Examining Teacher Retention in JCPS

An Examination of Teacher Retention in JCPS Priority Schools

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Table of Contents

Executive Summary

Since the historic 2001 passage and subsequent implementation of the No Child Left Behind Act, NCLB, schools and districts across the nation have been held accountable in one way or another for student achievement. These test-based accountability tools have shed light on which public schools within any given area are in the bottom percentile of all schools statewide. In Jefferson County Public Schools (JCPS) in Louisville, Kentucky, these schools have been labeled as 'priority schools.' Jefferson County Public Schools serve approximately 100,000 students. To be among the five percent of lowest performing of schools in the state is a rather serious and urgent matter. The case is easily made that the students in these schools are being underserved the most. Furthermore, the student population that constitutes the lowest performing schools in this district is so impoverished and disproportionately filled with students of color, that staffing these schools with quality and high-performing teachers has historically been challenging. It has been no secret or surprise that low-performing, high poverty schools in which students of color are the predominant majority, are hard to staff. The school's culture, climate, leadership, and teachers, all play an integral part in the student's experience. Moreover, the daily issues and external forces that these students face, and in turn, bring to school, are exponentially complicated.

Through a formal RFA (Request for Assistance), JCPS expressed the desire to better understand ways of retaining high-performing teachers in its lowest performing schools. Ultimately, district officials want to increase student achievement by providing its neediest students with the best teachers in the district. Considering the district's expressed needs in the RFA, and based on our review of literature around teacher retention, we developed three research questions to help our research team really examine the issues that have been identified. They questions are:

1. ***What teacher and school characteristics are most strongly related to retention in priority schools?***
2. ***How is JPCS defining, identifying, recruiting, and retaining highly effective teachers in its lowest performing schools?***
3. ***What are effective retention strategies for priority schools?***

The research questions led us to design a mixed-methods research project that included using quantitative survey data supplied by the district. The research team also collected qualitative data primarily through interviews of school personnel in six different priority schools. We also engaged in classroom and hallway observations, document collection, and classroom walkthroughs in an effort to better understand school culture and climate, teacher/student interactions, leadership styles, and the daily routines and procedure in these schools.

Based on our data collection and analysis, we were able to establish a few key findings. They are as follows:

Key Findings:

Research Question 1: What teacher and school characteristics are most strongly related to retention in priority schools?

- **Finding 1**: There is a diversity gap. The number of teachers of color does not mirror the student population. The composition of JCPS' teaching staff does not mirror that of the student population. 84.4% of all JCPS teachers are white, 15.6% are people of color. Unlike the teacher population, 56% of all JCPS students are people of color.

- **Finding 2:** JCPS Priority School teachers' credentials do not mirror those of JCPS teachers as a whole.

- **Finding 3:** School culture, school leadership, and healthy environments are important to teachers. Teachers and administrators noted that school culture, leadership styles, and the environment in which they work affects how they feel about the work they do and whether or not teachers stay or leave priority schools.

- **Finding 4:** Teacher efficacy matters. Teachers who believe that they can make a difference in the schools they teach tend to stay. When teachers believe in the work that they are doing and it makes a difference in the lives of their children, they stay and do the work.

- **Finding 5:** Teachers acknowledge their need to build trust and with and amongst students, and teachers of color - along with their white colleagues - acknowledge their advantage in understanding and relating to students of color. Teachers and administrators spoke about building authentic relationships with students. Teachers of color acknowledged that their own identities provide them with insight and an understanding and leads to more effective relational outcomes.

- **Finding 6:** JCPS' Comprehensive School Survey results are not directly tied to data on teacher retention. While JCPS may use the survey to inform other decision-making in the district, it is not very useful in understanding circumstances around teacher retention, including why teachers stay, why they leave, and what motivators determine each.

Research Question 2: How is JCPS defining, identifying, recruiting, and retaining highly effective teachers in its lowest performing schools?

- **Finding 1:** There is no formal or consistent way in which high-performing teachers are identified or retained in priority schools. It varies by school and building administrator.

Consequently, the identification of and retention efforts around high-performing teachers vary.

- **Finding 2:** Retention amongst teachers is primarily the responsibility of the building principal. Great efforts are directed towards retaining teachers, and although the JCPS transfer policy makes it relatively easy to leave priority schools, principals have implemented creative strategies to try to attract and retain good teachers.

Research Question 3: What are effective retention strategies for priority schools?

- **Finding 1:** Financial incentives and support for continuing education were identified as effective ways to encourage teacher retention. While current financial incentives are not necessarily predicted to help encourage or support teacher retention, there are mechanisms by which this can be accomplished.

- **Finding 2:** There seems to be some inequity around resources that are available to retain and train talent at priority schools. Administrators and teachers from various schools seemed to have asymmetric levels of information, perhaps creating unintended inequity around resources between priority schools.

- **Finding 3:** Teachers and administrators report feeling overwhelmed and overworked by district mandates. Most staff that we spoke to agreed that the district is doing good things. However, with the changes in leadership, many mandates, initiatives, and inefficacious paperwork are handed down to teachers and principals.

Based on the synthesis of the aforementioned findings, we offer up the following recommendations:

- **Recommendation 1:** Revise survey questions - especially for priority schools - to get at the heart of the matter around teacher retention. The survey questions should aid in understanding how to address and take real steps to retain teachers in priority schools.

- **Recommendation 2:** Focus on recruitment and retention efforts specifically targeted toward teachers of color. Intentionally create partnerships with Minority Serving Institutions (MSI) and Historically Black Colleges and Universities (HBCUs).

- **Recommendation 3:** Redesign and restructure recruitment efforts with a specific emphasis on recruiting from within the community. The district should consider putting in place a referral system and using networks that encourage current JCPS teachers to

encourage other teaching professionals who already have a vested interest in the community to come to JCPS (Grow Your Own Programs).

- **Recommendation 4:** Evaluate the amount of the stipend and other incentives offered to teachers who currently teach in priority school; consider offering incentives for teachers within the district to move over to priority schools.

- **Recommendation 5:** Develop a user friendly tool for evaluating teacher effectiveness and identifying high performers in priority schools. While we are not suggesting that the current evaluation system be ignored, we do recommend that the district consider an alternative tool for priority schools that allows for flexibility by building principals, considers teacher innovation, and reflects the values of equity.

Introduction

Public schools in the United States have always existed to provide its citizens with a quality education. Yet, not all Americans are receiving the same quality of education. Frederick Douglas reminds of that, "To deny education to any people, is one of the greatest crimes against human nature." We have compelling evidence that there are differences in this country around the outcomes of K-12 educational institutions, and these differences are quite staggering. The efforts around improving low-performing high poverty schools are not new. Since the advent of No Child Left Behind (NCLB) in 2002 and the reauthorization of the law, Every Student Succeeds Act (ESSA), in 2015, under the Obama Administration, local, state, and national policy makers and school leaders have been trying to better understand and the needs of students at low-performing schools. With little overall success, the problem of low-performing schools that have high poverty and disproportionately high numbers of students of color, continues to plague us as a country. While it may be true that low income and skin color in and of themselves do not determine academic achievement, the coupling of these two characteristics inevitably impact student achievement (Rothstein, 2004). Little progress has been made over the last 17 years, and unfortunately, the achievement gap continues to grow (Neckerman, 2007).

The Jefferson County Public School system, JCPS, serves the city of Louisville, KY, and its greater community. The school system is the largest in the state of Kentucky and the 28th largest in nation. Over 100,000 students in 172 schools are served at the elementary, middle, and high school levels. Eighty percent of all children who reside within the city of Louisville and Jefferson county attend JCPS (Jefferson County Public Schools, n.d.). There are over 6,600 teachers who work and serve within the district, and eighty-five percent possess a master's degrees. Thirteen percent of all teachers with a National Board Certification work in JCPS, and JCPS offers at least sixty-six magnets schools or programs (Jefferson County Public Schools, n.d.). Like many large urban school districts in the United States, the student population is quite diverse. 62% of all students are eligible for free or reduced lunch, 37% of its students are African-American, 44% are White-American, 11% are Latin-x, and 9% are classified as other, and 120 languages are spoken by JCPS students (Jefferson County Public Schools, n.d.). Jefferson County Public Schools has identified Priority Schools through the Kentucky State Accountability System. These schools are amongst the bottom 5% performing schools in the entire state of Kentucky. For the 2017/2018 school year, JCPS had 18 schools in its district that were classified as Priority Schools. In fact, JCPS accounts for more than 41 percent of the state's priority schools (Wheatley, 2018).

The explicit mission of the school is, "To challenge and engage each learner to grow through effective teaching and meaningful experiences within caring, supportive environments" (Jefferson County Public Schools, n.d.). The vision to provide an education to its constituency,

is equally appropriate and ambitious, "All Jefferson County Public Schools students graduate prepared, empowered, and inspired to reach their full potential and contribute as thoughtful, responsible citizens of our diverse, shared world" (Jefferson County Public Schools, n.d.). Demographics have shifted in Jefferson County, and in America's public schools, causing an even greater diversity gap - the difference in the percentage of students of color and teachers of color (Putnam, et. al, 2016). Moreover, JCPS has more students of color than teachers of color, and the gap that exists within priority schools is even wider. The Diversity Gap in JCPS schools is roughly thirty-five to forty percent overall and in excess of sixty percent in some of its priority schools (Jefferson County Public Schools, n.d.). The school district recently adopted its strategic plan, JCPS Strategic Plan - *Vision 2020: Excellence with Equity.* Within the plan, there are three areas of focus, including: *Learning, Growth, and Development, Increasing Capacity and Improving Culture, and Improving Infrastructure and Integrating Systems* (Jefferson County Public Schools, n.d.). Within the strategic plan, Strategy 3.1.3, assesses the need of the district to, "Improve human resources infrastructure: Develop and implement a responsive, time-sensitive educator recruitment and placement process in order to: identify, hire, and assign teachers and administrators with the capacities, skills, and dispositions necessary for effective teaching and learning; target recruitment to fill high-need positions; identify and hire a diverse workforce; and place and retain teachers in schools, taking into account teacher experience and student needs" (Jefferson County Public Schools, n.d.). In addition this year, the district decided to intentionally turn its focus and efforts towards realizing equity within its schools. As a foundational principle, JCPS's Envision Equity Plan (Appendix A) uses a quote from Frederick Douglass to describe its purpose, "It's easier to build strong children than to repair broken men." The plan looks at and creates metrics around discipline, school culture and climate, inequities amongst student groups, and inequities amongst schools (Jefferson County Public Schools, n.d.) were charged with writing their own individual racial equity plan that fit their respective communities and encourages equitable growth in the aforementioned areas.

Definition of Problem & Research Questions

In a Request for Assistance (RFA) written to the Vanderbilt Ed.D. program, the Jefferson County Office of Priority Schools expressed, "In priority schools, there is a significant sense of disruption to the professional learning communities when there is an influx of young and inexperienced teachers." The RFA asserts that the efforts around teacher retention and induction are sporadic and vary from school to school, "Some of the JCPS Priority Schools have implemented an in-house support office for new teachers. Others rely on district-based supports. Some schools have a well-designed coaching system that includes regular walkthroughs and PLC supports."

Jefferson County Public Schools has identified their schools that are ranked in the bottom performing five percent of all schools statewide and, in accordance with ESSA, these schools have been designated as Priority Schools (U.S. DoE, n.d.), now known as Accelerated Improvement schools. The RFA identifies a particular challenge around teacher retention in these Priority Schools. Furthermore, the RFA states that, "The critical driver of instructional capacity is the quality of teachers secured through effective processes of recruitment, selection, and assignment (Murphy, 2015)." Though these low performing, high poverty schools have the designation of priority, it is the district's goal to turn them around and remove them from this classification.

During this turnaround process, JCPS has identified three distinct stages with potentially different implications for teacher retention, (1) schools in the early stages have a high teacher turnover rate ("revolving door" school); (2) schools in the middle stages have a more stable teaching workforce, and (3) schools in the process of exiting priority status that are in position to attract more senior teachers who want to be part of a journey to sustained school success. The RFA acknowledges that efforts around teacher retention may vary from school to school since there is no systematic or district-wide, concerted effort around programming for teacher retention. Therefore, JCPS has solicited our help in understanding the challenges around teacher retention, identify what they are doing well to identify and retain good teachers, and in identifying the characteristics of students and teachers that may be impacting teacher retention rates.

Considering the needs identified in the RFA and existing research on teacher retention, we identified the following questions:

1) What teacher and school characteristics are most strongly related to retention in priority schools?

2) How is JPCS defining, identifying, recruiting, and retaining highly effective teachers in its lowest performing schools?

3) What are effective retention strategies for priority schools?

Conceptual Framework

Priority Schools can also be described as hard to staff schools given their lack of academic achievement, lower graduation rates, disproportionate percentages of both students of color and students eligible for free or reduced price meals, and lower teacher retention rates when compared to higher achieving schools or those with a historically less challenging student body (Center for American Progress, 2011). High-needs school have a harder time recruiting and retaining teachers, especially effective ones (Ingersoll, 2001; Sun, 2018). Targeted recruitment of teachers most committed to serving challenging student populations will help to place the teachers most confident in their ability to serve this student population into JCPS' priority schools. Furthermore, the addition of targeted and specific professional development will support the retention of these teachers by increasing both their personal sense of efficacy and the collective efficacy of the entire school staff (Ingersoll, 2001; Skaalvik & Skaalvik, 2017; Springer, et. al., 2016). Teachers that are confident in their personal and/or collective sense of efficacy are more likely to remain in these schools despite the stated challenges. Therefore, identifying the most effective amongst these teachers in priority schools will help to stabilize the school's workforce by assisting school leaders in recruiting and retaining the teachers most likely to remain in hard to staff schools (Springer, et. al., 2016).

This is especially important because cost of teacher turnover is tremendous, and it has been associated with a three to ten percent loss of student learning (Ronfeldt, Loeb, & Wyckoff, 2012) and an annual cost of two to five billion dollars (Lau, Dandy, & Hoffman, 2007; Ronfeldt, Loeb, & Wyckoff, 2012). Even private, independent wealthier schools have acknowledged that "demographics are our destiny" and pushed schools to think hard and long about attracting, hiring, and retaining teacher of color (Association of Independent School New England, 2001). Our focus on teacher retention in high priority, heavily people-of-color populated, and poverty-stricken schools is not unlike that of many school districts across the county. Moreover, our study has broader implications than just for JCPS. The achievement gap – which eventually becomes the income gap – is most palpable among this population of students. "In economic terms, it has been estimated that the net present value of future earnings for a student having access to a teacher one standard deviation above average effectiveness approaches half a million dollars," (Springer, 2015). In fact, it is safe to say that at this point, that this is a nationwide crisis. "The inequitable distribution of highly effective teachers across schools is a major concern of policy leader and practitioners interested in the condition of American public schooling," (Springer, 2015). Teacher retention is a problem everywhere, but it a serious problem in under-performing schools. To add to that already existing problem, highly qualified teachers are much less likely to stay in under-performing schools for many reasons. As the authors point out, "In addition to their initial maldistribution, highly qualified teachers leave disadvantaged schools at higher rates than their less-qualified counterparts," (Springer, 2015).

Some argue that the unequal distribution of highly effective teachers across schools (within a given district) is an indirect result of uniformity in teacher salary with no regard to the kind of school in which a teacher may be placed (Springer, 2015).

Given the fact that high need schools with high attrition tend to serve large numbers of students of color, it is worth examining who is teaching in these schools. People of color represent forty percent of the US population and fifty percent of all K-12 students (Carver-Thomas, 2018). While the teaching profession is lagging behind, the nation has seen the number of teachers of color grow from twelve percent to twenty percent over the past thirty years (Carver-Thomas, 2018). Still, this growth is not enough to mirror the nation's already shifted demographics. Although Jefferson County has seen similar shifts in its demographics, with students of color representing approximately 56% of all students, JCPS teachers remain overwhelmingly white (84%). JCPS' Priority Schools are even more heavily populated by students of color at 65.2%. With only 19.8% teachers of color, JCPS' Priority School Diversity Gap is 45.4%, meaning that a significant number of JCPS teachers do not represent their student body racially or ethnically, and those differences can have profound effects for students in the classroom and beyond (Putnam, et. al, 2016). Staffing similarly situated schools with teachers of color would create a more stable workforce since teachers of color are more likely to remain in schools with large proportions of students of color and those teachers who remain are generally regarded as more effective (Kohli, 2018; Kokka, 2016; Sun, 2018). Teachers of color are associated with positive outcomes for students of color, including: improved reading and math scores; higher graduation rates; increased college aspirations; fewer unexcused absences; a decrease in chronic absenteeism; more rigorous expectations; increased participation in honors, Advanced Placement, and gifted and talented courses/programs; and fewer assignments to exclusionary discipline (Bristol ,2018; Carver-Thomas, 2018; Center for American Progress, 2011; Kokka, 2016; Putnam et. al., 2016; Sun, 2018). The benefit of having teachers of color in a school extends beyond students of color to include all students and all teachers (AISNE, 2001; Carver-Thomas, 2018; Lee, 2012; Lee, 2013; Sun, 2018). Unfortunately, since the introduction of No Child Left Behind and the subsequent restructuring of schools that accompanied the need for accountability, the number of teachers of color in priority schools has decreased by up to fifty percent (Kohli, 2018; Kokka, 2016; Rogers-Ard, et. al., 2012).

Some sources indicate that teachers of color have higher attrition rates than white teachers (Carver-Thomas, 2018; Center for American Progress, 2011; Putnam, et. al., 2016; Sun, 2018), but these figures can be misleading. It is often difficult to separate school conditions and student demographics; schools with the largest percentages of students of color and students eligible for free and reduced meals tend to also be poorly resourced and subsequently have the higher rates of overall teacher attrition when compared to other school within a district (Center for American Progress, 2011; Ingersoll, 2001; Kokka, 2016; Sun, 2018). According to several studies, the higher overall attrition rates of teachers of color can be attributed to inadequate preparation and

mentoring, unsupportive or racially hostile working environments, a lack of administrative support, poor teaching conditions, inadequate professional development, and the tremendous turnover in poor performing schools tied to accountability (Bristol, 2018; Carver-Thomas, 2018; Center for American Progress, 2011; Rogers-Ard, et. al., 2012; Sun, 2018).

When compared to all teachers, teachers of color actually have higher retention rates in hard to staff schools (Kokka, 2016; Putnam, et. al., 2016; Sun, 2018). Highly effective African-American teachers have been shown to be more likely to remain in a high need schools due to an increased personal sense of efficacy in working with large percentages of students of color (Sun, 2018). Moreover, it is important to understand that the critical driver of instructional capacity is the quality of teachers secured through effective processes of recruitment, selection, and assignment (Murphy, 2015). This can be attributed to their personal commitment to working with students of color (Bristol, 2018; Kokka, 2016; Sun, 2018). When they do leave, their decisions are not associated with an aversion to serving challenging student populations (Kokka, 2016; Putnam, et. al., 2016; Sun, 2018). Given the prevailing trend for most teachers, with the notable exception of African American and some Latin-x teachers, to flee high-needs schools in favor of more amenable working conditions (Kokka, 2016; Sun, 2018), the stability of the staff in JCPS' priority schools' could rest in the hands of its ability to retain teachers of color in these schools.

Multiple explanations have been offered to explain why certain teachers remain in high-needs schools while others leave in search of more favorable working conditions. Our study will utilize the teacher efficacy theory. In its simplest form, the teacher efficacy model states that a teacher's ability to positively impact student outcomes is largely due to the teacher's belief that their individual actions can actually yield these positive results (Protheroe, 2008; Ryan, 2015). There are three types of teacher efficacy: general teaching efficacy, personal teaching efficacy, and collective teaching efficacy. General teaching efficacy refers to the belief that teachers in general can help create positive outcomes for all students, especially those in need of the most support. Personal teaching efficacy on the other hand, refers to a specific teacher's belief in their own abilities to have a positive impact on children. Collective teaching efficacy refers to teachers' belief that as a group they can effectively lead a group of students to successful academic outcomes (Hattie, 2009; Protheroe, 2008; Ryan, 2015). Furthermore, when examining the differential retention of teachers, the personal teaching efficacy has been shown to be a primary determinant in the retention decision of all teachers, regardless of race. This is especially relevant when teaching in schools with large percentages of students of color and/or low income students (Stipek, 2012). Johnson and Birkeland note when they looked at why newer teachers stay, why they move, and why they leave public school and teaching altogether within 3-5 years, of central importance in all the teachers explanations, was efficacy (Johnson & Birkeland, 2003). Teachers want to believe that they are making an impact on their students and their achievement.

The culture of the school and effective building leadership affect teacher efficacy. Along with efficacy, favorable working conditions, opportunities for growth and development, supportive principals, and an orderly, respectful learning environment were cited as important (Johnson & Birkeland, 2003). The improvement of leadership including having well-trained school principals is also noted as important a driver for teacher retention (Carver-Thomas, 2018). Teachers who stay in hard to staff schools and newer teachers to the profession rank school culture and climate right under teacher efficacy (Johnson & Birkeland, 2003).

Methods

Mixed-Methods

Our capstone project utilized a mixed methods approach. At the request of our client, we quantitatively analyzed data from within their existing annual school survey dataset in lieu of collecting original data. *Specifically, we examined two datasets for JCPs teachers provided to us by the district: the annual Comprehensive School Survey results for all Priority School teachers and a separate assortment of demographic data representing all JCPS teachers. Through these analyses we attempted to discern any trends among school and teacher characteristics that were associated with teacher satisfaction in JCPS' Priority Schools during the 2017-2018 school year.* The qualitative aspect of the study consisted of in-depth interviews with JCPS teachers and administrators who worked in Priority Schools during the 2017-2018 school year and who elected to remain in Priority Schools for the 2018-2019 school year. The qualitative inquiry was designed to examine through the lens of the educators and focus on three distinct areas: teacher efficacy, teacher characteristics, and school climate and working environment. Through our interview protocols, we attempted to identify the following: how JCPS identifies its highly effective teachers, what strategies are most associated with the successful retention of teachers in JCPS priority schools, and what is driving the decision of individual teachers to stay or leave their respective priority school. Additionally, we observed and documented the climate and culture in six Priority Schools. With permission from administrators, we walked the halls during passing periods, took pictures of the artifacts on the walls to get an idea of the messaging to students, observed teacher to student interactions, and observed student designated spaces. This data allowed us to gain a better understanding of school goals, district goals, and the intersectionality of the two.

Quantitative Methods

We received two distinct confidential data sets from JCPS. Individual teachers were only identified by a random number generated by JCPS. For the purpose of this analysis, there was no need to connect this information to specific teachers, we only needed to be able to identify which teachers were assigned to a Priority School during the 2017-2018 school year. Given the wealth of extant literature connecting teacher demographics to their beliefs about and commitment to Priority Schools, we also felt it was important to be able to connect the information provided to the teacher's race and sex. Teacher sex was identified in both data sets but there were some distinct differences in race identification between the two. The general demographic data set (data set #1) identified teachers by specific racial groups while the second data set (data set #2) identified teachers only as white or persons of color. Given the small number of teachers of color in these Priority Schools, our descriptive statistics include all of the

Priority Schools, not just the sites we were actually able to conduct interviews, in an effort to ensure the confidentiality of all teachers and the generalizability of the findings to priority school teachers as a whole. Using this information, we were able to calculate a variety of descriptive data regarding JCPS' teachers.

