperwork that sometimes can be avoided. I think there's, one thing, you can't just constantly pile materials onto a teacher's plate when we already have so much to do. And I think that's one thing that drives them out.

Christina's comments declare that districts need to eliminate some task or paperwork that is redundant, which can make a teacher's job less stressful. Also, according to Marsha, district personnel, "we put a lot more things, a lot more initiatives [in place] without taking some things away." Christina and Marsha's comments are similar because they both discuss when teachers have the stress of teaching alone with extra paperwork, they become overloaded and consider leaving the district.

Finally, the teachers in this study expressed to the researcher that they did not begin teaching in the urban district for the financial aspect. They wanted to service students that needed an exceptional education to become productive and successful citizens in society. However, with the new changing times, especially with the COVID-19 pandemic hitting so many families, compensating teachers financially would assist urban districts in retaining teachers. Christina emphasized that "[teachers] have to work second jobs in order to

provide for our households and it can become too stressful.” Renee, district personnel, believes the stipend, which the math and science teachers receive, encourages teachers to remain in the district, “they are given basically a little stipend to teach in those particular areas because we were having a hard time getting teachers in those areas so that’s why they got the stipend. Neal, an administrator, suggested providing larger stipends to math and science teachers:

I would like to offer them, especially in math and science, a bigger stipend, because I think because the outside forces and the other districts, you know, they tend to give more incentives to their math and science teachers. Now, of course, all teachers are valued, but math science is a major foundation.

The participants verbalized those teachers want to teach in the urban schools; however, at times their financial struggles prevent them from remaining. Also, they suggested that the stipends tend to compel them to remain in the teaching profession.

Renee conveyed that the district is having a difficult time finding teachers in other critical areas such as English, “So there is a lot of competition. I don’t think money is the greatest motivator, but we all need it.” Jefferson ISD offers \$4,500 for math and science teachers on top of their salary.

Retaining teachers in the urban Title I district is not a simple task. The researcher discovered through interviewing teachers, administrators, and district personnel, urban districts will need to support their teachers and invest in their emotional and financial well-being. When teachers feel as though their district is invested in them, then they are more likely to remain.

Authentic Professional Development

Jefferson ISD requires beginning teachers to have three years of professional development. They are required, each year, to take specific professional classes for

classroom management, meaningful work, and basic technology utilized in the district. Although Jefferson offers three years of professional development specifically for all new teachers, many urban Title I districts do not offer this to teachers. Many new teachers feel ill prepared from their college or ACP programs, so depend on professional development to give them the skillset needed to teach at-risk students.

Although Jefferson requires the three-year program, there are barriers to this program. According to Renee, it is a one size fits all program and not based on the teachers' skillsets. Some of the teachers entering the district are new; however, there are some that come into the district with years of experience from other districts but are still treated as beginning year teachers. She expressed the one size fits all professional development can become frustrating for some teachers:

I'm going to say one of the big ones is when I talked about professional development before when you kind of do a one size fits all professional development like with [Jefferson] and every first-year teacher has to take this, and every second year teacher has to take this. Sometimes people come in and they have different skills already and they may not necessarily need that particular course or professional development. And sometimes that's frustrating to people. So, we have to be able to decide is it content knowledge that needs to be worked on for folks or is it pedagogy and so I think that's kind of a barrier that we create when we have that kind of standard with [Jefferson]. I think there are certain things that, you know, in terms of culture that need to be promoted and I also believe though that there is some individualism that needs to come in because that's what we ask teachers to do for their kids, so I think we need to practice that with the adults.

Renee believed that the district needs to think about a teacher's skillset when planning professional developments.

The teachers agreed that having the three-year program is positive for beginning teachers; however, the district needs to add certain components that will permit the teachers to have a successful year. Regina states that beginning teachers “need a full understanding of, first of all, what Title 1 is. They [beginning teachers] need some professional development on culturally relevant and responsive teaching.” She believed that if teachers truly understand the culture and how to teach at-risk students, teachers will be more successful in the classroom and have a willingness to remain in the district longer than five years. Lacie also explained what happens when teachers do not have a clear understanding of what it means to teach at-risk students, “when they [teachers] are truly struggling with being at a Title I campus or working with that particular caliber of students, then we invest in that teacher and then we lose them we have lost our investment.”

Administrators in this study also discussed that when working with new teachers, they look at the teachers’ needs and yearly goals to ensure they are getting the professional development they desire and need. At times, they must look outside of the district to get trainings that will enhance their teaching strategies in the classroom. Taking these trainings prepare teachers to bring rigorous teaching strategies back to the classroom and can adjust to the needs of their students. The rigorous teaching strategies give at-risk students the higher order thinking skills to be academically empowered and success in the classroom compatible to their suburban peers.

Another authentic professional development that some district personnel would like to add is the video coaching. Tamera, district personnel, stated the video coaching platform provides specific feedback for teachers and gives the administrator or content specialist an idea of the needs of the teacher. The video coaching is also a tool for teachers can use for their “aha moments” according to Tamera. They can see themselves in the moment and

begin to adjust their teaching accordingly because many times they only see themselves through the eyes of the administrator.

According to the participants, having authentic professional development to assist new teachers with providing rigorous teaching strategies for at-risk students, having cultural relevant and responsive teaching trainings, and video coaching will permit teachers to truly understand how to teach in a Title I district. With these training, teachers will be compelled to remain in the urban Title I districts.

Mentor Programs

As discussed earlier in this chapter, many teachers discussed not being truly prepared to teach in an urban school district. The programs many of them went through was accelerated and they were not able to interact with students or experience first-hand being in the classrooms with at-risk students. They continued to discuss with the researcher that they had seasoned teachers or mentors that taught them how to be effective teachers in the classroom. Having those mentors was one reason they remained in Jefferson ISD. Below Daryl, a secondary teacher, explained why being a prepared teacher before they enter the classroom is so important to the success of students and teachers:

[The ACP program] definitely [need to] work on understanding and not just tell, not just in a PD, but train up the new teachers in terms of this is what can be done before they get into the classroom, because when that first bell rings and the kids in there, it is a madhouse. The teacher's eyebrows up here and that's just too much. Well, if little Johnny's got this problem with that problem. They have no idea how to deal with it. And it is a sink or swim. It might even go back as far as in ACP or their college training. What are you dealing with in a large school district? What kind of situations do you have to expect in a large school district? And why is it important to be honest, you know, I'm not trying to sugarcoat or treat Johnny like

you treat [others] in a textbook. There is no textbook for some things these kids go through.

According to the participants, there are so many new teachers that are going through these programs, which are vital to successfully retaining beginning teachers. The administrators and district personnel discussed with the researcher the ideal mentor program that should be in place for beginning teachers.

The administrators and district personnel discussed that Jefferson ISD has a district wide teacher induction program and each campus has its own mentoring program. They stated the district's teacher induction (mentor) program is for one full year in which new teachers are paired with two additional teachers. The administrator on each campus selects one teacher that is a veteran teacher with more than three years of teaching experience and the other is a teacher in her second year of teaching. They meet as a triad to discuss how the new teachers are doing, how to deal with different classroom issues, and to answer any questions related to instruction. They meet once a week and keep a journal of their discussions to turn in to the district. The district personnel stated this is the first year for conducting the teacher induction program like this and will track how it worked for the new teachers.

