



Utilizing Onboarding
Practices
to Engage and Retain
Employees in the K–12
Setting

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EXECUTIVE SUMMARY

This study focused on onboarding practices within Metro Nashville Public Schools (MNPS). MNPS is a racially, ethnically, and economically diverse district in Tennessee. It is the second-largest urban district in the state and the country's 42nd largest district. MNPS serves more than 85,000 students in over 150 schools. The district's vision is to be the fastest-improving urban school system in America, ensuring that every student becomes a life-long learner prepared for success in college, career, and life. MNPS's mission is to deliver a great public education to every student, every day.

Essential to achieving the district's mission and vision is a high-quality and engaged workforce. Each year the district has an average attrition rate of 13%, which equates to losing around 1,600 employees each year, about half of which are teachers. While hiring and attrition are about steady, onboarding new employees is costly and time-consuming. The talent management team wants to improve retention rates so that fewer employees leave the district each year. They have identified employee onboarding as a strategy that could help accomplish this goal. The talent management team wants to investigate ways to improve its onboarding processes for new personnel to create an onboarding experience that will increase employee engagement and retention.

Foundational to the desired outcomes for employee onboarding are the constructs of employee engagement and retention, and organizational socialization. These constructs offer insight to understand employee and organizational behavior and how they influence each other. Together employee engagement, retention, and socialization theories can offer a fuller picture of the necessary elements to create an onboarding program that supports and retains its employees.

The theory of action that was developed for the study is: If onboarding prepares employees to be successful in their first year on the job, addresses factors that lead to job dissatisfaction, and promotes employee engagement, then retention rates will rise, leading to improved academic outcomes for students. To investigate this claim, the guiding research questions were:

- RQ 1: What supports exist to help new employees address challenges and become engaged with the organization?
- RQ 2: What are the job challenges and sources of dissatisfaction for employees as they move into their third through fifth years on the job?
- RQ 3: In what ways are new employees being onboarded into the organization at the department/school level?

To conduct a thorough analysis to understand the phenomenon and develop recommendations, existing data was provided by the district, and new data was collected through employee interviews. This was a mixed-methods quality improvement study that included both quantitative and qualitative data analysis.

The district provided individual school retention data and school climate survey data from the Panorama Teacher and Staff Survey. The district also provided data from the employee exit survey, which was used to gain insight into job support, job dissatisfaction, and what factors contributed to employees leaving the organization. Individual school achievement data was retrieved from the Tennessee Department of Education. The three data sources were combined and analyzed in the data analysis software tools, Excel and R, to examine the relationships between climate (related to job satisfaction/dissatisfaction for teachers), retention, and student achievement.

Interviews with employees and managers across all district levels were completed to understand the onboarding experiences of district employees, determine what supports are needed for employees to feel successful in their work, and identify factors that contribute to job dissatisfaction. Two interview instruments were created, one for managers and one for employees. Managers and employees were asked a series of questions related to job role and expectations, employee engagement, job challenges, and onboarding experiences. The transcriptions were uploaded to the qualitative data analysis software tool Dedoose, and were reviewed and coded to identify patterns and connections to answer the research questions. Once all transcripts were coded, then the specific excerpts for each code were read collectively to identify patterns and shared experiences and sentiments among the interviewees.

The data analysis led to these findings:

The quantitative data analysis found statistically significant positive relationships between school climate and teacher retention, teacher retention and academic achievement, and school climate and academic achievement.

Finding 1: Very few supports exist for new employees to be successful in their first year on the job

Data from the interviews and exit survey showed that employees do not receive adequate support their first year in MNPS. This is not to say that employees did not seek out the support and help they needed, but that it was not readily and automatically available to new employees through established policies and procedures.

Finding 2: A) Initial trait engagement is high, but job resources are low, putting new employees at risk of disengagement, B) Opportunities for state and behavioral engagement increase over time

Most employees join MNPS or a new role within the organization with trait engagement, which is dispositional and refers to an employee having a generally positive attitude towards their work. New employees, especially teachers, are easily and frequently overwhelmed by the demands of the job and lack of resources, which puts their engagement at risk. However, as

employees settle in and gain experience, they begin to seek out or are assigned additional responsibilities that engage them in their school and the district. Once employees move out of survival mode, additional responsibilities can be perceived as opportunities for engagement and professional growth.

Finding 3: Job dissatisfaction results from lack of voice and power to effect change

As employees settle into the accommodation phase of their work and simultaneously become more comfortable in their job roles and responsibilities, they are able to more readily identify how external forces are impacting their ability to do their job. As teachers begin to better understand the needs of their students, they can identify how the current structures and supports help or hinder their ability to meet their students' needs. Add that to their feelings of being unheard, undervalued, and excluded from the decision-making process and teachers begin to experience increasing levels of job dissatisfaction.

Finding 4: Organizational behaviors can create job challenges that lead to job dissatisfaction

MNPS employees generally have realistic expectations of their work; the primary source of dissatisfaction comes from organizational behavior, intentional or not. Employees are dissatisfied with the support and resources they receive to do their job and do not feel valued or respected for their contributions and efforts. This sentiment appeared among the interviewees and in the exit survey, which indicates that sources of job dissatisfaction are more generalized, are directly connected to organizational behavior, and can ultimately overpower engagement.

Finding 5: Onboarding at the school/department level varies widely and often does not address the unique needs of a 1st year employee

Every employee and manager interviewed all described a different onboarding process at the team or school level. The new employee was often onboarded through regular routines and procedures that every employee receives, and little additional support was explicitly provided for new employees. Employees consistently cited needing more training and support for organizational policies and procedures and specific job role responsibilities.