Data Set #1

The first data set included data for all 5675 teachers employed by JCPS. In addition to their random identification number, we received data on eight variables for each teacher: race, sex, number of years' experience working for JCPS, degree level (emergency, bachelors, bachelors +15, masters 1, masters, masters 2 +15, and doctorate), job name (elementary, middle, high school, ESL, itinerant, etc.), if they worked in any priority school, if they worked in one of the Priority Schools in our focused sample, and if they obtained the National Board Certification. This data file did not include any survey responses.

From the information described above we were able to determine a significant amount of descriptive and demographic information about JCPS' teachers. For example, the "Average" JCPS teacher is a white woman with a master's degree, has been working for JCPS for almost nine years, but is not National Board Certified. We were then able to refine this profile by any one of the selected categories of interest. The "Average" teacher in a JCPS Priority School has a nearly identical profile but is slightly more likely to be a person of color (19.8% vs 15.6%). (See Table 5 and Appendix B for the full set of descriptive statistics used to make these calculations).

Data Set #2

To obtain more detailed quantitative data, we examined data set #2. This data included the school-based certified staff responses from all JCPS Priority School respondents to the 2018 Comprehensive School Survey (CSS). In total, JCPS provided us with the results from 1280 respondents representing the schools with the Priority Schools label during the 2017-2018 school year. Overall, there was a 93% response rate to the survey although we are unable to determine the exact response rate specific to Priority School teachers. Prior to beginning the analysis, we eliminated 137 respondents who failed to identify their race, sex, or both. In all, 26 women of unknown race were eliminated, 30 men of unknown race were eliminated, 3 people of color of unknown sex were eliminated, 2 white respondents of unknown sex were eliminated, and 76 people who failed to identify their race and sex were eliminated. Our final sample size was 1143 certified employees of a JCPS Priority School, 89.3% of the original sample.

Table 1: 2017-2018 CSS Priority School Survey Respondents

	men	women	Total
white	324	594	918
person of color	82	143	225
Total	406	737	1,143

Additionally, we compared the JCPS data file with the description of survey items provided to us by JCPS (See Appendix C). We determined that responses for nine survey items (C6, C7, C9, C10, C11, C15, C17, C31, and C34) were not included in the data file. Additionally, JCPS provided responses for another nine survey items but not a description of the question asked of participants. All 18 survey items for which incomplete data was provided were dropped from our analysis. One additional question was dropped from our analysis since it did not conform to the Likert scale format used for every other item of analysis. Prior to dropping this final question, we also determined that its probative value did not contribute to any of our research questions. The CSS instrument grouped questions along three individual scales: Students; School Operation; and Employee. Upon running our own factor analysis (see Appendix D), we created seven scales: Work Environment, Care & Support, Building Leadership, Learning Environment, Personal Efficacy, JCPS Satisfaction, and Assessment. We determined Cronbach's Alpha values for both JCPS' scales and our own and determined that all represented valid scales. We used Spearman's rank correlation coefficient, Kruskal-Wallis equality of populations rank test, and two-sample Wilcoxon rank-sum (Mann Whitney) tests, and a variable of our own creation entitled racesex to analyzed the CSS data by both race and sex.

Qualitative Methods

Our sampling was one of convenience. There were eighteen schools in the district that had the Priority School designation in the 2018-2019 school year. In consultation with the JCPS Director of Priority Schools, we were given permission to make contact with nine priority schools that he deemed likely to be willing to participate in our research project, likely to not have survey fatigue, and particularly interested in improving teacher retention. Of the nine approved schools, we were successful in getting six of the nine schools to participate in our project. Upon contact with the principals, we requested to meet with each principal and between two to four teachers or other administrators in the building. The number of personnel and the positions of our interview subjects was solely at the discretion of the building principals.

Table 2: Characteristics of all JCPS Priority Schools

	Size	% FARMS	% SOC	% TOC	Teacher Satisfaction Rate	Teacher Retention Rate
Priority Schools Overview						
Byck Elementary	391	92.6%	94.4%	39%	64%	93.8%
Maupin Elementary	243	92.6%	97.1%	36%	28%	75.0%
Roosevelt-Perry Elementary	245	98.4%	89.0%	19%	28%	84.8%
Wellington Elementary	425	78.8%	69.0%	25%	94%	88.6%
Western Middle School	619	61.4%	76.4%	31%	96%	93.4%
Knight Middle School	445	78.2%	52.6%	18%	97%	95.5%
Olmsted North Middle School	619	81.2%	70.6%	21%	97%	87.5%
Stuart Middle School	831	83.5%	55.0%	17%	43%	69.8%
Thomas Jefferson Middle School	1083	76.9%	75.7%	24%	80%	88.9%
Westport Middle School	1281	63.5%	56.7%	18%	69%	90.3%
Moore Middle & High School	2312	76.8% (MS) 71.0% (HS)	64.3%	13%	89%	95.2%
Academy @ Shawnee High School	452	80.8%	58.0%	29%	44%	65.2%
Western High School	689	73.1%	76.1%	13%	69%	94.7%
Doss High School	1027	77.9%	69.9%	9%	86%	95.7%
Fairdale High School	1289	69.7%	44.5%	10%	91%	94%
Iroquois High School	1213	83.3%	78.9%	29%	61%	87.9%

Seneca High School	1223	75.0%	65.1%	21%	79%	86.1%
Southern High School	1317	69.1%	57.8%	11%	89%	92.0%
All JCPS	100,000	62%	56%	16%	87%	88%

*Retention: % of Certified personnel who were at a school at the end of the year and returned the following year to the same school.

Table 3: Sample Schools Compared to All Priority Schools

	SIZE OF SCHOOL	% FARMS	% SOC	% TOC	TEACHER SATISFAC RATING	RETENTION RATE	# OF TEACHER INTERVIEWS	# OF ADMIN INTERVIEWS
Sample Schools								
Sample #1:	>750	70-80%	60-70%	10-15%	86%	89.2%	2	2
Sample #2:	<750	70-80%	70-80%	10-15%	69%	90.3%	2	1
Sample #3:	>750	70-80%	60-70%	10-15%	89%	95.2%	1	1
Sample #4:	>750	70-80%	60-70%	10-15%	89%	95.2%	1	1
Sample #5:	<750	<70%	70-80%	16-35%	96%	84%	3	1
Sample # 6:	<750	70-80%	50-60%	16-35%	97%	90.2.%	1	1
Sample #7:	<750	>80%	90-100%	36-50%	64%	63%	2	1
All priority high schools (N=8)	1055 (ave) 452(min) 1317(max)	69.1% (min) 83.3% (max)	44.5% (min) 78.9% (max)	9% (min) 29% (max)	44% (min) 91% (max)	65.2% (min) 95.2%(max)	5	4
All priority middle schools (N=7)	851 (ave) 445 (min) 1281 (max)	61.4% (min) 83.5% (max)	52.6% (min) 76.4% (max)	13% (min) 31% (max)	43% (min) 97% (max)	69.8% (min) 95.5%(max)	5	3

All priority elementary schools (N=4)	326 (ave) 243 (min) 425 (max)	78.8% (min) 98.4% (max)	69% (min) 97.1% (max)	19% (min) 39% (max)	28% (min) 94% (max)	75% (min) 93.8% (max)	2	1
All priority schools	744(avg) 243 (min) 1317 (max)	61.4% (min) 98.4% (max)	65.2% (avg) 44.5% (min) 97.1% (max)	19.8% (avg) 9% (min) 39% (max)	28% (min) 97% (max)	65.2% (min) 95.5% (max)	12	8
All JCPS	100,000	62%	51%	16%	87%	88%	N/A	N/A

The seven schools in our sample are described in Table 3. When comparing the characteristics of our sample to the overall characteristics of all Priority Schools in the district, the sample schools do reflects the overall population of Priority Schools. JCPS' nineteen Priority Schools are comprised of four elementary schools, seven middle schools, and eight high schools. In other words, 21 percent are elementary, 37 percent are middle schools, and 42 percent are high schools. Similarly, our sample is comprised of 14 percent elementary, 43 percent middle schools, and 43 percent high schools. Within our sample schools, the average high schools size is 982 - compared to 1055, the average size of all priority high schools in the district. The average size middle schools in our sample is 715, compared to 851, the average size of all priority middle schools. The percentage of students of color and the percentage of students receiving free or reduced meals in the sample both reasonably fall within the minimum and maximum range for all priority schools in the district. Comparatively, the percentages and range of students of color and faculty of color in the sample also fit reasonably into the overall range for all priority schools. The priority school sample is reasonably representative of all JCPS Priority Schools.

Lastly, we were able to interview twenty educators within the seven sample schools. The interviewees included twelve teachers and eight administrators. Specifically, there were four black teachers, eight white teachers, one black administrator, and seven white administrators. This means that 25 percent of the interviewees were Black, and 75 percent were white. 33 percent of the teachers were Black, and 66.7 percent were white. There was one black administrator, 12.5%, and seven white administrators, 87.5 percent. Additionally, 45 percent were male and 55 percent were female.

Table 4: Characteristics of Educators Interviewed in Sample Schools

	Black Teacher	White Teacher	Black Administrator	White Administrator	Total
Male	3	3		3	9
Female	1	5	1	4	11
Total	4	8	1	7	20

Limitations

Sample Size

The qualitative sample size itself is a limitation. The primary focus of our project was to examine teacher retention in the lowest performing schools in JCPS with the priority school designation. Therefore, our sample size was always going to be limited in scope. Given that our sample was even more narrowly defined at the direction of the district official, we have to acknowledge the potential existence of selection bias. Our findings may be transferable to the other priority schools in the district's cohort, but they should be considered with prudence since they are neither actually or intended to be statements of causality. Clearly, this poses a threat to external validity. Through meaningful effort and careful analysis, our research team worked earnestly to thoughtfully identify patterns and themes from the authentic data collected.

Data Set Provided by District

The most significant limitation to our quantitative study was that we were not permitted to conduct our own survey. The district official with whom we worked cited survey fatigue from past research projects, internal and external district instability, and teachers' general apathy towards participation. Instead, JCPS required us to use their Comprehensive School Survey results. Their insistence that we use an existing teacher survey from which to draw all of our quantitative results was a significant weakness of the study. While the CSS asks a number of questions relating to climate and culture, it does not appear to delve into personal efficacy, which we propose as the underlying theory behind teachers' retention decisions. Our review of the literature indicated that a number of factors including work environment and school culture influence teachers' retention decision and the existing survey did not allow us to explore any of these hypotheses or to draw meaningful conclusions regarding teacher retention. Citing their concerns over respondent confidentiality, the full data set (data set #1) provided by JCPS did not associate teacher survey responses with their years of teaching experience, route to certification, detailed demographics, or the demographic makeup of the other adults in their building. All of these data points would have provided a much clearer picture of the instructional staff in JCPS' Priority Schools. Our preliminary literature review indicated that a teachers' level of experience and method of preparation (traditional or alternate pathway) can significantly impact their personal efficacy as well as their decision to remain in an assigned school (Putnam, et. al., 2016).

Additionally, there were concerns with the second data set as well. Responses to several questions on the CSS survey were omitted in the data file and an equal number of questions where responses were provided but the questions themselves were omitted. In either case, the

data related to these questions (almost one third of what we perceive to be the full survey) were rendered meaningless for the purpose of deeper analysis. Another challenge was the inability to independently confirm the information provided by JCPS. For example, retentions rates reportedly exceeded ninety percent in a number of Priority Schools and were not reported to be less than eighty percent in all except for three of such schools. These numbers are wildly inconsistent with the data collected during interviews as well as with the CSS survey data that indicated fewer than eighty percent of all teachers were satisfied with JCPS and fewer than eighty five percent of them were satisfied with their current school; when further disaggregated, those number dropped into the seventy percentile for people of color. Perhaps the most critical omission in the existing CSS survey is the lack of a question that directly asks teachers if they intend to return to their current school the following year.

Contract Negotiations & State Takeover Context

Among the complexities of our research project was the significant turmoil that was simultaneously occurring within the district as we were asking principals across the district to participate in our project. All of this disorder poses a potential threat to internal validity. During the time of our qualitative data collection, we were entering the buildings rife with resentment from ongoing contract negotiations. Ironically, at issue were provisions that were designed to incentivize working in a JCPS priority school (Costello, 2018). These negotiations actually threatened to delay the start of the 2018-2019 school year. Given the circumstances, we were urged to delay our start to the qualitative data collection. What we thought we would be able to collect during the first six to eight weeks of school was pushed back by at least four weeks. While it was unclear what the exact impact of contract negotiations would have on building and district morale, six of the nine schools we were authorized to contact expressed a willingness to be a part of the research project. Adding to the multifarious effects of the contract negotiations, was the district's delivery of prior year student performance data. The timing of our interviews also fell just after the list of priority schools was updated based on student performance from the 2017-2018 school year. We were counseled and strongly urged to "tread lightly" when contacting principals about participating in the research project and to be very sensitive to both the internal and external factors that were likely affecting a principal's willingness to respond and ultimately participate. It is possible that these very real distractions not only affected the number of principals who responded, but also affected the number of personnel that the principals who did respond were willing to share with us. Moreover, we realize that teachers who are working in low-performing schools are often asked to do more, and agreeing to these interviews could have easily fallen under that same category. Lastly, at this same time and in addition to internal district turbulence, the entire JCPS district was under the threat of a state takeover (Gerth, 2018). While JCPS ultimately escaped a takeover by the state, the matter was not settled prior to our scheduled interviews. We had no way of predicting the effect of this external turmoil would have on school climate and culture or its likely to influence teachers'

willingness to either participate in our study or provide quality answers to some very intricate questions. By adopting a careful and structured analysis, we are confident that our findings and recommendations provide a clear insight into teacher retention in low-performing schools. Despite these particular limitations, we are confident that our findings and recommendations provide valuable insight into teacher retention in these lowest-performing schools.

Findings

Research Question 1: What teacher and school characteristics are most strongly related to retention in priority schools?

Finding 1: There is a diversity gap. The composition of the JCPS teaching staff does not mirror that of the student population. Specifically, the number of teachers of color does not mirror the number of students of color. Unlike the teacher population, 56% of all JCPS students are people of color. This difference in racial and ethnic backgrounds between students and teachers represents a diversity gap of about 40%. This is especially critical since white teachers report higher satisfaction levels than teachers of color yet are far less likely to send their own children to JCPS schools.

Data Set #1: JCPS Employee Profile

According to our data in Table 5 and Appendix B, 18.7% of all JCPS teachers worked in a Priority School during the 2017-2018 school year (N=1059). Amongst Priority School teachers, 37.3% were male (N=395) and 62.7% were female (N=664). JCPS Priority School teachers are not a racially diverse group, 84.4% of all JCPS teachers are white, 15.6% are people of color; this is below the national average of 18-20% people of color (Hansen & Quintero, 2016; Putnam, et. al., 2016, Sun, 2018). At 74.3%, women comprise the majority of JCPS teachers, 62.6%, of all JCPS teachers are white women; these numbers are consistent with national data indicating that the majority of the nation's teachers are white women. Within JCPS, the majority of its teachers of color are African American (80.6%), specifically African American women (60.9%). Men of color (any race) constitute just 3.8% of all JCPS teachers. While this percentage of men of color sounds extremely low, it exceeds national data, which places them at 1-2% of all teachers nationwide (Carver-Thomas, 2018; Ladson-Billings, 2005). At 5.7%, JCPS' African American male teachers (in priority schools) exceed national averages of less than one percent (Kohli, 2018).

Table 5: JCPS Priority School Students & Teachers by Race

	JCPS Teachers, Any Priority School	Percentage JCPS Priority School Teachers	JCPS Students, Any Priority School	Percentage JCPS Priority School Students
African American	**162**	**15.3%**	**7079**	**44.2%**
F	102	9.6%	3241	20.2%
M	60	5.7%	3838	23.9%
Latino/Hispanic	**28**	**2.6%**	**2400**	**15.0%**
F	22	2.1%	1130	7.0%
M	6	0.6%	1270	7.9%
White	**849**	**80.2%**	**5584**	**34.8%**
F	533	50.3%	2493	15.5%
M	316	29.8%	3091	19.3%
Other	**20**	**1.9%**	**970**	**6.1%**
F	7	0.7%	423	2.6%
M	13	1.2%	547	3.4%
Grand Total	**1059**		**16033**	

Note: Student demographic information comes from JCPS Dataset #1

Priority School Teachers comprise 18.7% of JCPS' total teaching force. Amongst all Priority Schools, 66.4% of all teachers are women and 80.2% all of them are white. There are almost as many white teachers in JCPS' Priority Schools as there are teachers of color in all of JCPS (849 versus 885). While just 12.6% of all JCPS teachers, African American teachers comprised 15.3% of all Priority School teachers. This is consistent with the literature which indicates that African American teachers are more likely to work in the most challenging urban schools (Carver-Thomas, 2018; Kokka, 2016; Putnam, et. al., 2016). Amongst the teachers of color in Priority Schools, the majority of them (77%) were African American. The schools of interest in this study were staffed almost exclusively with black and white teachers (95.5%). This increases the validity of connecting findings from previous studies to this one since most of the literature on teachers of color is specifically about black teachers.

Unlike the largely monochromatic teaching staff, JCPS students are far more diverse and more representative of the region's diversity. According to JCPS' 2017-2018 Data Books, JCPS overall student body was 37% Black, 44% White, 11% Latino, and 9% other. Priority School students were more likely to be Black or Latino (44% Black and 15% Latino) and less likely to be white (34.8%). There is a significant difference in student population amongst JCPS' Priority Schools. The percentage of students of color ranges from 44.5% to 97.1% with an average of 65.2% students of color. Teachers of color in Priority Schools ranges from 9% to 39% with an average of 19.8% teachers of color. These number present a diversity gap, or the difference in

the percentage of students of color and teachers of color of 35%-40% in all of JCPS schools and greater than 60% in JCPS' Priority Schools.

Another, sharp difference in the two student populations is family income. Overall, 62% of all JCPS students were eligible for free or reduced price meals (FARMS). Priority School students were more likely to be FARMS eligible since all reported FARMS eligibility above the district average and only two Priority Schools reported eligibility below 70%. In fact, more than two thirds reported FARMS eligibility over 80%, and 17% of Priority Schools reported that more than 90% of their students were receiving free or reduced meals. Additionally, there are a number of academic comparisons that can be made between Priority School students and the larger JCPS student body; those distinctions while often more dramatic than race/ethnicity or FARMS eligibility were not the focus of this study.

During our interviews, one of the administrators was questioned about the obvious diversity gaps that exists between the number of students of color and faculty of color. He responded, "*I know it's a point of emphasis for the district and our schools because, to be honest with you, if you're 80 percent students of color like we're 80 percent student of color, then our staff needs to be more representative of that. I mean it just does. There's no reason it shouldn't be…"* (Priority School Administrator) Another administrator responded by expressing his awareness of the disparity, *"Right now, I'm closer… I think the last time I checked, we were at 27 percent African-American teachers. I know that's still mostly white. But understand that when I got here, we were like 4 percent (teachers of color). And I'll tell you, it's hard finding applicants."* (Priority School Administrator) One teacher commented on how the diversity gap affected her education. She explained, *"I think it (having African American teachers) is super important. Even for me as a student, I don't even think we were five percent African-American in a school of two thousand. Never seeing anyone who looked like me, I think it made a difference.* (Priority School Teacher)

Finding 2: JCPS Priority School teachers' credentials do not mirror those of JCPS teachers as a whole.

Table 6: JCPS Teachers By Race, Sex, Priority Status & National Board Certification

Teachers	Without National Board Certification	National Board Certification	Total		Without National Board Certification	National Board Certification	Total	Grand Total
Priority Schools	1024	35	1059	**Non-Priority Schools**	4315	301	4616	5675
African American	159	3	162	**African American**	540	11	551	713
Female	99	3	102	Female	426	11	437	539
Male	60		60	Male	114		114	174
Latin-x	**28**		**28**	**Latin-x**	**64**	**2**	**66**	**94**
Female	22		22	Female	49	1	50	72
Male	6		6	Male	15	1	16	22
White	**817**	**32**	**849**	**White**	**3659**	**282**	**3941**	**4790**
Female	505	28	533	Female	2767	251	3018	3551
Male	312	4	316	Male	892	31	923	1239
Other	**20**		**20**	**Other**	**52**	**6**	**58**	**78**
Female	7		7	Female	45	5	50	57
Male	13		13	Male	7	1	8	21
Grand Total	**5339**	**336**						**5675**

The overwhelming majority of JCPS' teachers have advanced degrees (82.5% with at least a master's degree). The percentage of JCPS teachers with a doctorate is relatively low at 1.3%. Interestingly, there is a distinction in the racial divide. Of JCPS teachers with a doctorate degree,

teachers of color hold doctorates at twice the rate of white teachers (2.3% versus 1.1%), and black teachers account for 27.4% of all JCPS teachers with a doctorate degree (See Appendix B).

While 30.1% of all JCPS teachers with a doctorate work in Priority Schools, only 25% of the teachers of color with doctorates work in these schools. Both of these numbers indicate that teachers with doctorates are disproportionately working in Priority Schools almost at twice their overall representation in Priority Schools (Grissom, 2011). There weren't any discernible trends with advanced degrees by sex.

As of 2018, only 5.9% of JCPS teachers have National Board Certification. While seemingly low, JCPS teachers with National Board Certification is twice the national rate. JCPS' Priority Schools, its teachers of color, and consequently the students are not reaping the benefit of this intensive teacher preparation. In contrast to advanced degrees, National Board Certified Teachers are strikingly similar; overwhelmingly white (93.5%), female (89.0%), and not working in Priority Schools (89.6%).

Given the data set provided (See Appendix B), we were unable to calculate the number of years' experience teachers had working either in their current Priority School or in any Priority School. We could determine that the average JCPS teacher has 8.75 years' experience working for the district. For every racial group, the women had more years' experience than the men, about two years more in almost every case. The trend for more experienced female teachers also held for Priority School teachers except for Asians, where the men had more years' experience. Priority School teachers in every racial group were far less experienced than their colleagues in non-Priority Schools, generally by 3-4 years. For African Americans, the difference was 3.7 years, while it was 4.4 years for white teachers. Although the sample size was much smaller, Asian teachers in Priority Schools were 5.75 years less experienced than their colleagues. These findings are certainly consistent with the literature on Priority School teachers (Grissom, 2011) as well as our quantitative components.

In summary, the "average" JCPS teacher is a white woman with a master's degree, has been working for JCPS for almost nine years, but is not National Board Certified. While the "average" teacher in a JCPS Priority School has a near identical profile but is slightly more likely to be a person of color (19.8% vs 15.6%). African American teachers have a higher representation within Priority Schools than in the district as a whole and were more likely to have advanced degrees. Priority School teachers of all races had fewer years experience, were more likely to have an advanced degree, but were less likely to have National Board Certification.