Although the new teachers have this type of mentor program from Jefferson ISD, the questions that remain are if this program is effective for new teachers and do they need more than just a sit down discussion about teaching, teaching strategies, and classroom issues. Based on participant responses, the answer to both questions is yes. According to Victor, an administrator, he believed:

Sometimes they're able to have that mentor teacher and a new math or science teacher if they had the same planning periods, linked together and meet up to see if especially that new teacher may have any questions, whether that's in regards to

classroom management or instruction. So, they're able to talk to the teacher. But most importantly, they're able to, you know, have somebody to go to ask questions because, you know, it's their first year on campus. They don't know the campus way. And so, their mentor teacher is kind of is there to help support them, to help them transition and getting them familiar with our campus way on campus. And so that's what our mentoring program looks like. At last, the entire year. So, it starts in August and it will continue until the last day of school.

The mentor program in Jefferson ISD allows the new teachers to have a mentor for both instruction and classroom management support.

Neal discussed how the mentor program was beneficial to the new teachers on his campus. He believed that the teachers were able to make connections with their mentors to ask questions and find the support they need in an area in which they still needed growth:

[Mentors] allow [new teachers] to discuss any concerns they're having [and] celebrate successes. This is basically a time for them to bond with each other and share out. You know, am I drowning or am I above water. So, it's just that once a month, I guess you could say a mixer or we can look forward to just breaking down and just saying, here's where I am. We also give them a list of PDs that would be beneficial for them. The district does the [three-year professional development], which is already a big help. So, we don't overwhelm them with too much because it's almost a whole year thing. So, we don't want to overwhelm them with, you know, too much. So, we just kind of figure out where they are, what supports they need to keep encouraging. Now we meet with them, hear them out and go from there.

The mentor program for the teachers on Neal's campus is not meant to overwhelm the teachers but to ensure they are supported

and their concerns are heard.

Teachers meeting together to discuss their needs, ask questions, and voice their concerns is a priority to these administrators, Lacie, another administrator, added that she would like the mentor teachers to co-teach with the new teachers for the entire year. She continued discussing what the role of the mentor is for a beginning teacher:

The ideal mentoring program is allowing the mentor to not actually teach but serve as a co-teacher in classes so that they would have a schedule to go around and actually co-teach with new teachers. They would spend the entire year working and being in and out of classrooms. For example, if we are talking Algebra I, the mentor teacher would bounce around all of the teachers working in co-teaching, model teaching working with students that is what they would do for their content. Letting that master teacher get in there and be in the trenches with that new teacher. If there is a classroom with three teachers because of the co-teacher, that is fine. The co-teacher is there to continue to support the students, but the master teacher is there for students and teachers being in the classroom at all times.

The district personnel also discussed the mentoring program for the new teachers. They believe the program should be longer than one year. This gives new teachers a chance to fully immerse in the classrooms with a mentor teacher. Tamera, from the district, believed that the mentor program should be longer:

It should be longer. It was such a joke at one year, you don't even know what questions to ask in your first year, right. You know, I mean, what research shows is that the brand new teacher has about 18 problems in the classroom. And I think the researcher's name is Huberman. But after three years, they've got like five of them figured out. So, they still have [a lot] of problems in the classroom...So, if we could just extend that mentor program and have it be okay to, you know, maybe even take

a couple weeks off and be in somebody else's class or, you know, I wish everybody could be a student teacher first before they just walked into the classroom. I think the big piece would be extending the time, though.

In Tamera's comment above, it would benefit the new teachers more if the mentor program was longer than one year and adding classroom observations component to the program.

Renee, from the district, also concurred with Tamera in saying that the mentoring program should be extended along with having mentors acting as co-teachers in the classroom. She further stated that she understands if new teachers are able to have this type of support in the classrooms, there is one barrier the district would face, is the cost of having such a program. Renee explained the ideal mentor program:

[The mentoring program would] almost [be] like a student teaching experience where you have, and I know this is ridiculous because it's going to cost a lot of money, but where there's a person who is basically an apprentice for a year or two with a master teacher. So, they are teaching side by side and the work is released a little bit more to the novice teacher because just being able to see and hear the tone and the planning that would be critical for a novice teacher. I mean you go in there and you've got 22 children or however many, 150 kids that are looking to you and you're still trying to figure it out that's a problem.

Renee's explanation of the ideal mentor program would entail the new teacher teaching along side their mentor for one to two years.

The mentor program is implemented in Jefferson ISD for one year for new teachers going into a classroom for the first time. It offers them support, allows them to ask questions, and have a go to person for information or advice. Currently, Jefferson ISD has a program in which there are two teachers supporting the new teacher. However, the administrative and district personnel believe expanding the time for new teachers and

allowing the mentor teacher to co-teach in the classroom with the new teachers is the support they need to understand how to reach and teach at-risk students.

Summary

Urban Title I school districts have been trying to solve the problem of secondary math and science teachers leaving before their fifth year of teaching. When the researcher interviewed the math and science secondary teachers, administrators, and district personnel, they explained that investing in teachers, having authentic professional development, and extending and expanding the mentoring programs will assist with retaining new teachers longer than five years.

Conclusion

In conclusion of this chapter, the researcher sought to analyze the perceptions of math and science teachers, administrators, and district personnel on teacher retention in urban Title I districts for longer than five years. During the interviews, participants discussed the new teacher preparation, why many teachers remained in the urban school district, why new teachers leave before their fifth year of teachers, and what urban districts can do to keep the beginning secondary math and science teachers. The researcher was able to conclude from the interviews that new teachers that were resilient and had strong meaningful relationships with administration, students, and co-workers along with having a support system in place, compelled the teachers to remain in the urban Title I school districts longer than five years.

CHAPTER V: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Urban Title I districts have struggled to retain secondary math and science teachers (Henry & Redding, 2018). They understand that many of the teachers left the district due to the stressors and taxing environments that caused them to leave before their fifth year of teaching (Sutcher et al., 2018). Urban districts have tried numerous strategies to retain new teachers such as providing mentoring programs, stipends, and professional developments to help the teachers build their skill set (Cowen & Goldhaber, 2018; Jacobs, 2007). However, with all of this in place, secondary math and science teachers are leaving urban districts at an alarming rate each year (Fisher, 2011; Garcia & Weiss, 2019; Ingwersoll & Smith, 2003). This not only negatively affects the dynamics of the Title I districts, but it left students with a revolving door of teachers each year (Ingwersoll, 2000; Minor, 2009; Wronowski, 2018). This forces the districts to hire inexperienced and less than qualified teachers to fill those positions, which ultimately leads to significant learning gaps in student achievement (Kini & Podolsky, 2016).

The purpose of this study was to explore the perceptions of urban secondary math and science teachers, administrators, and district personnel regarding the factors that influence the secondary math and science teachers with more than five years of experience to remain in the teaching profession. This study took a deeper look at personal and professional factors that compelled secondary math and science teachers to stay in urban districts despite the challenges they face. The teachers, administrators, and district personnel also provided their perspective on retaining highly qualified secondary math and science teachers in Title I districts. The participants in this study provided their perspective on the lack of preparation to teach in an urban school district, why some teachers remained in the district, why teachers left early in their careers, and what districts can do to retain

new teachers. The researcher gained the participants' perspectives through interviews. This chapter will reflect the summary of the findings, implications from the data, and future recommendations based on the data collected.

This study was based on two theoretical frameworks. The Herzberg's two-factory theory discussed the job satisfaction (motivation and hygiene) which are essential to job performance and staying in their current position long term (Shaikh, Shaikh, & Shaikh, 2019). The motivation factor relates to feelings of a positive mindset towards a person's job advancement, the job itself, responsibilities, acknowledgements, and accomplishments (Herzberg, 1966). As evidenced in this study, many new teachers and veteran teachers have the motivation factor because they are drawn to working with students in the low socio-economic demographics in which they can make a difference in their education. The hygiene factor was connected to "interpersonal relations, salary, company policies, administration, relations with supervisors, and work conditions" (Alshmemri, Shahwan-Akl, & Maude, 2017, p. 14). According to the interviews, many new teachers decided to leave urban districts due to the lack of resources, large class sizes, lack of administrative support, and having other opportunities in the math and science careers that offered better financial gains.

The second theoretical framework for this study was based on Bandura's definition of self-efficacy. Based on the definition, self-efficacy is a person's belief that they can overcome challenges within their environment (Bandura, 2005). According to Singh and Udainiya (2009), a person with high self-efficacy tends to focus on breaking down obstacles that may prevent them from achieving their goals. However, Bandura (1993) stated that a person with low self-efficacy will give up on achieving their goals if there are challenges and they do not have the capacity to prevail. Bandura (1993) also suggests that teachers, in urban schools with high self-efficacy were able to overcome the challenges and

preserve in the classroom. The teachers offer classrooms experience to their students that allow them to grow academically (Haberman et al., 2017). Teachers with low self-efficacy were the teachers that decided to leave the urban schools because of the challenges of teaching in a low socio-economic district with low performing students was difficult (Miller, Ramirez, & Murdock, 2017). These teachers were often ill-prepared to teach in the urban setting and decided to seek other opportunities with less stressors (Whipp & Geronime, 2017).

The two frameworks were significant for this study. The Bandura's self-efficacy and the Herzberg's two-factor theory connects to teachers remaining in the Title I districts with at-risk students. The teachers interviewed had the intrinsic motivation to remain in Jefferson ISD. They stated that they wanted to work with "bad" students because they wanted to end the school to prison pipeline and help the students understand that they could have a better life. The teacher participants also had the extrinsic motivation factor because they were satisfied with some district trainings, seasoned mentors, and the relationships with the administration. The teachers interviewed had high self-efficacy because they understood that teaching is not easy, however, with the support in which they received and their desire to make a difference in the lives of their students compelled them to remain in Jefferson ISD and overcome many of the challenges many of them faced. The teachers who are motivated to remain in the Title I district have job satisfaction and are able to build positive relationships within their work environment (Jahromi et al., 2019). They are also compelled to remain if they have high self-efficacy in which they understand the challenges and are motivated to overcome those obstacles (Dembo & Gibson, 1985). However, when teachers did not have job satisfaction and low self-efficacy, many of the teachers would decide to seek other opportunities in districts with less stressors or leave the profession for

another career path (Miller, Ramirez, & Murdock, 2017; Milner & Woolfolk-Hoy, 2003; Whipp & Geronime, 2017).

Summary

The data collection for this study targeted three research questions. The research questions were aimed at perceptions of secondary math and science teachers, administrators, and district personnel regarding retaining secondary math and science teachers in the Title I districts. Chapter IV had four different themes (teacher preparation, perceptions of teacher retention, perceptions of why math and science teachers leave, and how can districts retain math and science teachers) that emerged during the data analysis that allowed the researcher to answer the following research questions:

RQ 1: What perceptions do secondary math and science teachers hold regarding factors that influence them to remain in a Title I urban school more than five years?

RQ 2: What perceptions do secondary administrators hold regarding retaining secondary math and science teachers in Title I urban schools?

RQ 3: What perceptions do district specialists, coordinators, and area superintendents hold regarding retaining secondary math and science teachers in Title I urban schools?

Teacher Preparation Programs

The lack of preparation to teach at-risk students can make educating at-risk students very difficult. Ill-prepared teachers in the classroom have a lasting effect on students' level of achievement in the classroom (Henry & Redding, 2018; Stotko et al., 2007). These teachers must be able to meet the challenging needs of the workplace environment and teach at-risk students. With the shortage of qualified teachers in urban districts, they are recruiting teachers through alternative certification programs (Chiang et al., 2017; Stotko et

al., 2007). The eight secondary math and science teachers who participated in this study either went through a college program or alternative certification program to become a certified teacher. The teachers who graduated from an alternative certification program discussed how they themselves were not prepared to teach in a Title I district with at-risk students. Carver-Thomas and Darling-Hammond (2017) explained that many of the educators in the alternative certification programs are placed on a fast track and are not properly trained in the areas of math and science. The participants described their programs as accelerated, and they had minimal opportunities to interact in classrooms with urban at-risk students. While in the alternative certification program, the teachers stated their professors only discussed the perfect scenario in classrooms with textbook solutions. However, as they were “thrown” into the classrooms, they realized the perfect scenarios did not have the perfect textbook solutions.

The secondary math and science teachers who participated in this study and went through the college certification program did feel prepared to teach in urban Title I districts. The participants verbalized the pre-service experience gave them the ability to teach in any classroom setting with diverse learners. While in various classroom settings, pre-service teachers are able to learn how to effectively impact student achievement by modifying and adjusting instruction to meet the needs of students (Rondfeldt, Brockman, & Campbell, 2018). The participants expressed that their professors took them under their wings and truly guided, coached, and prepared them for the realities of teaching. Callahan (2016) suggested growing new teachers into effective experienced teachers, schools must provide them with the supports needed to impact student growth. Having these supports and guidance, permitted the teachers to remain in Jefferson ISD longer than five years because they were prepared to teach at-risk students. With the supports and guidance that are put in place for teachers, the more successful teachers are in the classroom, and the

likelihood of them remaining in the teaching profession (Carver-Thomas & Darling-Hammond, 2017).

With the eight participating teachers who received their certification through ACP or a college program, seven of the teachers stated they became better and effective teachers through the district's extensive three year required new teacher trainings, personalized professional development, and smart growth plans. Kraft et al. (2015) believed that schools that encourage teachers with proper, purposeful, and logical approaches to teaching are able to attract effective educators, develop their skills and build their expertise in the classroom which guarantees students will make gains. The district personnel stated that the new teacher professional development permitted them to learn the policies and protocols of the district and allow them to grow in the content areas in which they will teach. The administrators explained they as leaders must building capacity in their new teachers through coaching to build their skill set, providing support, and look at their instructional needs in order to customize a growth plan to strengthen the teachers' instruction in the classroom. Building capacity in teachers means that school leaders must hire effective educators, develop their staff, and provide a clear vision for the campus environment in which the staff can improve their skill set (Tingle, 2016). Principals that can retain teachers think of them as learners and commit to assisting them to continuously improve (Borman & Dowling, 2008; Cochran-Smith et al., 2012; Johnson & Birkeland, 2003; Wang et al., 2018).