Finding 3: School culture, school leadership, and healthy environments are important to teachers.

Quantitative Findings

Data Set #2: CSS Survey Results from Priority School Teachers

The CSS instrument included questions from three individual scales: Students; School Operation; and Employee. The reliability of each of these scales after removing the aforementioned variables was calculated using Cronbach's alpha. The reliability coefficient of the scales was 0.7799, 0.9324, and 0.9325 respectively. Additionally, we ran a factor analysis (See Appendix D) to determine if survey questions would be better divided into a larger number of scales. We determined that the majority of survey questions could be categorized into seven scales: Work Environment, Care & Support, Building Leadership, Learning Environment, Personal Efficacy, JCPS Satisfaction, and Assessment. Cronbach's Alpha values were determined for each of these scales as well. The reliability coefficients of the scales were 0.9400, 0.9261, 0.8726, 0.8680, 0.8477, 0.7874, and 0.8589 respectively. All ten of those Cronbach's Alpha values were well above the 0.70 threshold generally considered acceptable. Individual survey responses utilized a four-point Likert Scale: 4= Strongly Agree; 3= Agree; 2=Disagree; and 1= Strongly Disagree. Survey responses were analyzed as an entire group as well as by race, sex, and the composite racesex. Race and sex were converted to binary nominal variables: female/male and person of color/white person. Racesex was converted to a nominal variable with four categories: women of color, men of color, white women, and white men. Given the limitations of the data provided by JCPS, we were not able to further disaggregate race. Given the small number of teachers of color in JCPS' schools, complete disaggregation by race would have removed the anonymity of individual respondents especially for people of color who did not identify as a black female. As demonstrated in Table 5, the majority of all JCPS' Priority School teachers, not just survey respondents, were white women. Please see Table 1 for a breakdown of the survey respondents by race and sex.

Spearman's Correlations

Spearman Correlations were run for all three scales: Students; School Operations; and Employee as well as for the three scales combined. All correlations were sorted by both race and sex creating four different results charts, one for each group: women of color, men of color, white women, and white men. All data was found to be significant at the 0.01 level or greater, the N values are also reported for each group. See Tables 7-14 for the student and efficacy scales. Table 15 includes composite data for all ten scales sorted by race and sex. Appendix E-G contains the Spearman Correlation data for the JCPS defined scales: student, school operation and employee.

Student Scale, sorted by Race & Sex

Table 7: Spearman Correlation data for Women of Color- Student Scale

	Teachers at my school care about their students	Students at my school can talk with their counselor	My school provides a caring & supportive environment for students
Teachers at my school care about their students	---		
Students at my school can talk with their counselor	0.4707*	---	
My school provides a caring & supportive environment for students	0.5812*	0.6637*	---
* p<0.0001; N=142			

Table 8: Spearman Correlation data for Men of Color- Student Scale

	Teachers at my school care about their students	Students at my school can talk with their counselor	My school provides a caring & supportive environment for students
Teachers at my school care about their students	---		
Students at my school can talk with their counselor	0.5628*	---	
My school provides a caring & supportive environment for students	0.7070*	0.6092*	---
* p<0.0001; N=79			

Table 9: Spearman Correlation data for White Women- - Student Scale

	Teachers at my school care about their students	Students at my school can talk with their counselor	My school provides a caring & supportive environment for students
Teachers at my school care about their students	---		
Students at my school can talk with their counselor	0.4646*	---	
My school provides a	0.6338*	0.5837*	---

caring & supportive environment for students			
* p<0.0001; N=588			

Table 10: Spearman Correlation data for White Men- Student Scale

	Teachers at my school care about their students	Students at my school can talk with their counselor	My school provides a caring & supportive environment for students
Teachers at my school care about their students	---		
Students at my school can talk with their counselor	0.4739*	---	
My school provides a caring & supportive environment for students	0.6410*	0.6366*	---
* p<0.0001; N=316			

Based on the data for the student scale, there is a strong correlation between a belief that students can talk with their guidance counselor (B2) and a belief that their school provides a caring supportive environment for students (B3) for all groups except white women and a strong correlation between perceptions of teachers caring about their students (B1) and a belief that their school provides a caring supportive environment for students (B3) for all groups except women of color. All data was found to be significant at the 0.01 level or greater.

School Operation and Employee Scales

Given the size of the tables, the correlation table for the school operation scale and employee scales are not included here but can be found in Appendix E. Their findings however are discussed in this section. All correlations were found to be significant at the 0.01 level or greater. Based on the data for the school operation scale and connected to the literature concerning our research questions, amongst all teachers, there is a strong correlation between the following:

1. The value teachers place on PLC time and their belief that all teachers have high standards for all students ($\rho = 0.6325$)
2. Teachers' perceptions that both physical ($\rho = 0.6375$) and internet bullying ($\rho = 0.7431$) is a problem and their belief that safety concerns are handled in a timely manner.
3. Teachers' perceptions about the effectiveness of their principal's leadership and the benefit of School-Based Decision Making in their building ($\rho = 0.6723$)

4. Teachers' belief that their school is effectively implementing a plan to close the achievement gap & and the benefit of School-Based Decision Making in their building ($\rho = 0.7195$)
5. Teachers' perceptions about the effectiveness of their principal's leadership & and the belief that their school is effectively implementing a plan to close the achievement gap ($\rho = 0.6800$)

The correlation table for the employee scale are not included here. All correlations were found to be significant at the 0.01 level or greater. Based on the data for the employee scale and connected to the literature concerning our research questions, amongst all teachers, there is a strong correlation between the following:

1. Teachers perception that their group of colleagues is well thought of by other faculty and staff and how much they reported liking the staff at work ($\rho = 0.7711$);
2. Teachers' sense of belonging at JCPS with how much they reported liking the staff at work ($\rho = 0.6448$);
3. Teachers perception of their safety commuting to and from work and how much they reported liking the staff at work ($\rho = 0.6159$)
4. Teachers perception that their group of colleagues is well thought of by other faculty and staff and their sense of belonging at JCPS ($\rho = 0.6675$)
5. Teachers perception of their safety commuting to and from work and their sense of belonging at JCPS ($\rho = 0.6279$)
6. Teachers perception of their safety commuting to and from work and their sense of safety at work ($\rho = 0.7772$)
7. Teachers perception of their safety in the vicinity of the building and their sense of safety at work ($\rho = 0.7698$)
8. Virtually every question in the employee scale was strongly (or very strongly) correlated with teachers' self-reported satisfaction with their department/workplace

Efficacy Scale, sorted by Race & Sex

Table 11: Spearman Correlation data for Women of Color- Efficacy Scale

	If I try, I can get through to even the most unmotivated students	If I try a different method, I can significantly affect a student's achievement	If teachers are willing, they can help any student learn
If I try, I can get through to even the most unmotivated students	---		
If I try a different method, I can significantly affect a student's achievement	0.6933*	---	
If teachers are willing, they can help any	0.6971*	0.7551*	---

student learn			
* p<0.0001; N=136			

Table 12: Spearman Correlation data for Men of Color- Efficacy Scale

	If I try, I can get through to even the most unmotivated students	If I try a different method, I can significantly affect a student's achievement	If teachers are willing, they can help any student learn
If I try, I can get through to even the most unmotivated students	---		
If I try a different method, I can significantly affect a student's achievement	0.7007*	---	
If teachers are willing, they can help any student learn	0.7617*	0.7506*	---
* p<0.0001; N=79			

Table 13: Spearman Correlation data for White Women- Efficacy Scale

	If I try, I can get through to even the most unmotivated students	If I try a different method, I can significantly affect a student's achievement	If teachers are willing, they can help any student learn
If I try, I can get through to even the most unmotivated students	---		
If I try a different method, I can significantly affect a student's achievement	0.6247*	---	
If teachers are willing, they can help any student learn	0.6583*	0.6731*	---
* p<0.0001; N=565			

Table 14: Spearman Correlation data for White Men- Efficacy Scale

	If I try, I can get through to even the most unmotivated students	If I try a different method, I can significantly affect a student's achievement	If teachers are willing, they can help any student learn
If I try, I can get through to even the most unmotivated students	---		
If I try a different method,	0.6294*	---	

I can significantly affect a student's achievement			
If teachers are willing, they can help any student learn	0.6948*	0.6438*	---
* p<0.0001; N=316			

Table 15: Spearman Correlation for All Scales with Satisfaction by RaceSex

	Women of Color (N = 142)	**Men of Color (N = 82)**	**White Women (N = 591)**	**White Men (N = 324)**
CSS Employee Scale	0.7553	0.8040	0.7613	0.7628
CSS School Operation Scale	0.6497	0.7076	0.5328	0.6295
CSS Student Scale	0.5569	0.6109	0.5097	0.5327
Assessment Scale	-0.2838	-0.2972	-0.2591	-0.2852
Building Leadership Scale	0.6834	0.7061	0.6716	0.6763
Care & Support Scale	0.7899	0.7585	0.6563	0.7295
JCPS Satisfaction Scale	0.5591	0.7093	0.5421	0.6344
Learning Environment Scale	0.5806	0.6010	0.4629	0.6552
Personal Efficacy Scale	0.3864	0.4529	0.3885	0.4684
Work Environment Scale	0.8343	0.8476	0.8384	0.8432

*All results are statistically significance at the p= 0.0001 level

Based on the correlation coefficients for each, the Work Environment was most strongly correlated to satisfaction for every group (0.8343, 0.8476, 0.8384, and 0.8432). Care & Support and the Employee scales also revealed strong correlations to the satisfaction variable for every group. Men of color also showed stronger correlations than any other group with their satisfaction and several other scales (student, school operations, building leadership, and JCPS satisfaction). Assessment was also negatively correlated to satisfaction for every single group, although this association was relatively weak (-0.2838, -0.2972, -0.2591, -0.2852). These results should also be a source of further investigation since each of the questions in this scale would require more work or additional planning on the teacher's part, a factor that may hint at the negative correlation. Given these results, a revised survey should focus additional questions on work environment, care & support, and employees. A large part of our conceptual framework centered around efficacy; a scale that upon testing proved to be only moderately correlated with satisfaction. Since there were only three questions on the efficacy scale, further revisions of the CSS survey would allow for a deeper exploration of personal and collective efficacy.

Kruskal-Wallis Equality of Populations Rank Test

After determining the validity of the revised CSS survey scales, Kruskal-Wallis equality of populations rank tests were run on all forty-nine dependent variables using the manufactured independent variable that combined race and sex to create four distinct groups for analysis: women of color, men of color, white women, and white men. All dependent variables were also analyzed by race: people of color or whites. Meaningful analysis could not be done using the sex variable since the number of white men and women was four times the number of men and women of color, given the extreme differences in frequency the mean sex value skewed toward the responses of white men and women rendering it impossible to determine when the respondent's race functioned as an intervening variable to sex. Missing values were dropped from analysis, therefore depending on the response rate for each individual question, the N varied but was reported as part of the statistic. In total the results for thirteen variables were found to be significant by race and sex with three degrees of freedom combined and an additional two variables yielded significant results by race with one degree of freedom. Variables that indicated significant difference in means were then sorted to determine which groups had the greatest variance. Of the thirteen CSS survey questions with significant differences by race and sex, these eight were aligned with our research questions:

1. At my school, I feel physical bullying is a problem.
2. I like the staff at work.
3. My group of colleagues at school is well thought of by other faculty and staff.
4. I feel safe on my way to and from work.
5. I feel safe outside the building before and after work.
6. I feel safe and secure at *my* workplace.
7. I would recommend JCPS as a good place to work.

8. I am satisfied with my department/workplace.

Here are the two CSS survey questions with significant differences by race:

1. My group of colleagues at school is well thought of by other faculty and staff.
2. I am satisfied with my department/workplace.

Since the last two questions were yielded significant results along both planes of analysis and since race was translated into a binary variable, the Wilcoxon rank-sum, or Mann-Whitney, test was also run for those questions. Both the Kruskal-Wallis equality of populations and the Mann-Whitney U test results for the two variables that differed along race and race/sex are shown below indicated that the results were significant (probability < 0.05). Based on these results, white men felt their group of colleagues was most well thought of ($\mu = 3.36$, $\sigma = 0.691$) and women of color reported the lowest value ($\mu = 3.14$, $\sigma = 0.738$). Regarding satisfaction with their department/workplace, white men also reported the highest levels of satisfaction ($\mu = 3.27$, $\sigma = 0.742$) and women of color the lowest ($\mu = 3.01$, $\sigma = 0.780$). The null hypothesis for the Mann-Whitney tests was that the response for white teachers equaled the response for teachers of color. Since at that probability, the z score was greater than 2.6, both of these results are significant. When analyzed by race, the results are further validated since the two tests are independent of one another but both produced similar and statistically significant results.

The other six statistically significant survey results when analyzed by race and sex simultaneously also generally show the largest distributions between women of color and white men, with white men providing the most favorable responses overall. Generally, whites of both sexes provided more favorable ratings as well.

Table 16: Kruskal-Wallis Equality of Populations Rank Test sorted by Race & Sex

Survey Question	X^2	p	Women of Color (μ & σ)	Men of Color (μ & σ)	White Women (μ & σ)	White Men (μ & σ)
At my school, I feel physical bullying is a problem	$X^2 = 7.950$	p= 0.0471	$\mu = 3.22$ $\sigma = 0.678$	$\mu = 3.39$ $\sigma = 0.569$	$\mu = 3.21$ $\sigma = 0.627$	$\mu = 3.32$ $\sigma = 0.596$
I like the staff at work	$X^2 = 12.018$	p= 0.0073	$\mu = 3.25$ $\sigma = 0.669$	$\mu = 3.36$ $\sigma = 0.621$	$\mu = 3.39$ $\sigma = 0.601$	$\mu = 3.48$ $\sigma = 0.623$
My group of colleagues at school is well thought of by other faculty and staff	$X^2 = 8.643$	p= 0.0344	$\mu = 3.14$ $\sigma = 0.738$	$\mu = 3.27$ $\sigma = 0.655$	$\mu = 3.33$ $\sigma = 0.629$	$\mu = 3.36$ $\sigma = 0.691$

I feel safe on my way to and from work	$X^2 = 16.010$	p= 0.0011	$\mu = 3.36$ $\sigma = 0.656$	$\mu = 3.22$ $\sigma = 0.758$	$\mu = 3.25$ $\sigma = 0.681$	$\mu = 3.43$ $\sigma = 0.653$
I feel safe outside the building before and after work	$X^2 = 17.852$	p= 0.0005	$\mu = 3.22$ $\sigma = 0.755$	$\mu = 3.16$ $\sigma = 0.803$	$\mu = 3.13$ $\sigma = 0.786$	$\mu = 3.36$ $\sigma = 0.697$
I feel safe and secure at *my* workplace	$X^2 = 16.901$	p= 0.0007	$\mu = 3.21$ $\sigma = 0.713$	$\mu = 3.02$ $\sigma = 0.889$	$\mu = 3.09$ $\sigma = 0.764$	$\mu = 3.29$ $\sigma = 0.773$
I would recommend JCPS as a good place to work	$X^2 = 9.026$	p= 0.0289	$\mu = 3.13$ $\sigma = 0.646$	$\mu = 3.10$ $\sigma = 0.795$	$\mu = 3.01$ $\sigma = 0.694$	$\mu = 3.14$ $\sigma = 0.777$
I am satisfied with my department/workplace	$X^2 = 14.114$	p= 0.0028	$\mu = 3.01$ $\sigma = 0.781$	$\mu = 3.06$ $\sigma = 0.775$	$\mu = 3.13$ $\sigma = 0.714$	$\mu = 3.27$ $\sigma = 0.742$

- At my school, I feel physical bullying is a problem ($X^2 = 7.950$; p= 0.0471). Men of color most agreed with this statement ($\mu = 3.39$; $\sigma = 0.569$) and women of color ($\mu = 3.22$; $\sigma = 0.678$) and white women reported lower but similar levels of agreement ($\mu = 3.21$; $\sigma = 0.627$).
- I like the staff at work ($X^2 = 12.018$; p= 0.0073). White men most agreed with this statement ($\mu = 3.48$; $\sigma = 0.623$) and women of color ($\mu = 3.25$; $\sigma = 0.669$) reported the lowest levels of agreement.
- My group of colleagues at school is well thought of by other faculty and staff ($X^2 = 8.643$; p= 0.0344). White men most agreed with this statement ($\mu = 3.36$; $\sigma = 0.691$) and women of color ($\mu = 3.14$; $\sigma = 0.738$) reported the lowest levels of agreement.
- I feel safe on my way to and from work ($X^2 = 16.010$; p= 0.0011). White men most agreed with this statement ($\mu = 3.43$; $\sigma = 0.653$) and men of color ($\mu = 3.22$; $\sigma = 0.758$) reported the lowest levels of agreement.
- I feel safe outside the building before and after work ($X^2 = 17.852$; p= 0.0005). White men most agreed with this statement ($\mu = 3.36$; $\sigma = 0.697$) and white women ($\mu = 3.13$; $\sigma = 0.786$) reported the lowest levels of agreement.
- I feel safe and secure at *my* workplace ($X^2 = 16.901$; p= 0.0007). White men most agreed with this statement ($\mu = 3.29$; $\sigma = 0.773$) and men of color ($\mu = 3.02$; $\sigma = 0.889$) and white women ($\mu = 3.09$; $\sigma = 0.764$) reported the lowest levels of agreement.
- I would recommend JCPS as a good place to work ($X^2 = 9.026$; p= 0.0289). White men ($\mu = 3.14$; $\sigma = 0.777$) and women of color ($\mu = 3.13$; $\sigma = 0.646$) most agreed with this statement and white women ($\mu = 3.01$; $\sigma = 0.694$) reported the lowest levels of agreement.

- I am satisfied with my department/workplace. ($X^2 = 14.114$; p= 0.0028). White men ($\mu = 3.27$; $\sigma = 0.742$) most agreed with this statement and women of color ($\mu = 3.01$; $\sigma = 0.781$) reported the lowest levels of agreement.

Table 17: Kruskal-Wallis equality of populations test

My group of colleagues at school is well thought of by other faculty and staff.			$X^2 = 8.643$ with 3 d.f.		probability = 0.0344	
	Observations	Ranksum	Mean	Std. Dev	Min	Max
Women of Color	139	68161.00	3.143885	.7378106	1	4
Men of Color	79	42127.50	3.265823	.6545474	1	4
White Women	580	326569.00	3.334483	.629047	1	4
White Men	316	184197.50	3.357595	.6914254	1	4

Table 18: Kruskal-Wallis equality of populations test

My group of colleagues at school is well thought of by other faculty and staff.			$X^2 = 6.969$ with 1 d.f.		probability = 0.0083	
	Observations	Ranksum	Mean	Std. Dev	Min	Max
White	896	510766.50	3.342634	.6514371	1	4
Person of Color	218	110288.50	3.03125	.7096731	1	4

Table 19: Kruskal-Wallis equality of populations test

I am satisfied with my department/ workplace.			$X^2 = 14.114$ with 3 d.f.		probability = 0.0028	
	Observations	Ranksum	Mean	Std. Dev	Min	Max
Women of Color	142	68161.00	3.014085	.7808516	1	4
Men of Color	82	42127.50	3.060976	.7753543	1	4
White Women	591	326569.00	3.130288	.7142234	1	4

White Men	324	184197.50	3.268519	.7415967	1	4

Table 20: Kruskal-Wallis equality of populations test

I am satisfied with my department/ workplace.			$X^2 = 5.596$ with 1 d.f.		probability = 0.0180	
	Observations	Ranksum	Mean	Std. Dev	Min	Max
White	915	531988.50	3.179235	.7266462	1	4
Person of Color	224	117241.50	3.03125	.7774318	1	4

Two sample Wilcoxon rank-sum (Mann-Whitney) test

Table 21: Two sample Wilcoxon rank-sum (Mann-Whitney) test

My group of colleagues at school is well thought of by other faculty and staff.			
Race	Observations	Rank Sum	Expected
white	896	510766.5	499520
person of color	218	110288.5	121535
combined	1114	621055	621055
unadjusted variance 18149227		adjustment for ties -3667836.6	
z=2.955		Prob > |z| = 0.0031	

Table 22: Two sample Wilcoxon rank-sum (Mann-Whitney) test

I am satisfied with my department/ workplace.			
Race	Observations	Rank Sum	Expected
white	915	531988.5	521550

person of color	224	117241.5	127680
combined	1139	649230	649230
unadjusted variance 19471200		adjustment for ties -3595164.2	
z=2.620		Prob > |z| = 0.0088	

Across virtually every survey question with statistically significant results, white men reported the most favorable results regarding the school climate, school culture, instruction, and both school and district leadership. Generally speaking, the responses of women of color reflected much lower approval of their colleagues and JCPS as a whole. Prior to running any statistical tests, a group of questions was selected that we predicted would yield valuable data based on the literature. After completing the Kruskal-Wallis equality of populations tests for these variables, the results were not significant. Three questions of particular interest were: "I would rather send my own child(ren) to JCPS than to a non-JCPS school ($X^2 = 6.998$; p= 0.0720)," "My supervisor provides effective leadership ($X^2 = 1.001$; p= 0.3171).," and "By trying a different teaching method, I can significantly affect a student's achievement ($X^2 = 0.768$; p= 0.8572)."

Given the combined results from these statistical tests, JCPS' survey should focus on the work environment, care & support to students, and teachers perceptions of one another. All of the statistically significant responses when disaggregated by race and sex fit into of these three larger contexts. Given the data available, white men most strongly connect external factors to their satisfaction and likelihood of their intent to remain in their school. In contrast, women of color reported the lowest levels of approval of their colleagues, the lowest perception that their colleagues approved of them, and the lowest levels of satisfaction with their school. Surprisingly, their responses did not appear to result in a decreased likelihood of recommending JCPS as a good place to work or of sending their own children to JCPS schools. While not discernible from this study but consistent with other research, this finding could be indicative of the disposition many women of color in general report where their personal needs and values are disregarded by schools specifically and society as as whole (Anderson, 1988; Banaji & Greenwald, 2013; Chambers, 2009; Dunbar-Ortiz, 2014; Griffin & Tackie, 2016; Hinton, 2016; Horsford, 2010; Kohli, 2018; Lee, 2013; Neckerman, 2007; Riley, 2018; Rogers-Ard, et. al., 2012). Women of color have demonstrated their resilience despite societal challenges and external pressures for generations and this finding could be indicative of that.

Qualitative findings on School Culture & Leadership

In our qualitative sample, the environment in which teachers work, the culture of the school, and the leadership that the principal provides was described by teachers as extremely impactful factors that led teachers to make decisions about leaving or staying in any particular school situation. The degree to which the principal and building administrators created environments in which collaboration, trust, and care and concern for students were encouraged and normalized - and the extent to which the school felt like a "family" atmosphere - mattered greatly to teachers and principals. Team building and engagement were also important. Working in tandem and with one another to encourage growth was also valued.