Perceptions of Teacher Retention in Urban Title I Schools

The researcher was able to gain participants' perceptions of why secondary math and science teachers remain in urban districts longer than five years. The first factor was the desire to teach at urban at-risk students. Carter-Rodriguez (2019) suggested teachers are not leaving the high needs school due to their students. Some teachers make a

conscience choice to work in these schools because they are committed to work with at-risk students in the low-socio-economical schools (Achinstein et al., 2010; Cochran-Smith et al., 2012; Love, 2021). The teachers expressed that they were either a product of Jefferson ISD and wanted to give back to the community or grew up in and around similar environments as their students. Each teacher stated that they began teaching because they wanted to see students that were considered “bad” become successful adults. Although they had other options for their career paths, teaching was exactly where they should be, and any other job would not give them the satisfaction as teaching. Teachers educating students in the urban district are committed to giving them a quality education and setting them up for success (Whitaker, 2020). However, Milner (2017) suggested that there are some teachers that are not equipped or properly trained to educate diverse learners.

According to the teachers of this study, some teachers that leave urban districts, only see the students’ circumstances of poverty, dysfunctional families, and low academic achievement. These teachers leave believing they are not capable of educating at-risk students. When teachers become aware of their beliefs systems and assumptions about the students they are teaching, especially when their social backgrounds and experiences differ from their diverse students they decide to teach in a demographic of students with less challenges (Gehrke, 2005; Haberman et al., 2017; Love, 2021). Jefferson ISD district personnel and administrators who participated in this study, expressed that the teachers who remain truly want to teach the students and are committed to the success of the students. The teachers also said that with many disruptions in the lives of urban students, teachers in Jefferson try to provide a classroom that is stable and conducive for student learning. The participating teachers stated that these are the types of teachers that at-risk students need in their lives. The teachers stated they are not at Jefferson ISD for the money but for the love of teaching.

Another factor that retains the secondary math and science teachers is the relationships which are formed in the work environment. Newton et al. (2010) state that the “effort of creating a professional community among various stakeholders’ groups,” (p. 23) helps with the collaborative effort to ensure that beginning teachers have the support needed to provide a high-quality education to the students in the urban schools especially in the areas of math and science (Tai et al., 2007). The participants discussed the relationships with students, campus support, along with district and campus leaders. Having these strong, supportive, and positive relationships enabled teachers to have individuals that they can go to for additional guidance when they are faced with challenges in the classroom.

The district and campus leaders acknowledged that keeping teachers motivated and encouraged compelled teachers to remain in the district. Throughout the school year, the district leaders frequently meet with the new teachers to have conversations about their students’ academic gains, provide resources, and coach them through their instructional struggles. Campus administrators provided the teachers with frequent feedback, create a collaborative growth plan when needed, and praise the teachers for academic student progress. They ensure the teachers are celebrated and valued for their gains in professional growth and student progress. School leaders that ensure this happens, attract effective educators, develop their skills, and build their expertise in the classroom which will guarantee that students gain from skilled and committed educators (Kraft et al., 2015). As school leaders are developing effective teachers, school leaders must also ensure teachers are feeling effective, supported, and are able work collaboratively with others to provide quality instructions to their students (Powell, 2017). According to Jefferson ISD administrators, teachers grow and develop if value is placed in them from the beginning of

their careers. Placing value in teachers puts them in a growth mindset not only for themselves but for their students as well.

Jefferson ISD teachers acknowledge that the relationships with campus and district leaders are important so they can continuously improve their teaching practices; however, the relationship with students is another reason why they have remained in teaching for longer than five years. The teachers in this study stated that they remained because they want to give their students the opportunity to grow academically and have a bright future. They believe urban students deserve to learn in a classroom environment where they will be encouraged to think about their futures and prepare for an ever-changing world. Urban teachers working in the urban schools want to see their students succeed (Whitaker, 2017). Effective teachers give at-risk students a sense of hope and belief that they are more than the stigma society has placed upon them (Gehrke, 2005; Whitaker, 2017). However, the teachers in this study emphasized that it is not an easy task but for this to happen, it is important to build caring, meaningful, and positive relationships with students within their classrooms.

Four teachers in this study believed that the current generation is lost, and the educational system is feeding the school to prison pipeline. The teachers expressed in their classrooms, students are taught the content along with vital life lessons such as changing their behavior, mindset, and being proactive instead of reactive in various situations. The teachers explained that this allows the students the opportunity to show the world a better version of themselves. The teachers believed it is important that society change their views and stigmas of the urban student. When students realize they have a caring teacher that wants to see them reach their full potential, as one teacher stated the students walk and talk with pride. The participants in this study believe the overall goals for the students are to

achieve academically, break generational poverty, and minimize the stigma society has placed on them.

Perceptions of Why Teachers Leave Early in Their Careers

Teaching in urban Title I district is not an easy task. The first five years for a new teacher are when they are the most vulnerable (Mansfield, 2016), so working in intense conditions with greater pressures can leave inexperienced teachers incapable of maintaining their motivation and effectiveness in the classrooms (Hong, 2012). Teachers that are in continuous stressful circumstances have: (a) the inability to cope with various situations or overreact, (b) decrease their ability to use good judgment, and (c) cause memory loss (Divoll & Ribeiro, 2021; Greenberg, 2017; Jensen, 2008). With the constant exposure to increased pressure and stress, the new teachers will begin to feel defeated and unable to overcome many of the challenge they face in urban schools (Bandura, 2005; Haberman et al., 2017). The participants discussed in this section their perceptions of why teachers leave urban districts early in their teaching career and the challenges many new teachers face.

The participants also discussed why they believed many teachers leave early in their careers to move to other less challenging districts or leave the education career altogether. The first point discussed by teachers was the perspective of teaching versus the reality of it. They stated many new teachers have the idea that students will automatically respond to them while they are teaching, like the movies, and that it is an easy job with frequent built-in vacation time. However, as stated by the Jefferson ISD teachers in the study, as reality sets in and they soon encounter challenges such as lack of resources, parental support, student discipline, large class sizes, and large learning gaps. Sutcher et al.'s (2018) research showed that pre-service teachers are well prepared through their education experience to join the workforce; however, the dissatisfaction comes when they are unable

to cope with the challenges they may face in the workforce. Regrettably after a few years of dissatisfaction with teaching in the urban school, teachers experience stress and leave the district feeling misguided and defeated (Carver-Thomas & Darling- Hammond, 2018; Garcia & Weiss, 2019).

Another factor the teachers, administrators, and district personnel discussed was closing the achievement gap and building relationships with the students. Ladson-Billings (2009) stated that the way a teacher connects with their students is the way in which they see them from a societal point of view. In order to truly build relationships with at-risk students, teachers must develop “relationships with our students and understanding their political, cultural, and intellectual legacy” (Delpit, 2012, p. 38). With a true understanding of their students, teachers can produce a caring classroom, build meaningful and positive relationships with students for them to have an opportunity to be successful both in their academics and behavior (Divoll, 2010; Wolk, 2002). With some new teachers coming into teaching with little to no experience working with at-risk students, they lack the knowledge and skill of how to close the widening achievement gaps and make connections with their students. According to Milner and Laughter (2015), although many teachers have good intentions to work with at-risk urban students, they are not prepared to work with these students. The teachers stated that new teachers often leave the urban schools to teach students who are more on grade level and able to grasp the curriculum easily. The participants suggested when teachers are feeling as though they are not making a difference in their students it is difficult for many of them to develop meaningful relationships with their student. Kraft et al. (2015) suggested that some urban teachers feel their success and job satisfaction depend on their students’ growth and the caring classroom environment they provided. According to the teachers in this study, the new teachers need to have an open mind and adjust their thinking and reflect on their “why.” The participants stated that

at the start of a new teachers' career, many of them are eager to work with urban students; however, they become discouraged and feeling defeated as stressors from work in the urban schools began to set in and question if teaching in the urban school was the right career path for them. Johnson and Birkeland (2003) suggested that when teachers did not see the rewards of their work, then some of them decide to leave their current campus to teach at another campus or leave the profession.

Along with the inability to close the learning gaps of their students, teachers also leave due to financial reasons or more opportunities. Although many teachers stated that they are not in teaching for the money, with the rising gas and food prices, and the decline in many businesses and corporations caused many families to lose income in their households, some teachers have had to take on a second job to survive the hard economic times many are suffering. With a math and science degree, it would be easy to find another job with less or the same amount of stress but with more pay. Many new teachers seize the opportunity to leave teaching altogether and seek more advanced and financially rewarding opportunities. The other career options for people in the science, technology, engineering, and mathematics fields provides better pay and other financial benefits (Newton et al., 2010).

The last factor discussed by the participants is the need for a work and life balance. The administrators and teachers in this study confirmed that teachers that are early in their careers often find it difficult to find a happy median between the vast responsibility of being an urban teacher and having a life outside of work. They said the new teachers tend to stay long hours at work to ensure they are prepared for the next day or complete the necessary paperwork that is required by the district. This leads to stress and burnout for many teachers so they begin seeking out other districts where the workload is not as tedious and they can participate in enjoyable activities outside of work (Divoll & Ribeiro, 2021;

Ingwalson, 2016; McCarthy et al., 2015, Sutcher et al., 2016). Teachers, who decided to remain in the profession, must draw an emotional line or boundary to balance their professional growth and becoming emotionally involved in building student success (Aultman, Williams-Johnson, & Schutz's, 2009; Divoll & Ribeiro, 2021; Ellerbrook, 2016). Two teachers interviewed for this study, expressed that new teachers try to find ways to meet the demands of working in an urban school which leads to burnout early in their careers. The teachers who have remained in teaching have experienced burnout; however, many of them are resilient and established an appropriate emotional line, which enabled them to decrease burnout and stress (Aultman et al., 2009; Smith et al., 2018). The teachers' mindset must also shift from the challenges, stressors, and burnout to how they can become a resilient teacher which in turn allows them to maintain their motivation and commitment to teaching (Albright et al. 2017; Dweck, 2014; Gu & Day, 2007). One teacher interviewed stated that one way for teachers to shift their mindset is to think about their "why." The teacher stated that focusing on the "why" will give them the confidence to continue working with the at-risk students and finding a way to overcome the challenges the teachers may face.

Perceptions of How Districts Can Retain Secondary Math and Science Teachers

Districts have tried numerous strategies to retain their secondary math and science teachers. Ineffective strategies utilized by school districts have failed to retain teachers, and in turn, teachers depart from the profession (Fisher, 2011; Wronowski, 2018). The teachers, administrators, and district personnel that participated in this study expressed three very distinct ways districts can retain teachers longer than five years. This included: investing in the teachers, authentic professional development, and extended and expanded the district's mentor programs.

Positive emotions such as joy, interest, contentment, and love enhance the possibilities of teachers learning to successfully cope and survive challenges in the workplace (Fredrick, 2004; Divoll & Ribeiro, 2021). Investing in teachers means more than providing \$4,500 financial investments through stipends but empowering teachers through emotional investments (Ben-Shahar, 2012). The emotional investments are intended to show the teachers that they are valued and celebrated (Lambersky, 2016). According to the administrators of this study, the emotional investments also involve taking some items off the plate of the new teachers. This type of investment continues to allow teachers to persist with the momentum they have gained (Lambersky, 2016). However, if they need additional support then the administrator and district personnel discussed they seek out various supports that will assist the teachers. When a new teacher realizes they are appreciated then the emotional investments the districts have made in them will remain instead of them walking out of the door.

As new teachers begin working in Jefferson ISD, they have three years of intensive professional development training. The district personnel and teachers discussed that although having the professional development in areas such as classroom management, basic technology, and meaningful work; it is a one-size-fits all program and not based on a teacher's skillset. The problem with this is all new teachers to the district must take the trainings regardless of their years of experience in other districts. Hochberg and Desimone (2010) advised that the stakeholders that design the professional developments for teachers, need to be mindful of the teachers' background, experience, and current knowledge. Urban districts must create professional trainings that will take in account a teacher's experience, background, and current knowledge and continue to build upon the teacher's knowledge.

The teachers and district personnel stated that the professional developments also need to add trainings on culturally relevance, responsive training, and video coaching

which would help teachers understand better the at-risk student population and strengthen their teaching in the classrooms. The district personnel stated that video coaching is one way in which new and experienced teacher can be reflective on their teaching practice. The goals are for video coaches to view the teacher's video and provide feedback to the teacher and enhance the teacher's instructional practices which increases the teacher's effective in the classroom setting (Suhrheinrich & Chan, 2017). In order for new teachers to be effective with their diverse students, they must understand that:

content impacts the culture of their students [culturally relevant pedagogy (CRP)] while also understanding what pedagogical moves they must make to improve student learning in relation to students cultural and linguistic practices that are brought into the classroom to be subsequently leveraged by the teacher [culturally responsive teaching (CRT)]. (Brown, Boda, Lemmi, & Monroe, 2019, p.782)

With incorporating the CRP and CRT in the teaching practices of urban teachers, Weinstein et al. (2004) suggested implementing this with classroom management.

Teachers working with urban students must be aware of how to reach students academically but also respond to their behaviors that are culturally different for their own backgrounds (Ladson-Billings, 2014; Weinstein et al., 2004).

Mentoring programs prepare and support teachers in the classroom. Successful mentoring programs are an essential part of the induction phase by pairing the new teacher with a highly qualified mentor to continuously improve the instruction of the new teacher (Callahan, 2016; Divoll et al., 2018; Kent et al., 2012). According to the participants, the mentoring program should last longer than one year. Many of the new teachers are thrown in a sink or swim situation and continuously need support after their first year of teaching. In Jefferson ISD, the mentors and new teacher sit and discuss their concerns and answer questions the new teacher may have. However, the administrators and district personnel

believe that the mentoring programs should entail co-teaching and modeling for the new teacher. This would strengthen their skills and give the new teacher more confidence about their teaching practices (Duran et al., 2019).

Implications

Students in the urban school districts have the right to have teachers that are competent, compassionate and in a school that has a culture and climate that is stable, unified, and with high expectations (Whitaker, 2018). Therefore, hiring, training, and retaining teachers is critical in urban schools (Newton et al., 2010). The participants provided the researcher their perspective on why it is important to retain highly qualified secondary math and science teachers and how to retain them. They discussed topics such as the teacher preparation programs, teacher characteristics, job satisfaction and supports. They wanted their voices heard because each year, the district is losing teachers with less than five years of teaching and they are going to other districts or leaving the educational profession.

Teacher Preparation Programs

Engaging Opportunities in the Classroom

One topic of discussion was the lack of preparation with ACP programs and how the teachers did not have the opportunity to be engaged in various classroom settings. Five of the teachers stated the ACP did not prepare them to teach at-risk students. The participants conveyed that they were offered short observations, accelerated courses and they did not have the opportunities to engage with challenging situations that may happen in the classroom setting. For the pre-service programs, it would be ideal that candidates entering the classroom should have the opportunity to engage and interact with at-risk students (Carver-Thomas & Darling-Hammond, 2017). When they are on the fast track and not able to fully interact within the classroom setting, they feel as though they are

thrown into a situation they are not prepared for in the urban schools (Chiang et al., 2017). By allowing the pre-service teachers to engage in the classroom, they would be able to see the realities of the classroom and not the textbook version (Miquel & Duran, 2016). The teachers would be able to handle the challenges they would face once in the classrooms (Goodnough et al., 2009).