School Culture, Conditions, and Atmosphere

One teacher expounded upon his observation that current school environment and culture were quite different than some of the schools in which he had worked in the past. He viewed this as a very positive thing, noting, *"In this particular school, I would say everybody's on board. Everybody seems to share the same vision. Everybody seems to be carrying their load. Everybody seems to want to help kids. Is everybody getting it right? No. But people are willing to say, 'Well, let me see... this didn't work. Let me go back and try something else.' I've taught this demographic of students, and I've taught in this community at different schools, and it's not like this at every school. I've heard horrible things said about children and this community. I don't hear those things at this school. I don't experience those things with this particular school as I have in other places."* (Priority School Teacher)

One teacher explained that the only reason he teaches where he does today is because trusts the principal and her leadership. *"The reason I came was because I knew the principal. I have trust and faith in her that she will turn this school around. And, you know, I want to be a part of that. I'm onboard with her - her goals and her vision. I trust her vision, so I'm willing to help with that and be put into play."* (Priority School Teacher)

Another teacher from another school shared her gratitude for the current administrative leadership and the changes they have made in her building. She reported feeling supported and trusting her principal as reasons to continue at her respective school, saying. *"We all have different reasons for staying. Our new leadership team has definitely been a positive shift. There have been small changes and improvements - improvements and growth that needed to happen. If anything the change has been more progressive. When I go and I truly ask for and need help, our administration team finds a way… Even though they may not be able to hire someone right away, they send someone to come and help me in that moment. Even if that means (my principal) has to come in and personally help me with a class that I've been having trouble trouble with... I feel like the administration is willing to step into that teacher role if they need to. So, I do feel*

supported here, and it's like it is an understanding. There are things that they (administration) can't control, but they try their hardest to help in any way they can." (Priority School Teacher)

A teacher in a different building described the school's current culture and the shift in culture under the new administrator's leadership and expectations and compared it to others that have been brought in saying, *"I've been here the longest out of everybody in this building. I'm on my third principal, and before things were just done, and there wasn't much explanation. Teachers just left because they weren't happy with a lot of the things that principal did. Now, we have a different approach. The current principal expects to listen, and she wants to hear everybody's voice... Now, it's more 'we' instead of simply, 'This is what we're doing,' She asks, 'What can we do. What do we want? What can we improve?' I feel like that has made a difference. This principal has set new expectations around the way that kids are spoken to, including the way she speaks to the kids. She expects us to be cheery and uplifting and supportive of the kids. We try to do positive things with the kids, and we try to restore whatever harm has been done. Our ultimate goal is to get them back in class unless they're preventing learning from taking place. We are doing school in a new way."* (Priority School Teacher)

One administrator described the school's conditions and atmosphere the year before she assumed its leadership, pointing out that, *"When I got here, there were lines on the floors and all over the hallways, and those lines represented a model that I did not agree with. Those lines were for kids. You were moved from class to class by an adult and by walking on a line that had been drawn out on the floor. You went to the bathroom in line with your class… The only place that you make people walk in and on lines is prison. That was just not the culture that we wanted. So we changed it."* (Priority School Administrator) She went on to explain that before she arrived, the culture of the school was so rigid that it yielded a great number of suspensions, *"There were 28 classroom teachers. Twenty of them left. They were just done. That same year, there had been 800 (total) days of suspension served by students. Our population is just slightly over 400 kids. When you do the math, it was about two days per kid." Some kids were suspended a lot - like 50 days. And, so, it was just it was a real hot mess. What I knew, and what I told the (new) team that we gathered, was that we weren't going to be able to make anything happen here at this school unless we had sustainability with our teachers. It's all related..."* (Priority School Administrator)

Supporting Teachers Encourages Retention

We heard over and over again about how tough the work is in priority schools. We also heard that the teachers who stay, stay because they feel supported. One teacher carefully described her feelings around being supported in a difficult work situation by saying, *"We have a hard job. I mean it wears on people… I feel like as a whole, it's a good work environment and people care. Part of this is trusting your administration and your leadership to make the right decision, and I*

do trust (my principal). I've had my principal come in and personally help me with a class that I have been having trouble with, because there's no one else. I feel like the administration is willing to step into that teacher role if they need to. (In this school), we're generally pretty optimistic." (Priority School Teacher)

One teacher articulated the importance of feeling supported by saying, *"If teachers don't feel supported, then they don't feel valued every day. I think that has a direct correlation with teacher turnover. It's the little things that matter."* (Priority School Teacher)

Another teacher shared his perspective on being supported, *"I feel supported because I have a point person. I support her, and she supports me. So, we work well and as a team. That makes my job a lot easier - (at least) more comfortable because you have somebody that you can call on, someone who supports you. And if not I can go to her, I can go to the principal. I have a pretty good relationship with him, too."* (Priority School Teacher)

One administrator described the reason he thinks teachers stay at his school, **"***I think [teachers] are right to stay. I think that there is intensive support for the teachers who I work with. I think that is also what they would consistently say. They have a higher level of support here…. For the teachers who leave… well, the second year we lost some teachers simply because they wanted to be closer to home and live out in the east. Some did say that they were unhappy or felt like it was not a fit for them. We respect that."* (Priority School Administrator)

One administrator talked about the supportive environment he has created in which it is acceptable to try new things and even fail. He believes it is key to creating a collaborative and safe work environment in which people are developed and supported. He asserts, *"Well, I think they stay because we put a premium on making them and making this a place where they can innovate. They are not going to get slammed for trying things and failing at them, and I think we do a really good job of supporting teachers. Like if you have a problem, we're going to have some people in your classroom to help. We have no problem standing next to you and modeling, and we are very blunt about what will get you gone (i.e., terminated). And, I think people appreciate that. For that first (teaching) year, you have to be really bad (for us to part ways with you). As long as I know you're making an earnest effort, I see that you can form a relationship with a kid and you're not being petty with students, then I firmly believe that we cannot teach you the pedagogy."* (Priority School Administrator)

Collaboration around Decision-Making

One administrator pointed out the need to have teachers involved in all aspects of decision-making inside the school. Several administrators expressed their desire and shared their practices around including teachers in the decision-making processes. She described her

leadership style as such, *"I lead through a very shared leadership (model). Anytime we are making decisions, we first talk to the teachers about it. When it comes to making sure that there are teacher mentors and things like that, teachers are at the forefront of those decisions. Teachers are the ones who spend the majority of time with the students. They're the ones in front of the students all day, so they have to be engaged in whatever decision-making process."* (Priority School Administrator)

Most administrators described their leadership style and model as a collaborative one in which the voice of the teachers is valued and trusted. For many, that translates well into the promotion of student achievement. One administrator explained how including teachers in the decision making process builds teacher capacity which leads to student achievement. She explained how she encourages student achievement and supports teachers in her building: *"I don't think that I can necessarily narrow it down to just one thing. It (student achievement) definitely has a lot to do with teacher capacity. Teacher capacity increases when you include teachers in decisions. You can't promote student achievement without teacher capacity... There has to be a lot of collaboration."* (Priority School Administrator)

Safety

Much of the extant literature on the effects of school environment and culture refers to teachers' feeling of personal safety and the relationship between safety and retention. The CSS survey asks three questions about personal safety within and around the school. All three of the safety questions were strongly correlated ($p > 0.6$) with the satisfaction variable. Personal safety was not necessarily a recurring theme from our interviews, but one comment, in particular was of interest. One teacher spoke about the importance of creating a safe environment and noted that it makes a difference with teachers and students. She explained, *"We may not always have a complete understanding, but we have some understanding of where they (our students) are coming from. Stuff that happens at other (priority) schools does happen at (our school). (Our school) does a really good job at loving these kids. They really do. We give them chances that they wouldn't get in other schools. We see so many kids transfer here. When you look at the history of their referrals from their other schools, you always see fighting - Fighting. Fighting. Fighting. Fighting. Fighting. Fighting - over and over again. But when they come here, and they won't get a single referral because the environment is safer. They feel safe, and they feel loved, so they don't lash out. But, part of that means that we have to keep kids here that are maybe causing disruptions because we know that this is the best place for them. If they go somewhere else it's going to basically just be a railway and the system for them."* (Priority School Teacher)

One school administrator stopped us to ask what we were doing at the school. We subsequently explained our project and its focus. He was quite forthcoming about his perspective. Unsolicited, he went on to share with us the following, "*Working in this school is really hard.*

Our principal just went to take a kid home who was about to fight another kid, and he's just trying to help him stay out of trouble and not fight at school. The kid's mom has already told us that they're going to fight eventually, so they might as well get it out. For me, I'm just trying not to get shot. You know bullets don't have a name and they don't know faces. I'm just trying not to get shot. It's dangerous over here." (Priority School Administrator)

While no other teacher or administrator at this school or any other described the school environment in such a manner, we found that safety in the school environment is important. Consequently, it could also be affecting teachers, how they perceive school culture and leadership, and their likelihood to stay.

Finding 4: Teacher efficacy matters. Teachers who believe that they can make a difference in the schools they teach tend to stay.

Factor analysis indicated teacher efficacy should be an independent question scale. This is further supported by the literature. In the often cited, Visible Learning, Hattie conducted a meta-analyses of over eight hundred studies (now updated to over twelve hundred) and found personal efficacy to have an effect size on student achievement of 0.92 and collective teacher efficacy to have an effect size of 1.57. These findings place personal and collective teacher efficacy at more than twice and almost four times the hinge point (0.40) responsible for positive learning outcomes for students (Hattie, 2009). The results of the efficacy scale were not statistically significant along the lines of racesex ($p= 0.1786$) but they were statistically significant along the line of race ($p= 0.0633$) with people of color reporting a higher personal efficacy in Priority Schools (See Table 23). It is important to note that these results are largely driven by men of color since they reported the highest mean for the efficacy scale and women of color reported the lowest mean. Therefore, these results demonstrated that teachers of color (especially men of color) perceived a greater sense of personal efficacy in working with students in Priority Schools. Furthermore, since these schools have larger percentages of students of color and students in poverty, teachers of color reported a greater sense of efficacy in working with students of color and students from poverty.

Table 23: Kruskal-Wallis Equality of Populations Test Results for Personal Efficacy Scale

Survey Scale	**X^2**	**p**	**Women of Color (μ & σ)**	**Men of Color (μ & σ)**	**White Women (μ & σ)**	**White Men (μ & σ)**
Personal Efficacy Scale by RaceSex	$X^2 = 4.909$	$p= 0.1786$	$\mu = 3.14$ $\sigma = 0.738$	$\mu = 3.25$ $\sigma = 0.575$	$\mu = 3.22$ $\sigma = 0.562$	$\mu = 3.15$ $\sigma = 0.686$

Personal Efficacy Scale by Race*	$X^2 = 3.448$	p= 0.0633	$\mu = 3.27$ $\sigma = 0.625$	$\mu = 3.19$ $\sigma = 0.610$

*Indicates moderate statistical significance

We found that teachers and administrators hold in high esteem the role of the teacher in the classroom and their personal commitment to the task matters greatly when considering their effectiveness and willingness to stay. One teacher commented on a teacher's role in the classroom, saying, *"It is very important. It's my job - to promote student achievement and make sure that students achieve, whatever that looks like…. That might not look like all A's (for every student). There are individual goals for individual students. I am always promoting that and facilitating that."* (Priority School Teacher)

One teacher noted the importance of being invested in the well-being of students, declaring, *"For me, personally, it's the need that the kids have. I find it very rewarding to try and meet their needs. I find that every day I'm seeing the impact that, not just myself, but other teachers, are making in the community that I work with...how much of an impact they're having on students. It's daily. It's everything. It's not just academics, it's its whole child. I'm seeing the emotional support you know the whole child from every aspect is what we work on in priority schools. I don't have experience at high-end schools where everything goes. You know, where they come from affluent families that have plenty of money to afford all the extras. So all I know it's about being here to support and give to kids. And I just find that to be the most rewarding, and I enjoy working with this population."* (Priority School Teacher)

One teacher explained that he would not be able to do the job if he did not love it. He explained, *"I love teaching. I love education. I love. I love it. Are there other aspects that frustrate me to no end? Absolutely. Absolutely. But that's going to be the case anywhere I go. I could be doing something else, and also be frustrated. But, I just love my job. I love, love teaching. I would be in it no matter what. If I ever leave, when I leave the classroom, I'll still be doing something with education."* (Priority School Teacher)

Another teacher reminded us that although there is a level of commitment amongst the staff, teachers have to be prepared for what students are experiencing outside of the walls of the classroom: *"Our faculty and staff are pretty committed, and that's clearly visible every day. If you're not committed, and you come through these halls, it helps no one. You have to be prepared. I'm not just talking about physically, but you have to be mentally prepared, because you're dealing with so many factors and various situations that you have no control over. The only safe haven and safe environment that a lot of these kids will ever know may be your classroom. I have to help provide that. I can do that for my students."* (Priority School Teacher)

One priority school teacher explained his own sense of efficacy in this manner *"Being a teacher, especially with this demographic means that you are so much more. I am dad. I am a counselor. I am a doctor. I am nutritionist. I am all of these other things that I don't necessarily care to be. I don't always like that (aspect). I have great classroom management, and, yet, I hate classroom management. I hate having to always manage behaviors. (Some days) I just want to come in and teach. I have this great lesson and, you know! Yet, it's so much more than just the lesson and the education…. They are depending on us. And I know that I can do this. I must do this."* (Priority School Teacher)

One teacher even expressed his belief that teaching this population of children is both a burden and a responsibility. He said, *"I thank God (that I can be here). Just having those honest and open conversations among faculty and staff is our greatest strength right now because at least we understand when there is an issue... It's a big burden, but we're still responsible for the education of these young people - as far as the standards. But, we're also responsible to address the areas that are a concern in society…"* (Priority School Teacher) Clearly, those teachers who feel called to the profession, drawn to teaching, and able to make a difference see their value and importance in the classroom and to student achievement.

Another teacher described the level of engagement in his class, attributing the engagement to his care and concern for kids, his shifting of instructional methods, and *"I think teachers stay because they like their students. They believe that they can make a difference… I think the student engagement is pretty high in my class. I know I'm making an impact. I'm not bragging, but I think, it's probably high among the (whole) school. I know it's happening here (in my classroom) and as well or better in other classes. The reason why, I would say, is the (instructional) shift that I made a few years ago to a design model and basically to student investigations. So, I provide questions, and sources, and then a way to communicate findings. I have really kind of put the students in the driver's seat. It's gradual process, though. Most have never done history like this, and they can't do the things I ask right away. So there's some modeling and scaffolding. The goal is growth, and I believe we achieve that."* (Priority School Teacher)

Even administrators shared their feelings of teacher and personal efficacy. One administrator explains the importance of teacher efficacy and how he can only help teachers and support teachers' work if they have a love for kids and education, *"What I cannot teach you is (how to form) relationships. That's an intangibility. If you don't care about kids, and you're not mission driven, I can't teach you that. But if you come in (with the mentality that says) I love kids, I want to see him do well, and I have a passion for working with kids, there may be a few barriers and we can overcome them. If you have some content knowledge, we can teach you pedagogy. And I*

think we've been mostly successful at that. But you have to love teaching and believe you can help our kids." (Priority School Administrator)

Another administrator noted the level of commitment to change for the benefit of this student population and priority schools by saying, *"All of my 21 years [of] experience have been within priority schools. So I've worked with high-end poverty populations my entire career. For me, personally, it's the need that the kids have. I find it (helping meet that need) very rewarding. I find that everyday I'm seeing the impact that I and my teachers are having on the community that we work with. I see how much of an impact they're (teachers) having on students. It's not just academics; it's the whole child. I'm seeing the emotional support you know the whole child needs from every aspect, which is what we work on in priority schools. All I know is about being here to support and give to kids. I just find that the most rewarding, and I enjoy working with this population."* (Priority School Administrator)

Another administrator explained his own personal efficacy in this way, "*We're making a lot of strides (with racial equity), but a lot of it has to do with having honest conversations. I think that's the biggest piece of it - being honest - and that's what we've been. That's what I've done and try to keep doing, and we'll just keep going that way. I told the staff this is where I want to be. I love this school. They (the students) bring challenges, and they bring things to the table. But I like it, and I like being able to come to work everyday and think that I'm really making a difference and helping kids here… I really feel it here. It's been really great work, but (it's) not enough. We have so much to do…"* (Priority School Administrator)

Finding 5: Teachers acknowledge their need to build trust with and amongst students, and teachers of color acknowledge their advantage to understanding and relating to students of color.

Race & Identity Matter

It is important to note that the city of Louisville continues to be residentially segregated by race. In fact, The West End, is described as "economically depressed, and hyper-segregated" (Lussenhop, 2016). In fact, "Louisville is only one of two American cities that has continued system-wide desegregation programmes for schools, even after federal oversight of the district ended. The city opted to continue bussing kids sometimes long distances in order to ensure that schools are integrated" (Lussenhop, 2016). We heard about the long bus rides and the stress and strain it puts on kids and how it affects parental involvement. Furthermore, priority schools, which are the lowest performing schools in the district, disproportionately serve students of color who come from economically disadvantaged circumstances. Clearly, desegregation didn't fix everything, and even exacerbated some problems, like making it difficult for low-income parents without transportation to make it to their child's school (Neckerman, 2007; Ryan, 2010). Even

after forty years of desegregation, the racial composition of the city is still sharply divided along clear and discernable geographical lines (Erickson, 2012; Lussenhop, 2016; Ryan, 2010). We found while talking with teachers and administrators that race is often the deciding factor in where you live and that can account for a strong sense of identity, belonging, or lack thereof.

In fact, it was revealed that the line of demarcation and clear separation between black and white people in Jefferson County is known as the Ninth Street divide. One administrator expressed surprise that we had not heard of it, commenting, *"Has no one told you about the Ninth Street divide? It's known as the street that separates the city - Blacks from whites. It's been like that for years."* (Priority School Administrator) Another priority school administrator noted, *"Growing up, I could probably count on one or two hands how many times I was even in this end of town - the west side. So you know, tt's a good thing. You know it's good. It's been great being out here (west side)."* (Priority School Administrator) One teacher blamed the city's segregation, subsequent busing policy, and low parental involvement by explaining the matter in this manner, *"They started it in the 70s, and basically, to be perfectly honest, because I teach social studies, and this is what I tell my students every year - instead of integrating the city, they (the city of Louisville) decided to integrate the schools through busing. They said, 'So let's let's not try to integrate neighborhoods. Let's allow people to continue to be segregated by where they live, but then we'll force integration in our schools.' So, JCPS gets a lot of credit for being one of the best integrated districts in the country, but it all happened at a great cost. And, I'm not just talking about the money for buses, et cetera, but at a great cost in the level of parental involvement. As a coach, I've had parents tell me that they live in the Western district, 25-30 minutes away. And I've had parents tell me, 'We'd like to be more involved with wrestling, but we can't. We can't make that drive everyday."* (Priority School Teacher)

Most teachers and administrators with whom we spoke certainly understood how their own identifies affect their ability to relate to and identify with their students of color. Again, this administrator shed light on the segregation of the city that seems to continue to define racial experiences. One white administrator, in particular, expounded on this by saying, *"I'm from Louisville. I grew up here, but I didn't go to this high school. I went to (another) high school on the east side. When I talked about that east end of town being all white, that's where I went to school. I've told the staff that I grew up middle class. I never needed anything or wanted anything. I was just very privileged and lucky, and I realize that. I realize that."*

One teacher/coach described the atmosphere around her building as "tense" when discussing racial equity issue. She described how she is sometimes ignored by students of color because she is white. She recounts, *"We are a minority-majority school. I think the racial equity piece has been huge for us because we are a very white-heavy (faculty). For example, one of our teams has all white teachers... In the hallway, if I say, "Come over here!" they (students of color) look at me like I'm crazy; but if you (to the African-American interviewer) would say the same thing,*

then they would be like "Oh. Okay." So I just think race impacts your relationship with students just by what they see when they look at you. I guess I don't exactly know how that plays out in the classroom or how race might impact teaching, but I do know that in talking with kids, it makes a difference. Ms. Day, our counselor, is African-American, and she explained to me that they (students of color) were not listening to me and other white staff because they (students of color) want to see somebody that looks like them, which is completely understandable. It has been a touchy subject with the district this year because it has become more important. For some people, when we've been in meetings and things have come up, it's been awkward. " (Priority School Teacher)

Racial equity is a focus of the district. Another teacher shared her thoughts on just where she thinks the district is on this. She admitted, *"I really think our school system needs some help with racial equity. I mean if you look at our academic achievement gaps and our discipline gaps, they're mirrors of each other. African-American students are disproportionately suspended in every school, practically every county, across this country. It's got to be fixed because we have these discipline gaps with our students, along with the academic achievement gaps, and that it's because they're (African-American students) excluded from the classroom. I think the only way to fix that is to keep them (African-American students) in the classroom. But we've got to work with our teachers to realize how to handle discipline in a classroom. So they are not just suspending, and suspending, and suspending, but sitting down and having conversation… and showing understanding."* (Priority School Teacher)

The teachers of color with whom we spoke were clear about the impact that their own identities have on students of color. One teacher recounted a conversation he, as a black man, has had with black boys in his school. He courageously shared, *"I know their stories. I suggested they (the school) have actual students come in and share their stories. I think it would be an eye opening experience for a lot of the teachers just to see and know the pain and anguish that a lot these kids come in with and what they are up against. I have hard conversations in here (with black boys). They have asked me, "Mr. Caldwell, have you ever been pulled-over by the police?" I had to answer honestly, "Yes." Then they asked, "Have you ever been in handcuffs?" Again, "I said, Yes." "What did you do?" one student asked me. You know, I have to be honest with them. So, I tell them the proper approach you take (as a black man) when an officer addresses you. They have the credentials and authority… You just comply, and do the things that the officer requests."* (Priority School Teacher)

When another teacher of color was asked how his identity enables him to relate to students of color, he expounded that, *"As a adult black man, I know what it's like out there. I know what it's like when you leave 5th grade. I know what the world is like for black people. I know what's it's like for black males, but also for black folk in general… It's worse for black people and people of color with no education. It gets a whole lot worse. I mean I'm trying to get this education to*

my students so we can make better decisions. There are systems in place to keep you down. There are there are systems and policies that are put in place to keep you exactly where you are. And, if I could just get a little bit of education in them, then my students can get ahead of all of these systems and policies." (Priority School Teacher)

Another teacher commented on how black teachers understand black kids, saying, *"You know, we (black teachers at this school) are able to joke with the kids… It's never a situation in which, the students are going to make us mad. They are never going to send us all the way over the edge, and we're always going to try to understand where the behavior is coming from. And it's very rare that we're ever going to take it personally. It's good… We get each other."* (Priority School Teacher)

One teacher explained how his identity opens doors for him to relate to students of color, saying, *"I understand the struggle of my students, so I'm focused more on the solution. How can you (actually) make that kid see the value in an education? I'm passionate about it because I understand that (educations) was my way out of poverty. It's hard to see when it's not tangible for these kids… I continue to try to motivate, be innovative, and use sports. I tell them I played college basketball. A lot of people don't get that opportunity, but I also had a 3.8 GPA because my family prioritized it (education). Even if they don't prioritize it at home, I try to prioritize it here, during and after school."* (Priority School Teacher)

Given that most students in the priority schools we visited are students of color, we were curious about how white administrators and teachers viewed the impact that their identity had students of color. One white teacher pointed out the difference between growing up poor, white, and in the Kentuckian suburbs against growing up as a student of color in inner-city Louisville. He states, *"I'm a white male, so I get all the social perks. Or, at least… I very rarely feel as if I'm in danger or that I don't belong. I grew up very poor, so I can relate to poverty. That part is not as big of an issue. But there's a big difference between growing up poor - in the suburbs - and growing up poor in as close to the inner-city as Louisville has. Certainly, in my first few years at (another priority school), there was a lot of adjusting to just exactly what my students' lived-experiences were like; because they were very different from mine."* (Priority School Teacher)

One white administrator acknowledged how his background may impede his ability to completely relate to and understand what students of color go through. He shared the following, *"I stood up in front of the kids, and I was very honest with them. I've always been honest with them. I told them that I was not going to stand there and act like I know what your life is like, where you live, and what your background has been because I'm not able to do that. But I can tell you that I've experienced a lot of same struggles that you've had in school buildings in terms of your instruction and your education. I care about you, and I want you to do well; but I'll never stand up here and act like I know what your life is like. I think a lot of them appreciated the*

honesty and just appreciated that kind of talk… Because I am white, it is different when you're talking to 80 percent students of color in this building, especially with my background and the way I grew up…" (Priority School Administrator)

A different administrator explained why she feels comfortable at her minority-majority priority school. She explained, *"I am Caucasian, but I grew up in a predominantly black community here in Louisville. So, I grew up in this community, which is one of the reasons why it's important for me to stay here."* (Priority School Administrator)

Another administrator shared that her personal story of loss and tragedy helps to frame and shape her ability to relate to students from marginalized populations. She adds, *" I think that for the most part, students of color see me as a white woman. When they look at me that is just what they see... I think that my personal story helps me identify with them (students). My father was killed when I was eight years old. I was one of 'these' students. A lot of very difficult and traumatic experiences happen to a lot of our students. They happened to me. I was a latchkey kid with a single mother who had to work and who couldn't come to all my stuff. My story is how I identify with our students, not so much my ethnicity."* (Priority School Administrator)

Finding 6: JCPS' Comprehensive School Survey question scales (and therefore the results) have not evolved with more recent data on teacher retention to discern discrepancies in satisfaction that may impact retention.