Hiring and Retaining High Quality Teachers

Hiring Teachers with High Self-Efficacy

The teachers in this study articulated that they were drawn to teaching in the urban district. Many of them were a product of Jefferson ISD or grew up around situations like their students. The teachers, administrators, and district personnel stated that some teachers remain in the district because they have a meaningful impact on the lives and education of their students. The teachers expressed that although they were met with many challenges throughout their career, they knew that they did not want to give up teaching in Jefferson ISD. Henry and Redding (2018) found that teachers were able to overcome those obstacles by leaning on their support system to adjust and improve in their skillset. The seven teachers in this study stated that it was not easy to teach in Jefferson ISD when they began their careers, however with their mentors, other experienced teachers, and supportive administration they were able to persevere through the difficult times. Bandura (1993) stated teachers with high self-efficacy found various ways to overcome challenges they faced. Teachers with high self-efficacy tend to focus on the bigger picture and are willing to break down barriers that will keep them from achieving their overall goals (Dembo & Gibson, 1985; Haberman et al., 2017). Four teachers in this study expressed when interviewing teacher candidates, administrators in the urban districts must ask the candidates about their passion for teaching at-risk students, how they believe they can make a difference in the lives of their students, and what is their five-year plan to

continuously grow in the district. These types of questions will give the administrators an idea if they are a good fit for their campus and students (Wronowski, 2018). Teachers with high self-efficacy will interview with confidence and passion about teaching at-risk students (Bandura, 1993; Haberman et al., 2017). Effective teachers with high self-efficacy are willing to learn, grow, and provide positive experiences for students (Dembo & Gibson, 1985; Haberman et al., 2017; Milner & Woolfolk-Hoy, 2003).

Teacher Characteristics Needed in an Urban School District

Teachers working in the urban district must possess certain characteristics that enable them to overcome the challenges they may face (Haberman, 1995; Haberman et al., 2017). When interviewing the participants, they discussed those teachers that remain in the Title I districts are those that desire to teach in the urban setting. The teachers feel compelled to give back and produce successful students. Effective teachers believed that although the students may face challenges, they are there to help them realize they are bigger than their circumstances (Ford et al., 2020; Poplin et al., 2011). The task of teaching in the urban district is not easy however, they did not give up. Effective urban educators believe and understand that it is not easy to improve student learning and performance (Blazer & Kraft, 2017; Stotko et al., 2006). The teachers explained that they learned good teaching practices from their mentors, the content specialist, and administrators which allowed them to grow and create a learning environment that made their students prosper as well.

Urban districts truly need to look at the characteristics of the teachers from this study because they are resilient, have grit, and high self-efficacy. The administrators and district personnel pointed out that the teachers that remain in Jefferson ISD believed that they can make a difference in the lives of their students by preparing them for the future. The self-efficacy of the teachers in Jefferson ISD allowed them to center their instruction

on making the students aware of their capabilities to reach their full potential as adults. Bandura (1993) declared that a teacher with high self-efficacy tends to spend more time on instruction in the classroom rather than focus on problems that keep them from being productive. As teachers spend more time on instruction and building students up to be successful, they are making a lasting impact on their students. The resiliency comes from the teachers that remained in the district despite the obstacles they faced. Teachers who are resilient overcame challenging obstacles, had a strong sense of competence, efficacy, feelings of accomplishment, and humor (Mansfield et al., 2012). The last characteristic the participating teachers possess is knowing and understanding their students and the environment in which they teach. Educators with grit tend to work harder, over a span of time, maintain commitments during challenges and adversities, and finish difficult task more effectively (Duckworth et al., 2007). As many of the teachers interviewed stated, they were committed to changing the minds of society about the at-risk students, ending the poverty cycle, and showing the students they can have a better way of life. This means they were not going to leave the district for an easier career path, they were in it to stay.

Teacher Supports

Callahan (2016) suggested to grow new teachers, districts need to provide the supports that encourage new teachers to remain in the profession. The teachers, administrators, and the district personnel voiced that it is important to build relationships with the new teachers in which they can continue to grow and prosper. The teachers expressed that once they entered teaching, they were each assigned a mentor and had seasoned teachers that were close by or on their collaborative teams that guided them throughout the school year. These relationships built capacity in Jefferson ISD teachers, which compelled them to remain the teaching profession. The types of relationships are considered formal and informal mentoring. New teachers need both formal and informal

mentor relationships in which they feel compelled to remain in teaching (Ingersoll & Merrill, 2010; Ingwalson, 2016). According to Divoll et al. (2018), formal mentors are those that assist new teachers with “teaching content, understand the school [and district] requirements, and support with student issues” (p. 112). The informal mentors are those that are from within the school that are not the acting formal mentor for the new teacher; however, they offer guidance, support, a listening ear, trust, and provide them with positive interactions (Corburn & Russell, 2008). At times, the informal mentors are more influential to new teachers than the formal mentors because of the level of trust, and they were able to have informal discussions about their students and the stressors of teaching (Divoll et al., 2018).

With successful mentoring programs, there is a continuous concern that the new teachers are being exposed to the teaching practices of a seasoned teacher. The administrators in this study believed the ideal mentoring program is when new teachers are able to co-teach with a mentor or master teacher for the entire school year. Currently, Jefferson ISD’s mentor program is for only one year, which consists of the triad of teachers meeting to discuss concerns and ask questions. This is essential because the new teachers need these sessions to learn the campus and district, however it should also incorporate a time for the teachers to observe and co-teach with a seasoned teacher to improve their teaching practices (Duran & Miquel, 2019). Research shows when teachers participate in true mentor programs, they have an increase in implementing meaningful lessons to students, have good classroom management, and students show growth on rigorous standardized testing (Ingersoll & Strong, 2012).

Another implication of this study was providing teachers with authentic trainings according to their skillset and offer culturally responsive professional development. Jefferson ISD implements a three-year professional development plan for all new teachers

entering the district regardless of experience. Although many other districts do not offer this prescribed type of professional development, the trainings are a one-size-fits-all for both new and experienced teachers. So, at times this may be frustrating to an experienced teacher entering the district. When the district creates trainings, it should take in account the teachers' previous experiences and recommend the appropriate trainings for them. Along with the appropriate prescribed professional development, the teachers in this study stated that the new teachers and experienced teachers should be required to take culturally responsive training to truly understand how to teach at-risk students. The teachers expressed that culturally responsive professional development should be added to the trainings offered to all teachers entering the district. Many teachers that begin working in the urban districts believe the students' behaviors and academic performance will be similar to the students in their own backgrounds and experiences (Whitaker, 2020). The culturally responsive training will demonstrate to teachers how to interact, respond, and teach students that are from different backgrounds and cultures (Ladson-Billings, 2014; Weinstein et al., 2004). Another type of professional development that emerged was video coaching. The district personnel explained that this is another way for teachers to truly see themselves interacting with students and evaluate their own teaching. They are able to see their strengths and weakness through the video coaching. The teachers get a true picture of their teaching skills by taking a deeper look at themselves and learning where they can ask for support if needed.

Teachers' Job Satisfaction

The working conditions can be a catalyst for teacher turnover rates in high needs schools (Garcia & Weiss, 2019; Ingersoll, 2012; Sutcher et al., 2018). The teachers in this study expressed how their mentors, teachers, district, and administrators along with their teams permitted them to become strong and effective teachers in the classrooms. Having

formal and informal mentors for new teachers such as seasoned teachers, district and campus leaders, and a collaborative team reduces the chance of them leaving the district early in their careers (Corburn, 2001; Corburn & Russell, 2008; Divoll & Ribeiro, 2021). The workplace conditions allowed them to continuously grow which in turn meant their students grew as well. This correlates with Herzberg's motivation factor which strongly connects with job satisfaction (Yusoff, Kian, & Idris, 2013). The teachers in this study felt the intrinsic satisfaction of making a positive impact in the lives of their students and wanting to continuously grow as a teacher. The second factor is the hygiene factor which includes "interpersonal relations, salary, company policies, administration, relations with the supervisors, and working conditions" (Alshmemri, Shahwan-Akl, & Maude, 2017, p.14). The administrators interviewed vocalized that they felt it is important to provide a work environment that will allow their teachers to grow and prosper. Having positive, strong, and meaningful work relationships and work environments inspire secondary math and science teachers to remain in urban Title I districts longer than five years. This means celebrating teachers' victories, building their capacity, and giving critical feedback that allows them to continuously strengthen their teaching practice.

Another implication discussed by the teachers was the lack of work and life balance for new teachers. The teachers emphasized that many new teachers are working late and not taking the time to separate work and personal life. The teachers indicated that this is a very fast way that many new teachers are leaving the districts or the profession. New teachers must realize that when they are working a full day and then taking the work home with them, it leads to early burnout. They want to ensure their lessons are prepared and their students' needs are met, however new teachers must take the time to recharge themselves. If they are not taking care of their mental, emotional, and physical health then they lose focus of why they began teaching in the urban districts and are willing to leave

early in their careers (Abernavoli et al., 2013; Divoll & Riberio, 2021). In order to maintain the work and life balance, new teachers need to find time in their lives to relieve stress and engage in enjoyable and relaxing activities such as exercise, vacations, reading for lecture, or gardening. As new teachers find this balance, they will be more compelled to remain in the urban districts.

Future Recommendations

While conducting the research, the administrators discussed implementing a mentoring program and co-teach model for new teachers. In many districts, new teachers are assigned mentors to guide them throughout the school year; however, after one year, they are no longer assigned a mentor. Research shows that teachers are most vulnerable in their first three years of teaching and need continued support and guidance (Mansfield, 2016). It is recommended that urban districts continue building capacity in their new teachers by implementing a three-year mentor program for teachers. Having a program such as this will allow teachers to build their skill set, continuously put them in a growth mindset, and ultimately make an impact on student achievement.

Selecting the strong mentors for new teachers is imperative. Some mentors that are selected truly invest in guiding and supporting the new teacher; however, other mentors that are selected did not fully comprehend how to mentor a new teacher. They believe mentors check-in on their mentees and complete a checklist. Further research must be conducted on the selection process of mentors, providing adequate and continuous trainings for mentors and having consistent training across the districts. After the selection and training of mentors, researchers will need to plan a three-year study on the impact the mentor had on the mentee and if the mentor program compelled the new teacher to remain in the district after their third year of teaching.

As the researcher interviewed participants, the teachers discussed providing teachers in the accelerated certification programs with more opportunities to engage with at-risk students. They felt as though the fast track programs did not benefit them once in the urban classrooms. Further research needs to be conducted to compare the ACP programs with college certification programs. The research needs to particularly look at the teachers educating the at-risk population and if the retention percentage of urban teachers completing the accelerated programs is lower, the same, or higher than the retention percentage of teachers completing the college certification programs. This will give both certification programs the information to refine their requirements and provide engaging opportunities in the classrooms.

Conclusion

Urban districts are often seeking ways to hire highly qualified teachers for at-risk students. Urban districts often hire new secondary math and science teachers that want to work in an urban district because they want to contribute to fixing a broken educational system (Allensworth et al., 2009; Johnson et al., 2012; Love, 2021). The problem with this is once in the classroom, the reality of teaching in an urban Title I district is very different from the textbook scenarios they were given in their certification programs. They do not realize the many challenges and hardships they will face by teaching in an urban school. The new teachers are not prepared to meet the challenges nor have the capacity to overcoming them (Bandura, 1993).

As the significant number of teachers are leaving the urban districts increase each year (Callahan, 2016; Carver-Thomas & Darling-Hammond, 2018; Garcia-Weiss, 2019), districts are left to hire teachers that are less qualified and lack the skills set to teach at-risk students. This study contributes to literature because it helps districts improve their hiring practices and seek teachers that have certain characteristics described in this study. Urban

districts must hire teachers that will remain in the teaching profession and educate students that need and deserve the best education possible to achieve their goals and aspirations in life. The districts may have to adjust their interview questions that will reflect a teacher's passion for teaching in the urban schools and teach at-risk students. This study also provides districts with the idea of creating and implementing a three-year mentorship program for new teachers. The program will not only develop the mentors to properly coach teachers, but it will also provide new teachers the teaching tools necessary to teaching in the urban districts for longer than five years. All of these are important because urban at-risk students deserve the same high-quality education as students in the surrounding suburban districts.

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APPENDIX A:
INFORMED CONSENT



**University
of Houston
Clear Lake**

Informed Consent: Adult Research Participant

You are being asked to participate in the research project described below. Your participation in this study is entirely voluntary and you may refuse to participate, or you may decide to stop your participation at any time. Should you refuse to participate in the study or should you withdraw your consent and stop participation in the study, your decision will involve no penalty or loss of benefits to which you may otherwise be entitled. You are being asked to read the information below carefully and ask questions about anything you don't understand before deciding whether or not to participate.

Title: The Perspectives of Secondary Math and Science Teachers and Administrators on Retaining High Quality Secondary Math and Science Teachers in Title I Districts

Principal Investigator(s): Click or tap here to enter text.

Student Investigator(s): Pamela Stewart

Faculty Sponsor: Amy Orange

Purpose of the Study: The purpose of this study is to understand the following:

- Professional and personal factors that encouraged teachers to remain in the Title I school district.
- Supports received to remain in the district.
- Challenges teachers face and how they overcame those challenges.
- Learn from teachers that remained and how can we build capacity in them to remain in the secondary schools.

Procedures: If you choose to take part in this study, you will participate in an interview via phone or Zoom. The interview will be held at a convenient time for you. I will ask you questions about why secondary math and science teachers teach in Title I schools for 5+ years, ways to retain secondary math and science teachers in Title I schools, and supports available to secondary math and science teachers that may encourage them to continue teaching.

Expected Duration: Interviews are anticipated to last 20-45 minutes each.

Risks of Participation: There are no anticipated risks if you chose to participate in this study.

Benefits to the Subject

There is no direct benefit received from your participation in this study, but your participation will help the investigator(s) to better understand the personal and professional factors that encourage urban high school math and science teachers to stay in the urban schools despite the challenges they may face. The research for this study will inform school administrators and districts of the best methods to utilize to retain their teachers longer than five years.

Confidentiality of Records

Every effort will be made to maintain the confidentiality of your study records. The data collected from the study will be used for educational and publication purposes, however, you will not be identified by name. For federal audit purposes, the participant's documentation for this research project will be maintained and safeguarded by the Principal Investigator or Faculty Sponsor for a minimum of three years after completion of the study. After that time, the participant's documentation may be destroyed.