Comprehensive School Survey

The Comprehensive School Survey (CSS) instrument asks questions about characteristics tied to teacher retention such as school conditions, compensation, benefits, employee support, and relationships but one fatal flaw is that the survey stops short of directly asking teachers if they intend to remain in their current school for the upcoming school year. Asking that essential question would then allow JCPS to delve more deeply into the specific reason why teachers chose to leave either their school buildings or JCPS as a whole. Learning from teachers' decision to leave or stay, is the key insight needed to solve the retention problem in JCPS' Priority Schools.

In its current form, JCPS' CSS survey does a poor job of delving into teacher perceptions of students; this is central to the extant literature on teacher retention that draws significant correlations between student characteristics and teacher retention. At just three questions, the CSS Student scale does not ask enough questions to truly probe respondents' perceptions of their students as evidenced by the results not being statistically significant ($p > 0.05$).

The six scales developed from our factor analysis allowed for more variation in the types of questions that could be asked but given the major limitation of using the existing JCPS survey, we were unable to ensure an equal number of questions amongst the scales. The six contrived survey scales varied significantly in the number of questions linked to each scale. For example, the Personal Efficacy and Assessment scales were comprised of just three questions each, the Leadership scale just four questions, the School Effectiveness scale was comprised of eight questions, and both the Work Environment and Care & Support scales were comprised of sixteen questions each. As evidenced in Table 24 below, several of the existing and contrived survey scales lack the amount of depth necessary to yield statistically significant results between each group of survey respondents.

Given the extant research on both personal and collective teacher efficacy (Hattie, 2009), the existing CSS survey does not allow for a full analysis of teacher efficacy. The overwhelming number of white women prohibits any meaningful analysis by sex. Additionally, the results of the efficacy scale were not statistically significant along the lines of racesex. They were however statistically significant along the line of race, these results demonstrated that teachers of color perceived a greater sense of efficacy in working with students of color. Additional questions in this scale would allow for a more comprehensive analysis along both race and racesex. As structured, the CSS did not allow us to explore if teachers who came from poverty (regardless of race/ethnicity) reported a greater sense of efficacy in working with Priority School students.

Table 24: Kruskal-Wallis Equality of Populations Test Results for All Scales

Survey Scale	**X^2**	**p**	**Women of Color (μ & σ)**	**Men of Color (μ & σ)**	**White Women (μ & σ)**	**White Men (μ & σ)**
CSS Employee Scale*	$X^2 = 7.913$	p= 0.0478	$\mu = 3.07$ $\sigma = 0.534$	$\mu = 3.06$ $\sigma = 0.564$	$\mu = 3.06$ $\sigma = 0.477$	$\mu = 3.14$ $\sigma = 0.548$
CSS School Operation Scale	$X^2 = 4.602$	p= 0.2033	$\mu = 2.87$ $\sigma = 0.575$	$\mu = 2.92$ $\sigma = 0.653$	$\mu = 2.88$ $\sigma = 0.511$	$\mu = 2.96$ $\sigma = 0.564$

CSS Student Scale	$X^2 = 0.107$	p= 0.9910	$\mu = 3.33$ $\sigma = 0.597$	$\mu = 3.25$ $\sigma = 0.791$	$\mu = 3.34$ $\sigma = 0.593$	$\mu = 3.32$ $\sigma = 0.661$
Assessment Scale	$X^2 = 2.825$	p= 0.4195	$\mu = 2.66$ $\sigma = 0.714$	$\mu = 2.79$ $\sigma = 0.797$	$\mu = 2.72$ $\sigma = 0.688$	$\mu = 2.65$ $\sigma = 0.770$
Building Leadership Scale	$X^2 = 5.256$	p= 0.1540	$\mu = 3.12$ $\sigma = 0.711$	$\mu = 3.09$ $\sigma = 0.800$	$\mu = 3.09$ $\sigma = 0.651$	$\mu = 3.18$ $\sigma = 0.726$
Care & Support Scale	$X^2 = 7.408$	p= 0.0600	$\mu = 3.14$ $\sigma = 0.563$	$\mu = 3.21$ $\sigma = 0.546$	$\mu = 3.19$ $\sigma = 0.443$	$\mu = 3.26$ $\sigma = 0.545$
JCPS Satisfaction Scale	$X^2 = 5.630$	p= 0.1310	$\mu = 2.87$ $\sigma = 0.542$	$\mu = 2.90$ $\sigma = 0.638$	$\mu = 2.82$ $\sigma = 0.537$	$\mu = 2.89$ $\sigma = 0.601$
Learning Environment Scale*	$X^2 = 21.299$	p= 0.0001	$\mu = 3.11$ $\sigma = 0.523$	$\mu = 3.24$ $\sigma = 0.419$	$\mu = 3.11$ $\sigma = 0.438$	$\mu = 3.26$ $\sigma = 0.471$
Personal Efficacy Scale	$X^2 = 4.909$	p= 0.1786	$\mu = 3.14$ $\sigma = 0.738$	$\mu = 3.25$ $\sigma = 0.575$	$\mu = 3.22$ $\sigma = 0.562$	$\mu = 3.15$ $\sigma = 0.686$
Work Environment Scale*	$X^2 = 12.475$	p= 0.0059	$\mu = 3.15$ $\sigma = 0.587$	$\mu = 3.13$ $\sigma = 0.616$	$\mu = 3.13$ $\sigma = 0.520$	$\mu = 3.26$ $\sigma = 0.561$

*Indicates statistical significance

Another recurrent theme from the research is the power of the Principal. The effectiveness of school leaders and the fit between a teacher and their Principal is a critical component to teacher retention. In a recent study, Bristol (2018) study participants cited relationships with colleagues and administrators as two primary reasons for wanting to change schools (Bristol, 2018;

(Djonko-Moore, 2016; Grissom, 2011). Another study highlighted the differential retention rates by race based on effective leadership, concluding that effective principals had a larger effect on the retention of white teachers vs black teachers (Sun, 2018). The current JCPS survey does not delve deep enough into the Principal as instructional leader and lead relationship builder. It's difficult to get at the core of teacher retention as it relates to the role of the Principal based on the three questions in the existing survey.

Table 25: Kruskal-Wallis Equality of Populations Test Results Building Leadership Scales

Survey Scale	**X^2**	**p**	**Women of Color (μ & σ)**	**Men of Color (μ & σ)**	**White Women (μ & σ)**	**White Men (μ & σ)**
Building Leadership Scale by RaceSex	$X^2 = 5.256$	p= 0.1540	μ = 3.12 σ = 0.711	μ = 3.09 σ = 0.800	μ = 3.09 σ = 0.651	μ = 3.18 σ = 0.726
Building Leadership Scale by Race	$X^2 = 0.000$	p= 0.9868	μ = 3.11 σ = 0.747		μ = 3.12 σ = 0.680	

The existing questions in the Leadership Scale all demonstrate a statistical significance (p= 0.001) to the satisfaction variable for all four groups of teachers by race and sex. The results for both men of color and white men reported the highest correlations between their satisfaction and the effectiveness of their supervisor (0.6717 and 0.6224). Men of color reported the strongest correlation between their school's plan to close the achievement gap and their satisfaction (0.7580); this correlation was about fifty percent stronger than for any other group. The satisfaction for people of color of both sexes was very similar, higher than that for whites, and strongly correlated to their approval of school-based decision making (0.6288 and 0.6286). At the most basic levels, the current CSS survey fails to probe into the reasons correlated with differential satisfaction with their current school by various groups of teachers.

Table 26: Spearman Correlation Coefficients for Leadership Scale by Satisfaction Variable

	Women of Color (N = 105)	**Men of Color (N = 74)**	**White Women (N = 440)**	**White Men (N = 246)**
My supervisor provides	0.5909*	0.6717*	0.5830*	0.6224*

effective leadership.				
My workplace is effectively implementing a plan to close the achievement gap.	0.5347*	0.7580*	0.5357*	0.5453*
School-Based Decision Making has helped to improve my school.	0.6288*	0.6286*	0.5333*	0.5217*
* p<0.0001				

Research Question 2: How is JCPS defining, identifying, recruiting, and retaining highly effective teachers in its lowest performing schools?

Finding 1: There is no formal or consistent way in which high-performing teachers are identified or retained in priority schools. It varies by school and building administrator. Consequently, the identification and retention efforts of high-performing teachers also vary.

Identifying High-performers

JCPS has a comprehensive certified personnel evaluation plan that is aligned with the Charlotte Danielson model. It includes definitions of roles, frameworks for performance criteria, suggestions for documenting evidence, and expects certification for the evaluators. However, it was not referenced as a definitive tool for identifying high-performing teachers. Moreover, when we inquired about the way in which high-performing teachers are identified so that they can be retained in low performing schools, we received a variety of responses. When one administrator was asked about how she identifies high performing teachers, the answer she provided was quite telling. She explained, *"It looks different for every one of them…. I walk around… It is also sitting down and having a conversation with them to say, 'Where do you see yourself in five years. What are your goals? What are you going to work toward, and how can I be a contributing part to that? What do we need to work on?'"* (Priority School Administrator)

In fact, one administrator exclaimed, *"There is the way that we should on paper go about identifying high-performers, which is the evaluation process. But, I don't really care about that. The Danielson framework has not been that great at developing folks. It just is not..... (shakes head....) Really, you're going to stand out by being innovative and by being vocal. I very much*

believe in a meritocracy with employees. If you've stepped up, and you're showcasing some awesome things… like one of my eighth grade teachers is just a rock star with both independent reading and Google uses in her classroom. So I told her, that she was going to teach the rest of staff what that looks like. We're pretty blunt about standing out here… Innovation gets you noticed…" (Priority School Administrator)

A different administrator described another variation in the way she goes about identifying high performing teachers, saying, *"That's all done through our classroom. We have a walk through system that we use. We use the Power Walk system. It's like a high frequency walk through model. So we're doing somewhere from 100 to 150 walk-throughs a week. They're just simple three to five minute walk-throughs. We obviously are doing those on a very frequent basis with a lot of different people. So we see a lot of it (high-performing teaching) through that. We sometimes see it through our formal observations, too."* (Priority School Administrator) Another administrator mentioned walkthroughs as being key to identifying high performers. He stated, *Really I think the way we identify them is through a lot of our intentional walk-throughs. Or, you know in terms of going into classrooms and seeing what is going on…"* (Priority School Administrator)

Retention Efforts Through Building Trust & Diverse Types of Support

We were curious about whether or not the district had programs aimed at retaining priority school teachers. When we inquired, no teacher or administrator pointed to a current formal or consistent district initiated process or program aimed at teacher retention, specifically in priority schools. In fact, the responsibility of teacher retention seemed to fall on each individual building administrator and his/her respective teams. There did not seem to be any one approach that administrators were taking in an effort to retain good teachers. A couple of administrators referenced a new district initiated program aimed at retaining new teachers, but it seemed to be in the very beginning stages. While retention efforts seemed to be effective in individual buildings, they were certainly varied. *"Well I think it starts with the new teachers. Number one, we have a mentoring program here at our school where we assign every new teacher to a veteran teacher or resource teacher that works with them throughout the whole school year. They do monthly meetings with all the new teachers called HS 101. We do social things and we try to do to get together after school with all the teachers, but specifically with new [teachers] to try to get them ingrained in the culture a little bit."* (Priority School Administrator)

Apparently, the district has embarked up one a new program. One administrator noted, "*The district just started a new teacher mentoring program (for new teachers) because our statewide new teacher program was not funded this year, and it had been going on since I was a new teacher some twenty years ago. It was called KTIP, and they (the state) just got rid of it. They simply didn't fund it."* (Priority School Administrator) Moreover, when asked to describe the

new program that the district was starting, the administrator couldn't really give specifics, responding, *"The district just got a new teacher mentoring program. I don't know if it has a specific name yet, or specific details, but eventually every school will have to do it. That is, though, the first step in the retention piece with the new teachers - to make sure they have the support and everything they need."* (Priority School Administrator)*"*

Some administrators really saw supporting teachers - specifically by keeping district and school requirements to a minimal and by offering help - as a key factor in teacher retention. One administrator said, "*In terms of everyone else (veteran teachers), we're just trying to support them (in order to retain them)... Yes, I try to support them as much as possible by keeping their focus on their instruction in the classroom in terms of not pulling them out for a lot of different things - district related or things I or the school might require."* (Priority School Administrator)

One administrator explained that she is trying to shift culture in the school in order to retain teachers. Through professional development, she explained how she is trying to build trust and collaboration among the faculty. *"What I've done, and I do it twice a year, and it's been really good, is - embedded PD. We've done peer observations where we are actually taking groups of teachers into other classrooms and letting them watch (other) teachers teach. That's kind of being built into our culture, and the kids and the teachers really enjoy that. That's good and beneficial (for all). We've been here four years, so (there has been) a lot of that consistency. The more veteran teachers… are just fantastic with our kids! They've done a great job modeling for new teachers...We do have new teachers every year so that takes some support and work."* (Priority School Administrator)

One principal saw building trust among adults in the building as key to retention efforts. "*Keeping those relationships strong amongst our adults in the building is a big focus… Making sure they know they can come to me or their academy principal and letting them know that we can work through whatever problem. That trust is a big factor (in retention) with staff and administration… We find a lot of times… that there's a big disconnect with students and staff and trust and just saying, "We trust you that..." "You're just not here to do a job you mean you're here look out for us and our well-being and to do what's right by me all the time." And that's what we should be doing all the time; is doing what's best for kids.* (Priority School Administrator)*"*

One administrator told us that she was using NBC as a means by which to encourage retention in her building. She stated*, "For me specifically, I sat down and had those conversations with all the teachers last year, and when I had that conversation with them, there was a large theme of teachers wanting to pursue national board certification. And so I said, 'Okay if that's the case, let's write a grant to be a national board professional learning pilot school. Let's see if we can take that on.' I took it back to the other teachers who I didn't have that conversation with, and*

the majority of the teachers wanted that leadership experience. So right now, we have eight teachers that are pursuing national board certification." (Priority School Administrator)

Another administrator also reported that cultivating talent in his building was important to retaining high-performing teachers, "*A lot of times they (high-performers) can fall through the cracks… because they're doing so well, and they're doing what you're asking them to do. They are performing. We have PLC meetings and a lot of those teachers (high-performers) become PLC captains; so they take on leadership roles. What I try to do is put them in a lot of instructional leadership roles throughout the building to make sure they're working in that capacity. That includes leading PDs, being PLC and Department Chairs, and making sure that they know, obviously, they're doing a great job and that we're working with them. I think part of it is the intentionality. It's putting them in those roles after they've done an awesome job... I want to share this (their good work) with other teachers by making them mentors for other teachers."* (Priority School Administrator)

Research Question 3: What are effective retention strategies for priority schools?

Finding 1: Financial incentives, support for continuing education, and targeted professional development were identified as effective ways to encourage teacher retention.

Financial Incentives to Stay

Priority schools tend to have a higher turnover than schools that do not have the designation (Table 2, Appendix H), and districts are always interested in ways to encourage teacher retention in low performing schools. We heard from teachers and administrators about the recently introduced $1600 stipend that the district has just introduced this year to incentivize and reward the work that teachers in priority schools do. When asked what the district could do to help make the job of teaching in a priority school easier, one teacher simply replied, *"Pay us more money."* (Priority School Teacher)

Another teacher said the same thing but also included an explanation for why the district should pay priority school teachers more. He candidly replied, *"Pay us more money. You know we are in a tough job. I keep saying I've done this for a while. I sit in meetings PLCs, staff meetings, and we have a lot on our plates. We are held accountable. We are expected to take on every new initiative (from the district). We have to be trained on this, and this, and this, and this…. We're working with a lot. We're working with really difficult situations…"* (Priority School Teacher)

One teacher explained her position on the stipend by saying, *"You don't do it (teach in a priority school) for the money. But yes, a little more (money) would help. It would send a message that this work is important."* (Priority School Teacher)

We inquired with one teacher about whether or not the stipend was enough for the work he was doing. He summed it up best by saying, *"Enough? That is a weird question, because I was doing this work beforehand - before the district offered the $1600. I mean, they're not setting the world on fire with that little extra money. It's extra, and I'll take it. I'm not complaining. Will it attract someone? I think that if this work (at priority schools) is not for you, then it will never be for you. I don't think there's a dollar amount that will change that. I think there's a dollar amount that may make people say, 'Hey, I'll tolerate this,' but they are not going to be as effective. So, any extra funds should be used to reward those already in these schools."* (Priority School Teacher)

At least one administrator believed that if the stipend was more, he would be able to attract and retain better teachers. He shared his views on the $1600 stipend by suggesting, *"So one of the things that we've done is we're now paying priority school teachers more, and it's a bonus of about $1600 a year. That needs to be markedly increased. $1600 is not going to get me out of bed to go to a tough school. You make it six or seven thousand, and I'm going to get some rock stars who apply and come and stay."* (Priority School Administrator)

When one administrator was asked to identify strategies she employs to support and retain teachers, she mentioned something we found insightful. She shared, *"(Staying on at my school) was very attractive to teachers last year because we have a SIG amendment or a state grant... Because we were identified as a priority school, we have a school improvement grant…When I found out that so many of my teachers were interested in the national board process, (I said to my teachers) we are going to write a SIG amendment, and we're going to write it to where we will be able to pay for you guys to be nationally board certified. (I explained that this) would come with some tangibles, because if we're paying for you to be nationally board certified, you're going to have to stay in this school for three years. My teachers responded, 'No problem, I'll sign up for it!' Teachers felt like if we were paying for that (national board certification), and we're helping them obtain it, then they were ok with signing up to be to be here for three years."* (Priority School Administrator)

Professional Development

One teacher expressed his perspective on targeted professional development. He had rather specific feedback regarding what the district should do to encourage teachers to remain in priority schools, *"I would recommend providing a lot of professional development on behavioral management strategies… I would also focus on reading. We're working on these…and this is what we need. I think if we were allowed to just ignore a lot of other stuff and just spend the next*

two years focusing on these two things and if every PD would just be about behavioral management and reading, then we could deal with the other stuff in two years." (Priority School Teacher)

Many people recognized the district's efforts around creating more professional development opportunities. One administrator noted, *"We do a lot of professional development. It's one way we support teachers. One of the things that we've been trying to focus on in this building is offering professional development opportunities that are going to be relevant."* (Priority School Administrator)

Finding 2: There seems to be some level of inequity around resources that are available to retain and train talent at priority schools.

Equity Around Information & Resources

Administrators and teachers from various schools seemed to have asymmetric levels of knowledge and information around programs and incentives, perhaps creating unintended inequity around resources between priority schools. As mentioned above in the previous finding, one administrator found her efforts around creating an avenue by which teachers could obtain national board certification to be effective in keeping teachers at her school. The cost around obtaining national board certification is approximately $2500. This is no small cost to the district, but it did not seem that all people we spoke with even knew about this benefit. While one principal was working diligently towards national board certification with her staff, another principal seemed unaware of the benefit. This other administrator shared that she had heard that some teachers in the district were getting funding for national board certification, but she did not know how it was happening. She explained, *"The district has folks doing national board certification, and I don't know how that's being paid for, but that would be something, you know, that could really sweeten the pot for some folks… and keep some good folks."* (Priority School Administrator) This administrator went on to explain that acquiring the national board certification actually increases a teacher's pay, *"So, National Board Certification is one of those ways you can get that bump in pay, and it's a very large bump in pay.... National board certification changes your rank. Not only do you get the bump and pay for being national board certified, you get the bump in rank."* (Priority School Administrator)

To further illustrate the inequity in information, the administrator who was working assertively towards getting teachers in her building national board certification, also shared that she actually did not need the state grant funding outside of the school district. She revealed that, *"Well, now JCPS has rewritten our our JCTA, union contract. They wrote in that level two and level three schools will have national board certification paid for. So, we didn't have to pay for it out of our SIG because our district is now going to pay for it. So, that has really helped us out."* (Priority

School Administrator) No other teacher or administrator shared this revelatory fact about the recent contract negotiation.