Compensation

There is no financial compensation to be offered for participation in the study. **Investigator's Right to Withdraw Participant**

The investigator has the right to withdraw you from this study at any time.

Contact Information for Questions or Problems

The investigator has offered to answer all of your questions. If you have additional questions during the course of this study about the research or any related problem, you may contact the Student Researcher, Pamela Stewart, by email at Stewartp5060@uhcl.edu The Faculty Sponsor, Amy Orange, may be contacted by email at Orange@uhcl.edu

Identifiable Private Information (*if applicable*)

Identifiers might be removed from identifiable private information or identifiable biospecimens and that, after such removal, the information or biospecimens could be used for future research studies or distributed to another investigator for future research studies without additional informed consent from the subject or the legally authorized representative, if this might be a possibility

Signatures

Your signature below acknowledges your voluntary participation in this research project. Such participation does not release the investigator(s), institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to you. By signing the form, you are not waiving any of your legal rights.

The purpose of this study, procedures to be followed, and explanation of risks or benefits have been explained to you. You have been allowed to ask questions and your questions have been answered to your satisfaction. You have been told who to contact if you have additional questions. You have read this consent form and voluntarily agree to participate as a subject in this study. You are free to withdraw your consent at any time by contacting the Principle Investigator or Student Researcher/Faculty Sponsor. You will be given a copy of the consent form you have signed.

Subject's printed name: [Click or tap here to enter text.](#)

Signature of Subject: [Click or tap here to enter text.](#)

Date: [Click or tap here to enter text.](#)

Using language that is understandable and appropriate, I have discussed this project and the items listed above with the subject.

Printed name and title: [Click or tap here to enter text.](#)

Signature of Person Obtaining Consent: [Click or tap here to enter text.](#)

Date: [Click or tap here to enter text.](#)

THE UNIVERSITY OF HOUSTON-CLEAR LAKE (UHCL) COMMITTEE FOR PROTECTION OF HUMAN SUBJECTS HAS REVIEWED AND APPROVED THIS PROJECT. ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UHCL COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (281.283.3015). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT UHCL ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

(FEDERALWIDE ASSURANCE #FWA00004068

Hi [REDACTED],

My name is Pamela Stewart and I am an Assistant Principal in [REDACTED]. I am currently working on collecting data for my dissertation entitled “The perspectives of high school math and science teachers, administrators, district personnel on retaining highly qualified high school math and science teachers in Title I districts.” I have been approved to do my research in [REDACTED], Director of Professional Growth and Improvement – [REDACTED].

The purpose of this study is to understand the following:

- Professional and personal factors that encouraged teachers to remain in the Title I school district.
- Supports received to remain in the district.
- Challenges teachers face and how they overcame those challenges.
- Learn from teachers that remained and how can we build capacity in them to remain in the secondary schools.

Your participation in this study is strictly voluntary. If you choose not to participate in the research study, your evaluation will not be affected. Your identity will be associated with a pseudonym. The interview will be audio recorded and last approximately 20-30 minutes. The information you will provide is confidential and will be locked in a file with the researcher for five years. After the five years, the information will be destroyed.

If you would like to participate in this study, you may email me stewartp5060@uhcl.edu.

Thank you for your time and consideration.

Thank you,

Pamela Stewart

APPENDIX B:
APPROVAL LETTER

June 3, 2020

University of Houston-Clear Lake
Committee for the Protection of Human Subjects
2700 Bay Area Blvd.
Houston, TX 77058-1098

To Whom It May Concern:

[REDACTED] grants permission for the principal investigator, Pamela D. Stewart, to proceed with her research project, The Perspectives of High School Math and Science Teachers, Administrators, and District Personnel on Retaining Highly Qualified High School Math and Science Teachers in Title I Districts.

[REDACTED] is pleased to work in partnership with UHCL to gain knowledge about perspectives and insight related to retention of highly qualified teachers in Title I high school math and science.

Please accept this electronic version of Pamela's approval as we are working virtually.
[REDACTED] reserves the right to withdraw from any research at any time.
-No publication of any district, school, staff, student, or parent names related to [REDACTED] may be used in any publication.

Sincerely,

[REDACTED]
Director of Professional Growth and Improvement, [REDACTED] ISD
Chair, [REDACTED] ISD IRB Committee

APPENDIX C:
DEMOGRAPHICS OF PARTICIPANTS

1. Name _____
2. Current Teaching Position _____
3. Current Campus _____
4. Gender:
 - a. Male
 - b. Female
5. Ethnicity and/or Racial background
 - a. Asian
 - b. Caucasian/White
 - c. Black/African American
 - d. Hispanic/Latino
 - e. American Indian
 - f. Other: _____
6. During your teaching career, what content and grade levels have you taught?
7. How many years have you been teaching?
8. What certifications do you have?
9. What degrees have you earned?
10. What type of teaching certification program did you graduate from?
 - a. Traditional: College/4 years
 - b. ACP
 - i. Which ACP program? _____
11. During your degree program, were there any specific classes that taught you how to teach at-risk in the urban schools?

APPENDIX D:
TEACHER QUESTIONS

1. Do you believe the education program prepared for the secondary urban schools? If so how? If no, why?
2. Why did you decide to teach in the urban schools?
3. What supports did you receive or continue to receive in your first five years?
4. Do you believe these supports assisted you in the classroom effectively? (Examples)
5. Why did you decide to remain in the urban schools as a math/science teacher?
6. What is your perception of teacher leaving the district or the profession within their first five years of teaching?
7. What are the factors that encouraged you remain in education and teaching at-risk students?
8. What other supports do you believe the district can do to retain their secondary math/science teachers?
9. In order to work in a Title I district in the secondary schools, what do you think teachers need (internally) to remain in the district?
10. Have you contemplated leaving the district or education within your first five years? If so why or why not?
11. What are your beliefs about the influence of the environment on student learning?
12. Can you give an example of a time you helped a struggling student?
13. Did you feel prepared to work with urban students? Why/Why not?

APPENDIX E:
ADMINISTRATIVE QUESTIONS

1. Can you describe your teaching experience?
2. What factors do you believe influence teachers to remain in the secondary schools?
3. Why do you believe math and science teachers leave Title I schools for other districts or the profession?
4. How do you foster math/science teacher retention at your campus?
5. What supports do you offer your beginning math and science teachers?
6. How do you track whether these supports are effective for your teachers?
7. What other supports would you like to offer your teachers?
8. What barriers prevent you from offering them?
9. How do you continuously support your veteran math and science teachers?
10. What informs professional development selection for your campus?
11. What does the mentoring program look like for your new teacher on your campus?

APPENDIX F:
DISTRICT PERSONNEL

1. Can you describe your teaching experience?
2. What factors do you believe influence secondary math and science teachers to remain in the Title I district?
3. Why do you believe secondary teachers leave the district or the profession?
4. How do you foster teacher retention at the district level?
5. What supports do you offer the beginning secondary math and science teachers?
6. How do you track whether these supports are effective for your teachers?
7. What other supports would you like to offer your teachers?
8. What barriers prevent you from offering those supports?
9. How do you continuously support the veteran teachers in the district?
10. What informs professional development selection for your campus?
11. What does the mentoring program look like for your new teacher on your campus?