In another example of the inequity around resources, an administrator explained that the student population he serves, disproportionately experiences community-based trauma. He expressed, as a point of pride, his ability to provide mental health services through school-based trained mental health professionals, *"You really have to understand who our kids are. We have a demographic of students here that come with a lot of issues that you must be sensitive to. We're low socioeconomic status. We're incredibly diverse. We have a lot of refugee students, and we have a lot of students that are victims of inner-city trauma. We've placed a lot of money into mental health on the campus. I have four full-time mental health counselors. I have a social worker, and then in addition to that, I have some other related personnel like a community liaison, which we use in what we call a Student Success Team. This team's charge is to reduce suspension, increase class time, and remove barriers from education."* (Priority School Administrator)

The incredible resources and the number of mental health personnel that were available to this school seemed like an outlier. Another administrator declared that her school has a shortage of those trained to provide mental health support. She stated, *"We need more mental health help in our school. Our kids go through so much… We only have one counselor."* (Priority School Administrator)

Finding 3: Teachers and administrators report feeling overwhelmed and overworked by district mandates.

District Mandates

Teachers reported that the work that they do is exponentially more difficult when serving underrepresented groups who come from marginalized socio-economic situations. Teachers and administrators mentioned the enormous amount of required paperwork that must be completed. Their perspective was that the district has too many plans, initiatives, and mandates. Through our interviews, we found out that every school had to create its own racial equity plan. In addition, through interviews and school observations, we could see that they were all working on creating systems and goals around standards implementation, effective use of data, instructional planning and practice for deeper learning goals, progress monitoring and analysis of student work goals, academic and behavioral supports goals, and instructional feedback and professional learning goals. The feedback we received was that many of those plans and additional goals were unique to Priority Schools. Many schools had these documents hanging up in a central place for faculty and administration to see. It all seemed to be too much for teachers when the sum of the parts are added together. When one teacher was asked about what the district provides, she answered, *"The district? No, I can't really say they provide anything other than they provide us with a*

building and a paycheck - and mandates! And mandates! And mandates! I feel they (the district) do what they can. I feel like we if we had more funding, and if we had more resources, we could do better. And I don't necessarily put that on our principal. I know that she doesn't necessarily have control over how much money we get. I think she does the best with what she has…" (Priority School Teacher)

Another teacher/coach attributed the many district mandates to teacher burnout and frustration, stating, *"Teachers, right now, are very frustrated and tired with everything coming down from the district, as far as what we have to do, what we get to do, and what we can do. And then, some of that is communicated in a way that suggests that these things are the non-negotiables, and they are not."* (Priority School Teacher)

One teacher described district mandates in this way, *"Many times, all I see is that we still have to jump through twenty of the district's hoops and then the school's hoops, too."* (Priority School Teacher)

One teacher, who was careful not to criticize the district for its many efforts around improving student achievement did note, however, *"Sometimes, they (the district) just want us to do too much. Each superintendent has a new initiative or a new this… And then… it takes a couple of years to get good at that. Then you kind of get good at that, and then that superintendent leaves, and then there's a new superintendent with a whole different way of doing things. So things are constantly changing. Once you kind of get the hang of things, something else comes into play. Which goes back to is that achievement? I wish JCPS would just concentrate on doing a few things well."* (Priority School Teacher).

One administrator expressed his frustration with district paperwork and mandates by explaining the challenge in this manner, *"Some of this paperwork is necessary, but a lot of this is not helpful. And, it just sucks away my time. For all that stuff that's sitting there, there's some stuff that's also required of a teacher. Most of the time, I don't know what half the stuff is, and neither do they. It goes in a file somewhere, and we say we have a plan for this and a plan for that. And, I don't think it's really a plan. It's silly… I think this is somebody checking off a box. I don't see how this paperwork helps kids. Let's stop breaking people's backs with paperwork..."* (Priority School Administrator)

Discussion

The extant research tells us that more resources will be needed to achieve student success with nearly every type of disadvantaged and/or underrepresented student population, (Murphy, 2015). There is asymmetric distribution and knowledge of information around programs, resources, and incentives for teacher retention which causes intra-district inequity amongst schools; this affects principal/administrator agency from building to building. Principal agency affects the environment, culture, and support of teachers in the school. Because of the high numbers of students of color and FARMS recipients - 44.5% (min) - 97.1% (max) students of color, and 61.4% (min) - 98.4% (max) - the extant research is also applicable to JCPS priority schools. Not having equal understanding of the programs, resources, and incentives available to teachers through the district is likely hurting the chances of retaining good teachers and serving students well. In addition, the inequality in resources for students could lead to cultural and environmental challenges that could be necessarily addressed. Schools and principals need equity in access to resources, and they need equity around gaining information. For example, one administrator was proud of the level of mental health resources available at his school, citing, "*We have four full time mental health professionals here (on site),"* while another principal exclaimed that in her school, *"We definitely need more mental health support for students."* (Priority School Administrator) All priority schools serve similar demographics, and we consistently heard about the difficult situations in which students reside. One administrator mentioned the *"inner city trauma"* that students experience, and another administrator mentioned the extremely transient population that she serves. She recalls that, *"Only about 40 percent of our kids, who start here and finish here…*" (Priority School Administrator) She went on to say she did not think this fact was unique to her school and that the intra-district movement during the school year is quite significant.

We also witnessed that at least one administrator knew about the new district supported initiative around national board certification, and no others mentioned it when asked about financial incentives to attract and retain talent, district goals, or support for teachers. The cost around obtaining national board certification is approximately $2500. This is no small cost to the district. Therefore, it is imperative that principals across the district have equal access to resources in order to support teachers, and ultimately, students. All marginalized students should be able to benefits from district services and resources, and it should not be determined by which priority school principal is in the "know" or has been in the job the longest. Furthermore, if teachers will be retained in low-performing schools, principals and teachers, alike, need to know what incentives are available to those who remain in priority schools. The goal has to be to serve students well. Consequently, the distribution of information around the district has to become more equitable for optimal chances at high teacher retention.

Given that priority schools have a higher turnover rate than schools without the status, we always asked about why teachers leave and explored with interviewees what might make them stay. Themes around teacher efficacy in JCPS priority schools were strong. Both teachers and administrators expressed strong reactions towards their ability to positively impact their student populations. Through extant literature, we know teacher efficacy is of central importance to why newer teachers stay, why they move schools, and why they leave teaching altogether within 3-5 years (Johnson & Birkeland, 2003). Teachers want to believe that they are making an impact on their students and their achievement. In fact, teacher efficacy ranks higher in importance for teachers than: favorable working conditions, supportive principals, and a respectful learning environment (Johnson & Birkeland, 2003). Simply explained, when teachers believe that they are making a difference and having a positive impact on students, they remain in their respective schools, including high-poverty, hard-to-staff schools like those in JCPS. Additionally, personal and collective teacher efficacy were found to be more than twice and almost four times the hinge point (0.40) responsible for positive learning outcomes for students (Hattie, 2009). Furthermore, the results of the efficacy scale were not statistically significant along the lines of race/sex, but they were statistically significant along the line of race ($p=0.0633$), with people of color reporting a higher sense of personal efficacy in priority schools. When asked about why teachers stay, we heard more about teachers' abilities to *"make a difference"* or have an *"impact"* with students than any other factor. One teacher said, *"The kids keep me going. I believe in what I do. I'm tied to this community."* (Priority School Teacher)

We know that high poverty schools have a harder time recruiting and retaining teachers, especially highly effective teaching professionals (Sun, 2018). Teachers and administrators alike acknowledge that the relationship between the student and the teacher is of utmost importance when interfacing with this particular student population and demographic. One administrator emphasized the need for empathy, *"We stress the importance of having empathy with our kids…"* (Priority School Administrator) Yet, another administrator emphasized the need for patience and understanding, *"You have to be patient and understanding with this demographic. Our students are going through a lot…"* (Priority School Administrator) Initiatives, approaches, or methodologies to raising student achievement and academic standards that are void of a similar or equal emphasis on the social-emotional needs of adolescents do not yield much success, efforts to improve the social-emotional needs of marginalized students (Murphy, 2015). The approach to both - social-emotional needs of students and academic achievement - must be in tandem and considered equally important for the student.

Almost immediately in the interviews, as we explored teacher and student characteristics, the theme around teachers of color emerged. When compared to all teachers, teachers of color actually have higher retention rates in hard to staff schools (Putnam, et. al., 2016; Sun, 2018). In fact, we know that highly effective African-American teachers have been shown to be more likely to remain in a high need schools due to an increased personal sense of efficacy in working

with large percentages of students of color (Sun, 2018). One African American teacher told us, *"Because I am an African-American female, I mirror what my students see at home and in their communities. That's an advantage."* (Priority School Teacher) This same teacher went on to say that she has remained in her school even after several leadership changes because, "*...I thought I could make a difference. I still do."* (Priority School Teacher) Another African-American teacher described with pride his decision to stay in a hard to staff school by saying, *"This is my opportunity to walk the walk instead of just talking the talk. You know.., it's time for me to make a difference."* (Priority School Teacher)

The school administrators and teachers we spoke with understood the importance of having teachers of color in their respective buildings. One principal explained that she very much desires that the teaching staff mirror that of the student population, saying, *"For our teachers, we intentionally try to hire so that our staff looks like our students. The biggest difficulty with that is that we don't have a large pool of teachers of color to select from."* (Priority School Administrator) We had at least two teachers specifically mention how student of color - particularly, black students - respond better to teachers of color. We have evidence through the literature that teachers of color are associated with positive outcomes for students of color. Improved reading and math scores, higher graduation rates, a decrease in chronic absenteeism, fewer out-of-school suspensions, and an increased participation in honors and Advanced Placement are all attributed to the presence of teachers of color in the classroom with students of color (Carver-Thomas, 2018; Center for American Progress, 2011; Putnam et. al., 2016). The benefit of having teachers of color, however, also extends to white students and even teachers (AISNE, 2001; Carver-Thomas, 2018; Sun, 2018). Consistently, the teachers of color with whom we spoke understood the power of their presence in the classroom and their ability to relate to students of color. One teacher of color noted, *"I know my students' struggles…"* White teachers seem to understand that their own race limited their ability to fully relate to students around race. One white teacher admitted that although he grew up poor, he still experiences the privilege of whiteness, "*I'm a white male, so I get all the social perks.... I very rarely feel as if I'm in danger or that I don't belong."* (Priority School Teacher) Similarly, a white administrator expressed his understanding of his identity and its relative place to the students of color in his building by explaining, *"I'm the majority demographic that holds a lot of privilege and power. I have to do the work of equity otherwise many won't see it as legitimate change."* (Priority School Administrator) At the same time, this administrator was able to acknowledge what we know through the extant literature about kids benefiting from seeing and having teachers of color in the classroom. He explained, *"I place a premium on applicants of color and diverse applicants, because my kids need to see black men and black women in the classroom teaching. And if I could find a Hispanic administrator, they would probably have a job tomorrow."* (Priority School Administrator) Another administrator reported wanting to have more teachers of color to mirror the student population, but felt somewhat hindered by the district saying, "*For our teachers, we intentionally try to hire so that our staff looks like our students. The biggest*

difficulty with that is that we don't have a large pool of teachers of color to select from. It also makes it difficult in Jefferson County because of the way that hiring works and how teachers move from school to school. As you get experience, you rise up in the ranks in terms of your seniority with the union. And, there are definitive rules for how schools get teachers." (Priority School Administrator)

We also heard about the district and school workload that most teachers attributed to the district. The general sentiment that was revealed through a very steady theme is that the district needs to reduce the workload and the number of mandates that it pushes down to schools, principals, and teachers. We know that satisfaction with the district was lower for women than (0.5591 & 0.5421) it was for men (0.7093 & 0.6344Reducing the number of district mandates could lead to greater satisfaction for men and women, regardless of race. Many felt like they could do a better job with student achievement if there were fewer mandates. One administrator described the some of the district mandated paperwork as *"silly,"* and a teacher mentioned that the district could and should just *"try to do a few things well."* Given that priority teachers believe that they are asked to "do more", that they are *"working with really difficult situations"* and that *"we have a lot on our plates,"* it stands to reason that the stipend that is given to priority school teachers is not effective enough to attract more teachers to come to these lower performing schools. It barely rewards those who are already doing the work daily. The $1600 stipend that is currently being offered to priority school teachers does not seem to be attracting high-performing teachers from other schools or keep high-performing teachers at priority schools. Not one teacher or administrator cited it as an incentive or reason to remain. While the stipend is new step that the district has undertaken, the general sentiment was that it was not going to be *enough* to make a difference in the teaching that goes on in JCPS's lowest performing schools.

We were able to determine that teacher retention is primarily left up to the individual schools and principals. Good things were happening within the district and in individual schools, but these things were not consistent or duplicated from school to school. If the burden of retention has to fall on each individual principal and whatever resources she has at her disposal, there will be inconsistency in teacher retention throughout the district in priority schools. We heard about the district's efforts for attracting teachers, especially teachers of color. One principal acknowledges, *"We have a diversity office and we have and HR office that's specifically directed to that purpose. I think they (the district) do a lot. The district has a lot of intentionality with that attracting teachers of color."* (Priority School Administrator) 13 percent of the faculty at this administrator's school identified as Black or other, while the student of color population is more than 65 percent (JCPS, n.d.). When asked why his school and so many other priority schools have a diversity gap - the disparity between the number of students of color to the number of faculty of color - he answered, *"I don't know if I have a point blank explanation for it."* (Priority School Administrator) One administrator reported that the district recruits in Puerto Rico. She also mentioned that she wished, *"the district would put as much effort into retaining the teachers*

it has as it does into recruiting the teachers it does not have…" (Priority School Administrator) Consistently, administrators expressed a commitment to bringing more faculty of color into their buildings, but the evidence suggests that the district's local recruitment efforts are not as robust as its national recruiting efforts.

Recommendations

Recommendation 1: Revise survey questions - at least for priority schools - to get at the heart of the matter.

All existing research on Priority Schools or other similarly situated schools is consistent that specific school conditions, perceptions of student abilities, and administrative support is critical in retaining teachers both in their current schools and in the profession in general (Griffin & Tackie, 2016; Horsford, 2010; Kokka, 2016; Rogers-Ard, 2018; Sun, 2018). JCPS' survey does not delve deep into certain characteristics. For example, the student scale only includes three questions. That is simply not enough detail to determine the relationship between specific student characteristics and the reasons teachers remain in Priority Schools. Additionally, the Comprehensive School Survey (CSS) instrument stops short of directly asking teachers if they intend to remain in their current school the following school year. It provides little to no insight around the circumstances that affect teacher retention, including why teachers stay, why they leave, and what motivates each. The only way to even begin to apply the results of this survey to teacher retention (and the possible reasons for their attrition) is to collect data on teacher intentions much the same way the data is linked in the National Center for Education Statistics' School and Staffing Survey Teacher Follow-Up Survey.

According to our findings, teachers of color reported higher personal efficacy in JCPS' Priority Schools. JCPS leaders would be well advised to delve more deeply into teachers' personal and collective sense of efficacy considering the impact it has on student academic success. According to Hattie (2009) and over eight hundred other studies covered in his meta-analysis, collective teacher efficacy is the single-most important factor in impacting student performance. While not the topic of this study, JCPS' Priority School students consistently under-performed their district counterparts therefore any initiative that also raises student achievement would improve Priority Schools.

Recommendation 2: Focus on recruitment and retention efforts specifically targeted toward teachers of color. Intentionally create partnerships with MSIs, HBCUs.

Teachers of color are more likely to work in hard to staff and urban schools, usually with the most challenging students, they are likely to stay longer in these challenging schools, and their decisions to leave are generally irrelevant of the race, ethnicity, or socioeconomic status of their students (Carver-Thomas, 2018; Grissom, 2011; Kokka, 2016; Putnam, et. al., 2016). Nationally, seventy-five percent of teachers of color work in schools with the largest percentages of students of color (Carver-Thomas, 2018). We know that teachers of color feel less isolated when there is respective diversity in their schools which may also increase teacher satisfaction

and potentially reduce teacher attrition and school instability (Carver-Thomas, 2018). Currently, JCPS' Priority Schools employ fewer than twenty percent of its teachers of color. Urban teachers of color tend to be intrinsically motivated as role models, or to "give back" to their community (Kokka, 2016; Modica, 2015; Neckerman, 2007). Public schools, especially those in urban areas, need to build a workforce of educators that is a more accurate reflection of their student population (Griffin & Tackie, 2016). In addition to hiring more teachers of color, more administrators of color are needed as well, they are more likely to hire multiple male teachers of color (Bristol, 2018). Nationally, male teachers of color, especially black men, are less than one percent of the total teaching population (Brosnan, 2001; Kohli, 2018). It is further recommended that teachers of color are hired in numbers to achieve a critical mass, defined as at least twenty percent, to ensure adequate support within schools (Brosnan, 2001).

One promising recruitment strategy for qualified candidates of color is to partner with minority serving institutions (MSIs), including historically Black colleges and universities (HBCUs) in both the local area and the larger region (Brosnan, 2001; Ladson-Billings, 2005; Lau, 2007). HBCUs were once credited with supplying the nation with 75% of all black teachers (Evans & Leonard, 2013), to date HBCUs graduate 38% of all teachers of color, not just African Americans. Students find an experience on these campuses unparalleled by any predominantly white institution. Given more recent demographic shifts that place Latin-x people as the most populous group of color while people of Asian descent are the fastest growing population of color. JCPS would be well-served to partner with schools that specialize in producing graduates that share similar racial and ethnic backgrounds with the majority of their student body. Finally, if teachers of color are too difficult to find, pull white teachers in from the community itself, they would also be likely candidates for minority scholarships at MSIs, decreasing the financial commitment involved in teacher preparation.

Recommendation 3: Redesign and restructure recruitment efforts with a specific emphasis on recruiting from within the community. The district should consider putting in place a referral system and using networks that encourage current JCPS teachers to encourage other teaching professionals who already have a vested interest in the community to come to JCPS (Grow Your Own Programs).

One promising means of identifying and retaining teachers of color is to create a "Grow Your Own" program (Carver-Thomas, 2018; Center for American Progress, 2011; Evans & Leonard, 2013; Irizarry, 2007; Lau, 2007; Rogers-Ard, 2012). These programs recognize the inherent flaws in many alternative certification programs that seek the nations "best & the brightest" academics by recognizing that they don't always make the best teachers, especially in communities where the added burden of working through the challenges unique to poverty, especially concentrated urban poverty that is prevalent in the communities of the Priority Schools (Lau, 2007). "Grow Your Own" programs encourage a search for people with a

successful track record in the public schools with poor students and students of color, not unlike the schools in which these future teachers will likely end up working. Recruiting teachers from within the local area who know the community, who are familiar with the needs of the people, and who have a vested interest in closing the achievement gap and serving the underserved would likely include a larger percentage of candidates with a desire to remain in the most challenging schools. Through targeted recruitment of candidates with extensive ties to the community, including paraprofessionals currently working in the schools, these programs boast five year retention rates in excess of seventy percent (Center for American Progress, 2011); one such program even boasts a ten year retention rate of ninety-five percent (Lau, 2007). Oakland, CA; Birmingham, AL; New York City; and the State of North Carolina all have successful programs that could be used as models for starting one within JCPS (Center for American Progress, 2011; Evans & Leonard, 2013; Rogers-Ard, et. al., 2012).

In addition to partnering with MSIs, we suggest including local schools that are deeply connected to Jefferson County. Multiple teachers and administrators we interviewed mentioned receiving their degree from the University of Louisville. In addition to being a source of qualified teacher candidates this might be an ideal partnership for the district to tailor a teaching pathway that meets the specific needs of JCPS' Priority Schools as well as a potential partner for JCPS' "Grow Your Own" program. In addition to using a similar partnership to recruit new teachers, JCPS could use the partnership to refine the skill set of existing Priority School teachers and administrators. While not a guarantee of a career JCPS teacher, tying program inclusion to a five or ten year commitment to the district would undoubtedly minimize the loss of talent once the term expired as participants would be fully vested in JCPS at the end of such a lengthy term (Center for American Progress, 2011; Lau, 2007).

Perhaps the district could create a structured referral program for teachers who recommend other teachers to teach in low-performing priority schools. The program would definitely encourage staff of color to recommend other professionals of color inside and outside of the district who are already committed to the work of delivering a quality education to marginalized populations. The structured program could have a small financial incentive that is realized once the new professional is hired and an even greater financial incentive if the teacher professional stays at the school for at least three years. This will also build a sense of community amongst those faculty of color who need to be around and see others of color in the school community that serves schools that are predominantly comprised of students of color.

Recommendation 4: Evaluate the amount of the stipend and other incentives offered to teachers who currently teach in priority school; consider offering incentives for teachers within the district to move over to priority schools.

The district should explore what stipend amount will actually attract experienced teachers from other schools and effectively help retain teachers currently teaching in priority schools. Along these same lines, the district should think about offering professional development incentives. We heard often and clearly about the new $1600 stipend that the district had just recently implemented. The current stipend amount does not seem to be enough. Some teachers and principals were hopeful that it would make a difference, but some were clear that it is not enough to properly acknowledge the unique work that priority school teachers do or enough to attract high-performing teachers to priority schools. As it stands, the $1600 stipend did not seem to be a true motivator within priority schools or an attraction to those outside of priority schools. The potential for creating a system in which a monetary incentive could compel some of our best teachers to serve our most needy students is certainly worth exploring (Springer, 2015). While there can be problems and/or limitations if in these stipend or bonuses are not applied with consistency, we have an obligation to try incentives like this and others if we want to close the achievement gap between our lowest and highest performers. Providing stipends, bonuses, or other incentives is a small price to pay if we can get our best teachers in front of our most underrepresented, disadvantaged, and poverty-stricken student populations (Sun, 2018). We strongly encourage the district to explore the right amount - the point of enticement - for which teacher are likely to remain and/or move over into a priority school. Another consideration for the district is to tie some kind of incentive like national board certification to teaching in priority schools. In addition, we further recommend that the district attach a very clear and specific time frame for teaching in priority schools in order to take advantage of this kind of benefit. The thinking would be to secure a commitment of at least five years from high-performing teachers, reduce teacher turnover, and improve student achievement.

Recommendation 5: Develop a system for evaluating teacher effectiveness- that allows for flexibility by the building principal.

Our qualitative data revealed that JCPS does not have a universally consistent system for determining its highly effective teachers in priority schools. Many administrators are using their own individual methods for determining their highest performers. For the most part, they all seemed confident that their individual approaches were working. We recommend that the district create a system for determining teacher effectiveness that allows for the flexibility to be creative, to license to think outside the box, and the support for innovative pedagogy. Having high performers in these low-performing schools is key to turning them around. In fact, poor teacher quality can have a direct and negative impact on the learning of students of color, especially in mathematics, which we know is a gatekeeper course for access to a college education (Evans & Leonard, 2013). Since the work that is done at priority schools is uniquely challenging, we recommend that the tool for identifying high performers at priority schools look and feel differently than the district-wide teacher evaluative tool. Building principals need be empowered by the district to determine exactly what their students need. “Teacher turnover may

be impacted more by the quality of the principal in a disadvantaged, traditionally hard-to-staff school than in an average school. In fact, the size of the coefficients implies that a 1.5 standard deviation increase in principal effectiveness is enough to offset the turnover differential between disadvantaged schools and other schools" (Grissom, 2011). With flexibility in the tool that is used to identify teacher effectiveness, principals can assert their expertise in school improvement to increase student achievement.

Conclusion

We are encouraged by the district's sincere and courageous undertaking of equity initiatives, which we believe our project falls under. The seven priority schools that were in our sample certainly demonstrated meaningful, positive, and admirable efforts towards achieving racial equity through the attraction, retention, and support of quality teachers in its lowest performing schools. These priority schools are just what the name is meant to convey - priority. These students are faced with the most dire circumstances, being from marginalized populations, underrepresented groups, and impoverished circumstances, not of their choosing. It is our obligation to ensure that they get equitable teaching from qualified, high-performing teachers just like their wealthier, whiter, and more dominant peer groups.

Fortunately, we were able to talk with and hear from a good number of people who understand this obligation, who have a sense of urgency, and who are committed to do the work to ensure these deserving students get a chance. The district simply needs to shift its attention and tweek several things that it already has in place. The survey is a good example of that.
The quantitative portion of our study - which was a result of the comprehensive survey - only contributed to research question #1 in any meaningful way. Including a few questions that are specifically directed towards better understanding teacher retention could really make the district's efforts more precise. There no magic wand to waive in order to attract and retain more teachers of color, but it has to be a top priority. All students benefit from having teachers of color in the classroom, and students of color especially benefit.

Our ability to really answer question #2 was really hindered since JCPS does not have a consistent and clearly defined system for identifying highly effective teachers in its priority schools. Principals were using tools, systems, and other more collaborative measure to determine who was high-performing. These two systems need not be mutually exclusive, and we encourage the district to find ways to allow for the individual flexibility, whilst also adhering to its standards around sound instructional teaching and its vision for equity.

Lastly, teachers who believe they can make a difference priority schools stay and do. Principals need to be even empowered to support this kind of teacher efficacy. It is productive and powerful. It was clear that teacher-to-teacher, building collegiality, and a sense of community - all created at the building level - was an effective force for good. Principals and leadership teams need the flexibility, resources, and authority to create positive and collaborative teams.

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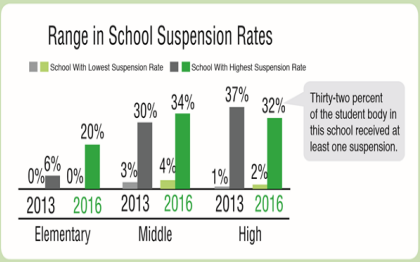
Appendices

Appendix A: JCPS Envision Equity

Discipline Focus Area: Increasing Capacity and Improving Culture

Inequity Between Schools

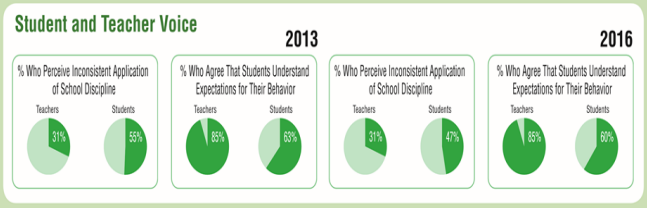


When examining the schools with the lowest and highest suspension rates by level, the 2016 data show the range between lowest and highest suspension rates has increased at the elementary and middle school level and decreased at the high school level. In 2016, there was an elementary school where 20 percent of the student enrollment received at least one suspension.

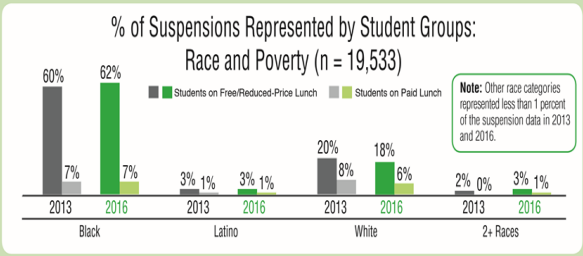
	2013	2016
School Poverty Level	% of Suspensions	% of Suspensions
Low Poverty	11%	6%
Med.-High Poverty	23%	17%
High Poverty	33%	46%
Extreme Poverty	33%	31%

In 2016, students in high-poverty schools and extreme-poverty schools made up 77 percent of out-of-school suspensions compared to 23 percent in low-poverty and med.-high poverty schools. This gap has increased since 2013.

Inequity Between Student Groups



Black students who are eligible for free or reduced-price lunch account, by far, for the largest share of suspended students. (In 2016, 62 percent of suspensions were black students who are eligible for free or reduced-price lunch.) This is an issue that should be explored in more depth to gain a better understanding of the root causes. Lunch status appears to be a stronger predictor for suspension than ethnicity.



School Climate and Culture Focus Area: Increasing Capacity and Improving Culture

Inequity Between Schools

Across role groups (e.g., students, teachers, parents), the percentage of those who are satisfied with their schools varied greatly between schools.

School Poverty Level	Student Satisfaction	Teacher Satisfaction	Parent Satisfaction
2013			
Extreme Poverty	76%	86%	85%
High Poverty	73%	86%	80%
Med.-High Poverty	77%	87%	83%
Low Poverty	82%	91%	86%
2016			
Extreme Poverty	79%	77%	85%
High Poverty	76%	76%	81%
Med.-High Poverty	81%	78%	84%
Low Poverty	86%	82%	83%

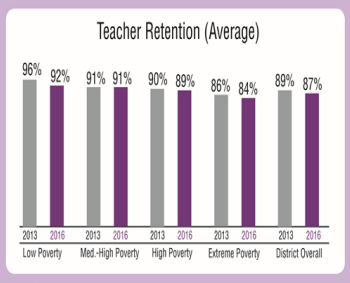
Overall, in 2016, satisfaction levels remained similar to 2013 satisfaction levels for parents, while student satisfaction levels slightly increased, and teacher satisfaction levels decreased.

Student Voice

There's this one teacher, every day he picks a different table to eat lunch at. He talks to everyone. I hope I get in his class one day. He seems nice. I have a teacher that kicks me out of class every time any of us want to talk about race.

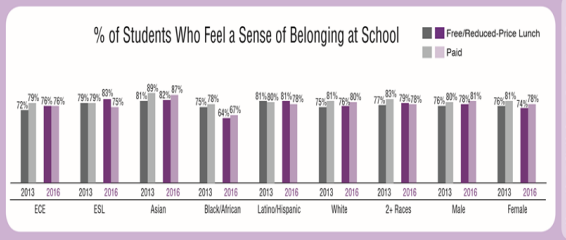
—JCPS student

Inequity Between Schools



Higher poverty concentration of the school was associated with lower teacher retention.

Note: One extreme-poverty school was restaffed in 2015-16.



In 2016, one out of four students from lower income backgrounds does not feel a sense of belonging at his or her school. African-American students from low- and high-income backgrounds rate their sense of belonging lower than other student groups.

Appendix B: Descriptive Statistics

Table B1: JCPS Teachers By Race, Sex, Priority Status & National Board Certification

Teachers	Without National Board Certification	National Board Certification	Total		Without National Board Certification	National Board Certification	Total	Grand Total
Priority Schools	1024	35	1059	**Non-Priority Schools**	4315	301	4616	5675
African American	159	3	162	**African American**	540	11	551	713
Female	99	3	102	Female	426	11	437	539
Male	60		60	Male	114		114	174
Latin-x	**28**		**28**	**Latin-x**	**64**	**2**	**66**	**94**
Female	22		22	Female	49	1	50	72
Male	6		6	Male	15	1	16	22
White	**817**	**32**	**849**	**White**	**3659**	**282**	**3941**	**4790**
Female	505	28	533	Female	2767	251	3018	3551
Male	312	4	316	Male	892	31	923	1239
Other	**20**		**20**	**Other**	**52**	**6**	**58**	**78**
Female	7		7	Female	45	5	50	57
Male	13		13	Male	7	1	8	21
Grand Total	**5339**	**336**						**5675**

Table B2: All JCPS Teachers by Degree Type

	Doctorate	Rank I - Masters	Rank II - Masters	Rank II+15 - Masters	Rank III - Bachelor	Rank III+15 - Bachelor	Rank IV - Emergency Certification	Grand Total
African American	**15**	**215**	**283**	**67**	**86**	**45**	**2**	**713**
F	13	178	208	51	58	30	1	539
M	2	37	75	16	28	15	1	174
Latino Hispanic	**2**	**25**	**33**	**3**	**24**	**7**		**94**
F	2	20	21	3	19	7		72
M		5	12		5			22
White	**53**	**1526**	**2122**	**282**	**585**	**218**	**4**	**4790**
F	32	1188	1551	197	428	153	2	3551
M	21	338	571	85	157	65	2	1239
Other	**3**	**25**	**28**	**1**	**19**	**2**		**78**
F	3	17	23	1	12	1		57
M		8	5		7	1		21
F Count	50	1403	1803	252	517	191	3	4219
M Count	23	388	663	101	197	81	3	1456
Grand Total	**73**	**1791**	**2466**	**353**	**714**	**272**	**6**	**5675**

Table B3: JCPS Teachers by Priority School status and Degree Type

	Doctorate	Rank I - Masters	Rank II - Masters	Rank II+15 - Masters	Rank III - Bachelor	Rank III+15 - Bachelor	Rank IV - Emergency Certification	Grand Total
African American	**15**	**215**	**283**	**67**	**86**	**45**	**2**	**713**
Non-PS	10	172	230	50	60	28	1	551
PS	5	43	53	17	26	17	1	162
Latino Hispanic	**2**	**25**	**33**	**3**	**24**	**7**		**94**
Non-PS	2	19	20	2	17	6		66
PS		6	13	1	7	1		28
White	**53**	**1526**	**2122**	**282**	**585**	**218**	**4**	**4790**
Non-PS	36	1305	1778	222	433	164	3	3941
PS	17	221	344	60	152	54	1	849
Other	**3**	**25**	**28**	**1**	**19**	**2**		**78**
Non-PS	3	20	21	1	13			58
PS		5	7		6	2		20
F Count	50	1403	1803	252	517	191	3	4219
M Count	23	388	663	101	197	81	3	1456
Grand Total	**73**	**1791**	**2466**	**353**	**714**	**272**	**6**	**5675**

Table B4: Priority School Teachers by Race & Sex

	Total, Any Priority School
African American	**162**
F	102
M	60
Latino Hispanic	**28**
F	22
M	6
White	**849**
F	533
M	316
Other	**20**
F	7
M	13
Grand Total	**1059***

*Note that the total number of teachers is less than CSS Priority School respondents; JCPS data sets are inconsistent for unknown reasons

Table B5: JCPS Teachers Years Experience by Race and Sex

	Average of JCPS Years Experience
African American	**8.98**
F	9.50
M	7.38
American Indian/Alaskan Native	**3.75**
F	4.29
M	0
Asian	**6.98**
F	7.60
M	5.58
Latino Hispanic	**4.40**
F	4.38
M	4.50
Two or More	**2.20**
F	2.50
M	1.00
White	**8.84**
F	9.16
M	7.93
Grand Total	**8.75**

Table B6: Priority School Teachers Years Experience by Race and Sex

	Average of JCPS Years Experience
Non-Priority Schools	**4616**
African American	**9.83**
F	10.09
M	8.81
American Indian/Alaskan Native	**4.67**
F	4.67
Asian	**8.58**
F	8.47
M	9.14
Latino Hispanic	**5.17**
F	5.12
M	5.31
Two or More	**2.00**
F	3.00
M	1.00
White	**9.63**
F	9.85
M	8.90
Priority Schools	**1059**
African American	**6.10**
F	6.94
M	4.67
American Indian/Alaskan Native	**1**
F	2

M	0
Asian	**2.76**
F	1
M	3.50
Latino Hispanic	**2.61**
F	2.68
M	2.33
Two or More	**1**
F	1
White	**5.20**
F	5.27
M	5.08
Grand Total	**8.75**

Appendix C: JCPS 2017-2018 Comprehensive School Survey (CSS) questions and responses for all JCPS instructional staff

CSS SURVEY RESULTS

Return to CSS Homepage (https://www.jefferson.kyscho

The Research Department designs, collects, and analyzes the "family" of surveys (students, certified, non-certified, parents) entitled Comprehensive School Survey. The Comprehens Surveys (CSS) provides feedback to the Board of Education, central administration, and schools so that we can continuously improve our educational services in important areas ass school climate. From the school effectiveness research literature, we know how important school climate is on enabling student learning, particularly for the most needy students. In t CSS is a critical tool for informed discussions, planning, and progress monitoring of JCPS as school system. We want to ensure that the voice of students (grades 4-12), certified stat and parents become an integral part of the decision-making process in our District.

Note: a Likert Scale is used for the Comprehensive School Surveys. The AVG column is the average response. The key is as follows:

4 – Strongly Agree
3 – Agree
2 – Disagree
1 – Strongly Disagree

If you would like to use our CSS Comparison Tool, you can access it here. (cssCompare.aspx)

Schoolbased Certified | 2018 | Load

Count Percent

Location: All Locations
Race: All
Gender: All

Load Survey

 # Responses: 6764
Response Rate: 93%

Gender:

Male	Female	Total
1494	4761	6255

Ethnicity:

African American	White	Latino	Other	Total
691	4978	113	168	5950

Job:

Teacher	Administrator	Director	Clerical/Secretarial	Coordinator	Specialist	Support/Resource	Technical	Maintenance/Grounds	Transportation	Other	Total
5502	491	9	7	12	63	195	9	5	1	184	6478

Assignment:

School	Office	Total
6478	57	6535

Age:

Under 30	30-55	56+	Total
934	4532	654	6120

Level:

Elementary	Middle	High	Special	All	Total
3220	1167	1844	269	85	6585

Years:

0-5	6-10	11-19	20+	Prefer Not to Answer	Total
1924	1461	1974	977	0	6336

(B) Students

			Strongly Agree	Agree	Disagree	Strongly Disagree	AVG
1.		I feel the teachers at my school really care about their students.	4020	2587	93	35	3.57
2.		I believe students at my school can talk with their counselor.	3229	2782	474	164	3.37

3.		My school provides a caring and supportive environment for students.		3545	2871	234	85	3.47

(C) School Operation

			Strongly Agree	Agree	Disagree	Strongly Disagree	AVG
1.		The superintendent and central office administrators provide effective leadership for schools.	1581	4011	741	199	3.07
2.		JCPS manages funding in an efficient and responsible manner.	704	3235	1854	607	2.63
3.		My supervisor provides effective leadership.	2972	2733	603	381	3.24
4.		My work place is effectively implementing a plan to close the achievement gap.	2563	3144	697	224	3.21
5.		School-Based Decision Making has helped to improve my school.	1759	3108	684	256	3.1
6.		Teachers at my school provide effective instruction.	2689	3664	298	45	3.34
7.		At my school, teachers provide regular communication to parents/guardians on student's progress.	2714	3519	345	49	3.34
8.		My school is requiring students to do more challenging reading than in previous years.	2247	3110	742	112	3.21
9.		At my school, students develop confidence in applying mathematical strategies to real-life situations outside of school.	1802	3562	688	92	3.15
10.		At my school, students regularly engage in active investigations and experimentation in science classes.	1999	3287	710	144	3.16
11.		At my school, teachers effectively align their lessons with common district assessments each grading period.	2869	3291	294	51	3.38
12.		My school implements a system to regularly track student proficiency throughout the year.	3180	3069	338	64	3.41
13.		My school implements an effective system of regularly analyzing student work.	2626	3312	606	110	3.27
14.		My school's classrooms have reasonable numbers of students.	1850	3221	1154	471	2.96
15.		Textbooks and other school materials are of high quality.	1260	3171	1470	656	2.77
16.		My school is equipped with up-to-date computers and other technology.	1535	2864	1491	821	2.76
17.		At my school, I feel verbal bullying is a problem.	796	2228	2517	1074	2.42
18.		At my school, I feel physical bullying is a problem.	516	1264	3240	1594	2.11
19.		At my school, I feel internet bullying is a problem.	579	1521	2703	1356	2.21
20.		Safety concerns, when reported, are handled in a timely manner.	2463	3414	539	257	3.21
21.		I believe JCPS staff will intervene in any unsafe situation that they observe.	2816	3245	485	160	3.3
22.		I would report any unsafe situation I observe.	5086	1628	23	11	3.75
23.		My students can describe what targets they are to learn.	2005	3992	402	31	3.24
24.		My classroom assessment feedback to students is frequent, descriptive, constructive and immediate.	2141	3801	325	35	3.28
25.		My students are actively involved in self-assessment.	1532	3839	842	46	3.1
26.		I provide opportunities for my students to work together on projects.	2423	3417	257	19	3.35
27.		When students work together, they give each other feedback.	1654	3895	690	46	3.14
28.		Students at my school help each other when needed.	2083	4148	349	50	3.25
29.		Students have opportunities to provide input into the design and focus of their work.	1371	3849	1111	91	3.01
30.		Students are provided many opportunities to share their ideas in class.	2569	3754	204	30	3.35
31.		I provide students different ways to show what they know (projects, presentations, tests, etc.).	2462	3489	236	23	3.35
32.		Teachers at my school don't let students give up when the work gets hard.	2342	3629	546	108	3.24
33.		Most students work hard on their schoolwork until they get it right.	1162	3430	1621	387	2.82
34.		Each member of the Professional Learning Community team receives frequent and timely feedback regarding the performance of his/her students on team, district, and state assessments.	1979	3662	581	168	3.17
35.		The Professional Learning Community team use time to engage in collective inquiry on questions specifically linked to gains in student achievement.	2152	3537	595	162	3.19
		I value the time I spend collaborating with my Professional						

36.		Learning Community.		2291	3204	611	255	3.18
37.		At my school, all teachers have high standards for student learning irrespective of their starting points or circumstances.		2501	3428	613	112	3.25

(D) Employee

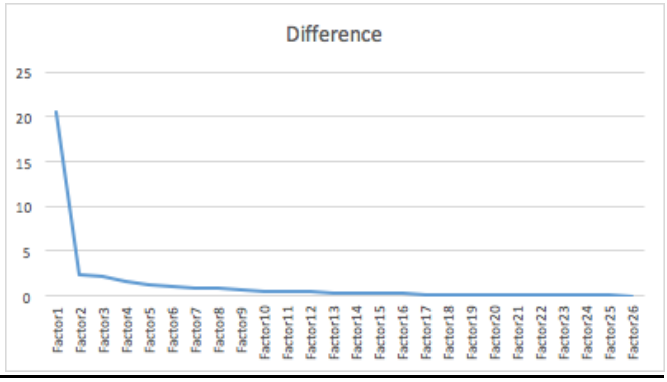
				Strongly Agree	Agree	Disagree	Strongly Disagree	AVG
1.		I like the staff at work.		3549	2956	176	52	3.49
2.		My group of colleagues at school is well thought of by other faculty and staff.		3160	3059	334	76	3.4
3.		I feel like I am part of the JCPS community.		2436	3470	651	145	3.22
4.		I feel safe on my way to and from work.		3368	3007	254	124	3.42
5.		I feel safe outside the building before and after work.		2975	3087	492	190	3.31
6.		I feel safe and secure at my work place.		3061	3025	472	192	3.33
7.		My supervisor gives me adequate feedback on my job performance.		2873	2954	577	292	3.26
8.		JCPS insurance and medical benefits are adequate for my family and me.		1581	3765	802	277	3.04
9.		JCPS policies on pay and benefits are applied fairly to all employees.		1588	3750	861	347	3.01
10.		I receive information regularly about district news and events.		2913	3709	105	22	3.41
11.		I am satisfied with my position at JCPS.		2574	3519	489	133	3.27
12.		I would recommend JCPS as a good place to work.		1954	3740	706	209	3.13
13.		I am satisfied with my department/work place.		2684	3259	557	212	3.25
14.		I would rather send my own child(ren) to JCPS than to a non-JCPS school.		1429	2178	1360	794	2.74
15.		I am very satisfied with JCPS.		1551	3780	1069	208	3.01

		Yes	No
16.	I have Internet access at home.	6608	129

				Strongly Agree	Agree	Disagree	Strongly Disagree	AVG
17.		If I really try hard, I can get through to even the most unmotivated students.		2267	3399	830	156	3.17
18.		By trying a different teaching method, I can significantly affect a student's achievement.		2859	3458	205	33	3.39
19.		If teachers have willingness, they can help any student learn.		2908	3081	614	90	3.32

Appendix D: Factor Analysis

Factor |	Difference	Proportion	Cumulative	
Factor1	20.5391	18.11464	0.6388	0.6388
Factor2	2.42446	0.26295	0.0754	0.7142
Factor3	2.16151	0.52694	0.0672	0.7814
Factor4	1.63457	0.35033	0.0508	0.8323
Factor5	1.28424	0.23315	0.0399	0.8722
Factor6	1.05109	0.17157	0.0327	0.9049
Factor7	0.87951	0.09572	0.0274	0.9323
Factor8	0.7838	0.20986	0.0244	0.9566
Factor9	0.57394	0.08902	0.0179	0.9745
Factor10	0.48492	0.05834	0.0151	0.9896
Factor11	0.42658	0.0336	0.0133	1.0028
Factor12	0.39298	0.05455	0.0122	1.0151
Factor13	0.33842	0.04847	0.0105	1.0256
Factor14	0.28995	0.03653	0.009	1.0346
Factor15	0.25342	0.01273	0.0079	1.0425
Factor16	0.24069	0.08877	0.0075	1.05
Factor17	0.15192	0.01152	0.0047	1.0547
Factor18	0.1404	0.00845	0.0044	1.0591
Factor19	0.13195	0.04161	0.0041	1.0632
Factor20	0.09034	0.0079	0.0028	1.066
Factor21	0.08243	0.00382	0.0026	1.0685
Factor22	0.07861	0.0312	0.0024	1.071
Factor23	0.04741	0.01129	0.0015	1.0725
Factor24	0.03612	0.01461	0.0011	1.0736
Factor25	0.0215	0.01905	0.0007	1.0742
Factor26	0.00245	0.00833	0.0001	1.0743



Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Factor7	Factor8	Factor9	Factor10	Factor11
B1	0.5936	0.1481	-0.1371	0.2052	-0.0629	0.0909	-0.1367	-0.0479	0.2114	0.1845	-0.0806
B2	0.5942	-0.1077	-0.1261	0.2017	0.0938	0.0597	0.0137	0.0306	0.2153	0.2409	-0.0148
B3	0.7419	-0.0583	-0.2569	0.2023	-0.0635	0.0587	0.1022	-0.0224	0.1783	0.2065	-0.0209
C1	0.6496	-0.0199	-0.0164	0.066	0.1354	-0.242	0.1358	-0.0165	0.0032	0.111	-0.2381
C12	0.6774	0.1894	-0.2266	0.0707	0.0455	0.0019	-0.096	-0.1072	-0.0211	0.0436	0.201
C13	0.7109	0.129	-0.1808	-0.0955	0.118	0.1045	0.0054	-0.0594	-0.0473	-0.028	0.1784

C14	0.7023	0.1932	-0.1827	-0.0144	0.105	0.019	0.0414	0.0058	-0.052	-0.0007	0.2266
C16	0.6745	0.2376	-0.1503	0.043	-0.0657	-0.0887	-0.0052	0.0129	-0.0543	-0.0151	0.1693
C18	0.6257	0.3389	-0.1499	0.0225	-0.0035	-0.0378	-0.306	0.0149	-0.0968	-0.0501	-0.074
C19	0.6794	0.2256	-0.1876	0.0784	0.1119	0.1064	-0.3027	0.0743	-0.1158	-0.1104	-0.1224
C2	0.6114	-0.0024	0.0838	-0.1276	0.3059	-0.1509	0.1468	-0.0081	-0.043	0.0831	-0.1593
C20	0.7244	0.2075	-0.2333	0.065	0.1526	0.0788	-0.1769	0.0416	-0.115	-0.0936	-0.1384
C21	0.4731	-0.0416	0.0698	-0.0375	0.3607	-0.1129	-0.0633	0.1894	0.1852	0.0133	0.0198
C22	0.6032	-0.066	0.0174	-0.0952	0.4389	-0.0032	-0.025	0.1671	0.1184	-0.183	0.0536
C23	0.5415	-0.068	0.0727	0.0151	0.3699	-0.0774	-0.0039	0.2859	0.1134	-0.0899	-0.0759
C24	-0.3163	0.4118	0.4172	0.5066	0.1035	0.0811	0.1154	0.04	-0.0256	-0.0547	0.0462
C25	-0.3417	0.4504	0.3631	0.426	0.1394	0.0315	0.1415	-0.0039	0.0177	-0.0684	-0.0008
C26	-0.2025	0.3453	0.4323	0.4839	0.0356	0.0504	0.1315	0.0655	-0.0974	0.031	0.0534
C27	0.7443	-0.1999	-0.1224	0.1431	0.0337	0.0652	-0.0224	0.1103	-0.1473	0.0872	0.0276
C28	0.7543	-0.155	-0.0603	0.0905	-0.0982	-0.0004	0.0037	-0.0052	-0.0951	0.0806	0.0304
C29	0.4528	0.0658	0.0289	0.0753	-0.2854	-0.0435	-0.1301	0.0578	0.0186	0.1086	-0.028
C3	0.7445	-0.1116	-0.199	0.2143	-0.0355	0.1298	0.2373	-0.1019	-0.1344	0.021	-0.1179
C30	0.6026	0.3888	-0.02	-0.1714	-0.2359	-0.1023	0.029	0.0532	-0.0468	-0.0595	-0.0132
C32	0.553	0.4158	0.0238	-0.1148	-0.2101	-0.2097	0.0811	-0.0415	0.005	-0.0484	-0.0717

C33	0.5841	0.3892	-0.0214	-0.209	-0.1592	-0.239	0.1511	0.0811	0.0658	-0.0061	0.0033
C35	0.52	0.3591	0.0884	-0.0429	-0.1971	-0.1415	0.0933	0.0392	0.0167	0.1011	-0.0936
C36	0.5808	0.3195	0.048	-0.2339	-0.1352	-0.1378	0.1913	0.1814	0.0814	-0.0109	0.0045
C37	0.7346	0.1068	0.0042	-0.1474	0.0096	-0.05	0.0503	0.147	0.1017	0.0053	0.0984
C4	0.751	0.0216	-0.2843	0.0458	0.1564	0.1295	0.1429	0.0215	-0.1313	0.0371	-0.0268
C5	0.7317	0.0036	-0.2092	0.1236	0.1278	0.1426	0.1824	0.0164	-0.0852	0.0229	0.001
C8	0.737	0.2112	-0.1858	0.0061	0.0124	-0.0013	-0.0243	-0.1053	0.0968	-0.0303	0.1835
D1	0.7097	-0.1307	0.0357	0.2406	-0.1327	0.0709	-0.0421	-0.1852	0.2399	-0.1815	-0.0466
D10	0.6726	0.0266	0.1491	0.0634	-0.051	-0.1057	-0.2659	-0.0977	-0.0656	-0.0163	-0.0979
D11	0.7735	-0.2009	0.2222	-0.0487	-0.0287	-0.0901	0.0045	-0.1421	-0.0144	-0.1558	-0.0262
D12	0.7915	-0.1843	0.2129	-0.1018	0.0306	-0.0999	0.1625	-0.1268	0.0116	-0.1027	0.0107
D13	0.8243	-0.2017	0.0555	0.0386	-0.0873	0.0063	0.0846	-0.1101	-0.0249	-0.173	-0.041
D14	0.5951	-0.2043	0.1856	-0.1641	0.0824	-0.0126	0.1773	-0.1313	-0.1021	0.0572	0.0943
D15	0.7955	-0.1897	0.1985	-0.0913	0.0905	-0.0569	0.1946	-0.1955	-0.0767	-0.0048	-0.0249
D17	0.5091	0.081	0.3233	-0.3374	-0.0166	0.435	0.044	0.05	0.0486	0.0786	0.0041
D18	0.5848	0.1804	0.3374	-0.2496	-0.0723	0.3719	-0.0685	0.005	0.0105	-0.0261	-0.051
D19	0.5381	0.1435	0.4061	-0.313	0.0005	0.419	-0.0621	0.0287	-0.0187	0.1119	-0.0648
D2	0.7452	-0.1066	0.0315	0.1883	-0.1327	0.0872	-0.0221	-0.1869	0.2675	-0.1383	0.0047

D3	0.7641	-0.1163	0.1729	0.0566	-0.0694	0.027	-0.0585	-0.0735	0.1274	-0.0614	0.0175
D4	0.6894	-0.3599	0.2293	0.1835	-0.2714	-0.0526	-0.0603	0.2953	-0.0286	-0.0362	0.0802
D5	0.687	-0.3588	0.2196	0.1758	-0.2188	-0.0722	-0.0948	0.3286	-0.0645	0.0209	0.0246
D6	0.7397	-0.3627	0.1025	0.0682	-0.1669	-0.0046	0.0392	0.1963	-0.1147	-0.0029	0.0622
D7	0.7368	-0.0113	-0.1476	0.1541	-0.0435	0.1113	0.0436	-0.0599	-0.1671	-0.0649	-0.0424
D8	0.4513	-0.0041	0.4175	0.0135	0.187	-0.1814	-0.2101	-0.1919	-0.0489	0.2268	0.108
D9	0.5088	-0.0261	0.3893	-0.0255	0.148	-0.2682	-0.2671	-0.1877	-0.0908	0.0891	0.041

Appendix E: Spearman Correlation Coefficients for the Student Scale

	B1	B2	B3
B1	---		
B2	0.4732*	---	
B3	0.6351*	0.6092*	---
* p<0.01; N=1143			

Appendix F: Spearman Correlation Coefficients for the School Operation Scale

	C1	C2	C3	C4	C5	C8	C12	C13	C14	C16	C18	C19	C20	C21	C22	C23	C24	C25	C26	C27	C28	C29	C30	C32	C33	C35	C36	C37
C1	---																											
C2	0.5320*	---																										
C3	0.4066*	0.2940*	---																									
C4	0.4020*	0.3115*	0.6161*	---																								
C5	0.3243*	0.3081*	0.3970*	0.4764*	---																							
C8	0.3717*	0.2857*	0.4398*	0.5261*	0.3755*	---																						

C12	0.2985*	0.2176*	0.3747*	0.4755*	0.3579*	0.6244*	---																						
C13	0.3191*	0.2896*	0.3576*	0.5146*	0.3775*	0.4933*	0.5085*	---																					
C14	0.3589*	0.3129*	0.3363*	0.4736*	0.3527*	0.4808*	0.4872*	0.4830*	---																				
C16	0.3274*	0.2724*	0.3395*	0.4131*	0.2951*	0.4533*	0.4569*	0.4748*	0.6438*	---																			
C18	0.2949*	0.2223*	0.3334*	0.4362*	0.3173*	0.5392*	0.4667*	0.4136*	0.4525*	0.4558*	---																		
C19	0.3114*	0.2472*	0.4141*	0.5642*	0.4016*	0.5245*	0.5331*	0.4721*	0.4729*	0.4159*	0.6219*	---																	
C20	0.3577*	0.2952*	0.4518*	0.5850*	0.4033*	0.5433*	0.5310*	0.4848*	0.4857*	0.4460*	0.5794*	0.7627*	---																
C21	0.2581*	0.3221*	0.2430*	0.3053*	0.1572*	0.2645*	0.2419*	0.2372*	0.3009*	0.2347*	0.2481*	0.2923*	0.3169*	---															
C22	0.2971*	0.4014*	0.3192*	0.4144*	0.3048*	0.3465*	0.3407*	0.3988*	0.3791*	0.3007*	0.2818*	0.3871*	0.4208*	0.4540*	---														
C23	0.2885*	0.3566*	0.2921*	0.3956*	0.3278*	0.3164*	0.2701*	0.3139*	0.3308*	0.2912*	0.2672*	0.3558*	0.3432*	0.3959*	0.5336*	---													
C24	-0.1817*	-0.1518*	-0.2505*	-0.2427*	-0.0582	-0.1900*	-0.1377*	-0.1392*	-0.1612*	-0.1040*	-0.0928*	-0.1187*	-0.1610*	-0.1327*	-0.1733*	-0.0740	---												
C25	-0.1690*	-0.1265*	-0.2692*	-0.2497*	-0.0710	-0.1384*	-0.1431*	-0.1305*	-0.1122*	-0.1200*	-0.1336*	-0.1621*	-0.1500*	-0.1490*	-0.1698*	-0.1156*	0.7129*	---										
C26	-0.0578	-0.0394	-0.1172*	-0.1012*	0.0341	-0.0959*	-0.0369	-0.0268	-0.0371	0.0687	-0.0358	-0.0523	-0.0369	-0.1143*	-0.0753	-0.0204	0.5589*	0.5043*	---										
C27	0.3794*	0.3383*	0.5319*	0.5130*	0.3375*	0.4262*	0.3918*	0.3998*	0.3820*	0.3906*	0.3739*	0.4285*	0.4548*	0.3311*	0.4173*	0.3703*	-0.2392*	-0.2925*	-0.0693	---									
C28	0.3663*	0.3136*	0.4872*	0.4407*	0.3091*	0.4040*	0.3608*	0.3283*	0.3124*	0.3361*	0.3675*	0.3970*	0.4012*	0.2936*	0.3496*	0.3298*	-0.2097*	-0.2877*	-0.0915*	0.6842*	---								
C29	0.1898*	0.1176*	0.2916*	0.2562*	0.2143*	0.2378*	0.2447*	0.2215*	0.2191*	0.2309*	0.2597*	0.2930*	0.2742*	0.1275*	0.1564*	0.1398*	-0.0476	-0.0865*	0.0203	0.3333*	0.4169*	---							
C30	0.2783*	0.2048*	0.2822*	0.3774*	0.2620*	0.4354*	0.4309*	0.3604*	0.3795*	0.3563*	0.4391*	0.3885*	0.4153*	0.1581*	0.2341*	0.2224*	-0.0801*	-0.0990*	-0.0023	0.2590*	0.2939*	0.2726*	---						
C32	0.2289*	0.1629*	0.2572*	0.2773*	0.2655*	0.4078*	0.3674*	0.2814*	0.3161*	0.2844*	0.3803*	0.3803*	0.3546*	0.1354*	0.1849*	0.1804*	-0.0495	-0.0354	-0.0004	0.1965*	0.2587*	0.2372*	0.5911*	---					
C33	0.2472*	0.1628*	0.2227*	0.2991*	0.2710*	0.4015*	0.3667*	0.3076*	0.3357*	0.3191*	0.3556*	0.3416*	0.3513*	0.1497*	0.1941*	0.2150*	-0.0323	-0.0214	0.0352	0.1950*	0.2390*	0.2033*	0.5511*	0.6685*	---				
C35	0.2013*	0.1133*	0.2064*	0.2481*	0.2607*	0.3611*	0.3190*	0.2647*	0.2561*	0.3218*	0.3508*	0.3325*	0.3284*	0.1348*	0.1133*	0.1651*	-0.0150	-0.0081	0.0645	0.2022*	0.2125*	0.1766*	0.4730*	0.5340*	0.5851*	---			
C36	0.2903*	0.2246*	0.2585*	0.3482*	0.2547*	0.4109*	0.3837*	0.3326*	0.3334*	0.3371*	0.3655*	0.3724*	0.3742*	0.2351*	0.2501*	0.2720*	-0.0596	-0.0877*	-0.0052	0.2420*	0.2377*	0.1880*	0.4862*	0.5112*	0.5786*	0.5950*	---		
C37	0.3596*	0.3072*	0.3242*	0.4203*	0.2891*	0.4555*	0.4159*	0.4025*	0.3800*	0.3376*	0.4051*	0.4361*	0.4652*	0.3066*	0.3683*	0.3196*	-0.1947*	-0.2167*	-0.0994*	0.4186*	0.4128*	0.2805*	0.3736*	0.3291*	0.3964*	0.3824*	0.5399*	---	

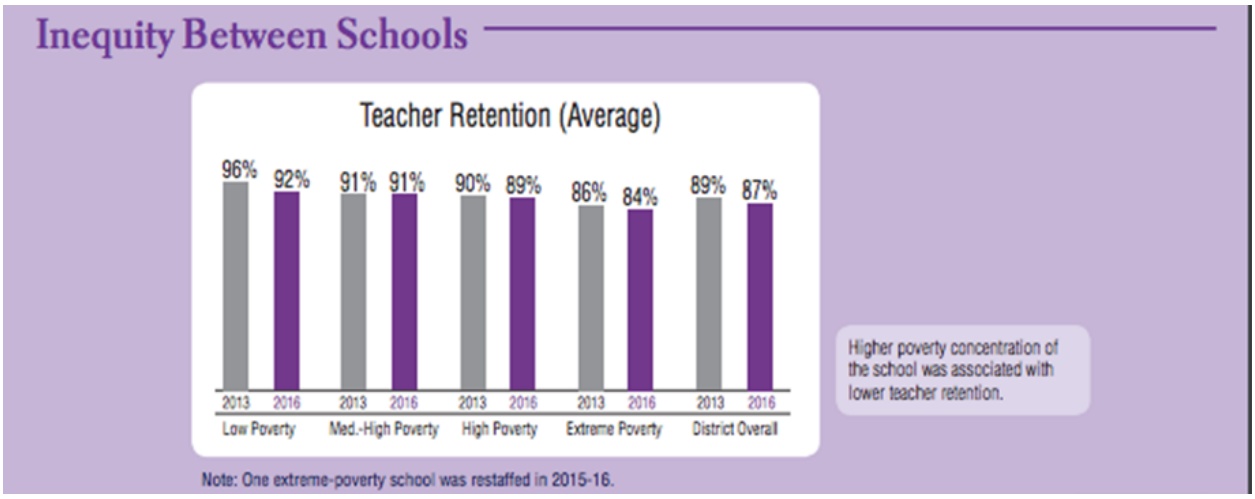
* p<0.01; N=1143

Appendix G: Spearman Correlation Coefficients for the Employee Scale

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D17	D18	D19
D1	---																	
D2	0.7329 *	---																
D3	0.6220 *	0.6464 *	---															
D4	0.5879 *	0.5779 *	0.5832 *	---														
D5	0.5345 *	0.5207 *	0.5393 *	0.8602 *	---													
D6	0.5239 *	0.5416 *	0.5433 *	0.7670 *	0.7622 *	---												
D7	0.5108 *	0.5111 *	0.5304 *	0.4848 *	0.4586 *	0.5048 *	---											
D8	0.2542 *	0.2377 *	0.3326 *	0.3007 *	0.2767 *	0.2667 *	0.2418 *	---										
D9	0.3149 *	0.2831 *	0.3828 *	0.3382 *	0.3681 *	0.3604 *	0.2814 *	0.5807 *	---									
D10	0.4291 *	0.4343 *	0.4775 *	0.4897 *	0.4842 *	0.4550 *	0.4566 *	0.3669 *	0.4743 *	---								
D11	0.5349 *	0.5201 *	0.5926 *	0.5482 *	0.5239 *	0.5675 *	0.4991 *	0.3420 *	0.4502 *	0.5275 *	---							
D12	0.4769 *	0.4619 *	0.6011 *	0.5057 *	0.4926 *	0.5436 *	0.4601 *	0.3728 *	0.4455 *	0.4590 *	0.7181 *	---						
D13	0.6156 *	0.6100 *	0.6086 *	0.5826 *	0.5593 *	0.6000 *	0.5826 *	0.2785 *	0.3790 *	0.5124 *	0.7378 *	0.6748 *	---					
D14	0.2538 *	0.2737 *	0.3550 *	0.3030 *	0.2954 *	0.3202 *	0.2309 *	0.2319 *	0.2305 *	0.2122 *	0.3440 *	0.4364 *	0.3292 *	---				
D15	0.4885 *	0.4601 *	0.5822 *	0.4795 *	0.4692 *	0.5336 *	0.4668 *	0.3513 *	0.4509 *	0.4253 *	0.6816 *	0.7617 *	0.6487 *	0.4755 *	---			
D17	0.2489 *	0.2807 *	0.3437 *	0.2930 *	0.2592 *	0.3282 *	0.2521 *	0.2136 *	0.2251 *	0.2720 *	0.3736 *	0.4020 *	0.3424 *	0.2566 *	0.3789 *	---		
D18	0.2990 *	0.3269 *	0.3883 *	0.3190 *	0.2908 *	0.3147 *	0.3001 *	0.2574 *	0.2796 *	0.3498 *	0.3698 *	0.3896 *	0.3704 *	0.2478 *	0.3515 *	0.5856 *	---	
D19	0.2824 *	0.3054 *	0.3618 *	0.3100 *	0.2789 *	0.3346 *	0.2756 *	0.2614 *	0.3059 *	0.3383 *	0.3932 *	0.3992 *	0.3443 *	0.2382 *	0.3860 *	0.6675 *	0.6141 *	---

* p<0.01; N=1143

Appendix H: Historical Average JCPS Teacher Retention



Appendix I: Interview Protocols

<u>Teacher Interview Protocols</u>

Initial Questions

- How has the new school year been for you so far?
- How long have you been teaching? How long have you been in JCPS? Tell me a little about your career.

Teacher Efficacy

- How long have you been at this school?
- How did you become assigned to this school, an urban school with predominantly students of color? Was that intentional, circumstantial, or coincidental?
- What are the most important and determining factors in schools that you can identify as necessary to enable and support student achievement?
- How important do you see your role as the classroom teacher in promoting student achievement?
- To what extent are you being provided with the tools you need to be successful?
- What are some specific ways that a teacher can influence student outcomes?
- How would you describe the level of student engagement in your classes?
- How do you think your instructional practices and assessments are preparing students?
- From what you can observe, how committed are others on your team or in your building to raising student achievement?
- How frequently do teachers leave this school? How likely are teachers to stay?
- Why do you think teachers leave this school? What causes them to leave?
- This seems to be a hard job. What specifically keeps you going? What keeps you motivated?

Teacher Characteristics

- How do you identify your ethnic/racial background?
- Where did you grow up? (ex. Setting city, suburb, monochromatic, diverse, Louisville area)
- How would you describe your K-12 and college education? Was it a public, private, Title I school, low, middle, or high socioeconomic status?
- How does your identity influence your work with youth, if at all? How does your identify influence your work as a teacher in this school?
- Describe a time in which your identify especially helped you in the classroom with respect to connecting with students.
- What are the specific challenges of teaching? What about teaching in this school?
- How do you navigate these challenges?
- How does your identify impact your ability to navigate these challenges?
- Was there ever a time when you considered leaving the classroom? Tell me about that.
- Ultimately, what made you stay?

School Conditions/Work Environment

- How would you describe the school's climate?
- Describe what is done to ensure students feel a sense of safety (emotionally, physically, and intellectually).
- Can you tell me about discipline issues at this school?
- Describe the support you are provided around disciplinary issues at the school.
- Describe the academic expectations for students? Do expectations vary for different groups? If so, please describe what you have observed.
- What is parental involvement like in this school? Are parents likely to be responsive to a teacher's concerns?
- How do you think the level of parental involvement affects teacher retention in this school?
- How much autonomy do you have in your lesson planning and teaching?
    - How do you feel about this level of autonomy?
    - How much influence do you feel you have over department-wide or whole-school decisions?
- Do you think there is anything that the school or district could provide that would make your job better or more enjoyable?
- What would make you feel happier or more satisfied in your job?
- How do you feel about the professional development offered by the school/district? Is it targeted to your needs and/or the needs of the school?
- What does collaboration look like in your school?
- With respect to school improvement, what would you say is the greatest strength? What is the largest area for improvement?

Administrator Interview Protocols

Initial Questions:

- How has the new school year been for you so far?
- How long have you been in education? How long have you been in JCPS? Tell me a little about your career.

Teacher Efficacy (As Observed by Principal)

- How long have you been at this school?
- Were you assigned to lead this school, or did you choose to come to this school - an urban school predominantly populated by students of color?
- What are the most important and determining factors in this school that you identify as necessary to enable and support student achievement?
- How important do you see the role of the classroom teacher in promoting student achievement?
- What do you do daily, weekly, monthly to support the work teachers do inside the classroom?
- How well do you think teachers' instructional practices and assessments are preparing students?
- From what you can observe, describe the commitment teachers in this building have towards raising student achievement?
- How do you identify and support high-performing teachers?
- How frequently do teachers leave this school? How likely are teachers to stay?
- Why do you think some teachers leave? Why do you think teachers stay?
- What do you do in your school to encourage teacher retention? What strategies do you use?
- Does the district support your efforts? If so, how?

Teacher Characteristics (As Observed by Principal)

- How long have y d up at this school - an urban school with predominantly students of color? Was it intentional, circumstantial, or coincidental?
- How do you identify your ethnic/racial background?
- Describe the racial and ethnic composition of your faculty.
- How important is it to have teachers of color in a school that serves predominantly students of color?
- Does the district do anything intentional to attract faculty of color?
- How does your identity influence your work with your faculty?
- How do you identify and support high-performing teachers?
- What are the challenges of running a priority school? This school in particular?
- How do you navigate these challenges?

School Conditions/Work Environment (As Observed by Principal)

- How would you describe the school's climate?
- Describe what is done to ensure students feel safe emotionally, physically, and intellectually at school.
- How do you support teachers on disciplinary issues?

- Describe parental involvement in the school? How does it impact teachers wanting to leave or stay?
- In your role as principal, how do you ensure that teachers have their instructional needs addressed and met? Specifically, what does support for instruction look like?
- What do you believe your role is in retaining teachers at this school?
- How do you feel about the professional development offered to teachers by the school/district, i.e. do you feel it is it targeted to your needs at this school?
- How much autonomy do you have in planning professional development? How do you feel about this level of autonomy?
- What kind of professional development is offered specifically to help retain high-performing teachers?
- In relation to school improvement, what would you say is the greatest strength of the school and its teachers? What would you identify as the largest area for improvement?
- What are some leadership opportunities afforded to teachers to encourage retention?
- Identify and describe those specific practices in your school or district that you believe are most effective in retaining teachers.
- What special initiatives currently exist to retain teachers in this building or across the district?
- Describe what you would like to see done differently around teacher retention at the district level.