Finding 6: Employees are unified in a commitment to the students of MNPS, but are not unified behind a collective mission or vision

The desire to serve and support the children of MNPS was common across all employment categories in both the exit survey and interviews. However, employees are driven by a personal, rather than collective, mission.

Based on the findings, the following recommendations are made for MNPS to improve its onboarding practices:

Recommendation 1: Update and communicate a district mission and vision, and tie the mission and vision to all district initiatives to facilitate stakeholder engagement and buy-in

MNPS leadership needs to determine a district mission and vision, developed with teacher and stakeholder input, and communicate it frequently to the entire MNPS community. Generally speaking, educators are an intrinsically motivated group, which is true of the employees within MNPS. While they are individually motivated by a personal mission and passion for their work, they are not tied to a collective mission set forth by the organization. This disconnect creates distrust between the employees and district leadership and prevents employees from fully embracing and implementing district initiatives.

Recommendation 2: Create formalized coaching plan for 1st and 2nd year teachers that transitions to mentoring by 3rd year

To provide the necessary supports for first-year teachers, the district should create and implement a formalized coaching plan for teachers during their first two years of employment. The new teacher coaching framework should include training on the required district communication and software tools, curriculum and instructional resources, and classroom management. This process should also provide support to 1st-year teachers in district and school policies and procedures. Then, as the teachers move into their third year, this should transition into a mentorship program that provides targeted support and training to help teachers achieve their short and long-term career goals.

Recommendation 3: Create onboarding teams at the school and department level

The district should support schools and central office departments in creating onboarding teams and provide guidance for creating a school or department/team-based onboarding program. District and school leaders should identify a small group of team, faculty, and staff members that can serve on the onboarding team to support newcomers to the team, school, or department. This team should be representative of the broader school or department community, and leadership should be directly involved in forming the team and guiding and planning the onboarding team's strategic initiatives.

Recommendation 4: Implement a school-based new employee orientation

The New Teacher Academy should continue at the district level but should be extended to include time at the building level with the newly created onboarding team and school administration. The school-based new employee orientation should include new teachers and new support staff. It is an opportunity for new teachers and support staff to meet with school

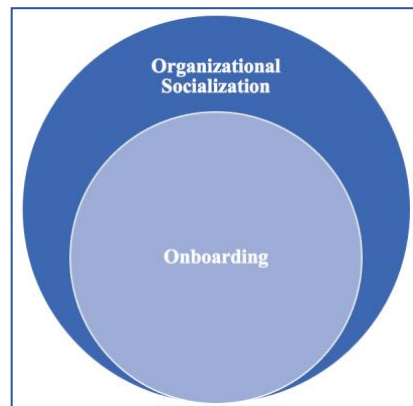
leadership to learn about the school's instructional and operational goals and procedures. Instructionally, the new employees can learn about the school's mission and vision, review job roles and expectations, school demographic and achievement data, and curricular and extracurricular activities. Operationally, employees can review the school's master schedule, daily schedules, year-long calendar of events, and school and district policies and procedures.

Recommendation 5: Improve data collection

To support continuous improvement efforts related to onboarding and employee engagement and retention, MNPS needs to improve data collection related to these initiatives. MNPS should create an onboarding survey that all employees complete at the end of their first of employment. It can provide feedback and data to assess onboarding practices at the district and department/school level, how well employees are being socialized into the organization, and highlight areas of success and in need of improvement. Additionally, the exit survey should be updated to more readily provide data on turnover and why employees leave the district. Demographic data should be collected and attached to survey responses to better understand all employee experiences, from onboarding to leaving the district.

INTRODUCTION

As organizations hire new employees, they are tasked with training and preparing them to navigate the organization to do their job effectively. This process is known as organizational socialization and is vital to an organization's performance and success. Organizational socialization is an ongoing process by "which employees learn about and adapt to new jobs, roles, and the culture of the workplace" (Klein & Polin, 2012). One aspect of organizational socialization is onboarding. Onboarding is specific to managers and human resources departments to communicate the logistical and social processes required of a new employee when they join an organization and can last a few weeks or carry through the first year of employment.



Onboarding is a socialization tool that, for the individual, reduces everyday stressors associated with starting a new job or joining a new organization. It is a chance for the employee to gain better clarity about their job role and expectations, build relationships with colleagues, and learn more about the organization's history and values. Onboarding is also an opportunity for the individual to learn the organization's essential policies and procedures to navigate new systems and structures efficiently and effectively.

According to the Society for Human Resource Management (SHRM), onboarding can increase job satisfaction and performance and decrease employee turnover, which benefits the organization financially and improves its overall productivity. Through onboarding, the organization has an opportunity to set its employees up for success, communicate important organizational values, and set clear expectations for work performance and behavior. A robust onboarding program can improve organizational performance by quickly getting new employees "up to speed" to work productively towards organizational goals.

FOCAL ORGANIZATION

Metro Nashville Public Schools (MNPS) is the second-largest urban district in Tennessee and the country's 42nd largest district. MNPS serves more than 85,000 students in over 150

schools. The district is racially, ethnically, and economically diverse. According to the **Tennessee State Report Card**, 40% of the students are Black or African American, 28.1% are Hispanic or Latino, 27.4% are White, 4.1% are Asian, and less than 1% are American Indian/Alaska Native or Native Hawaiian/Pacific Islander. Additionally, 38.3% of the students are economically disadvantaged, 18.4% are English language learners, 12.9% are students with disabilities, and a little over 3% of them are homeless or in foster care. In the 2018-2019 school year, 26.4% of students were considered on track or mastered according to state standardized assessments, and the average ACT score was 18.5.

The district employs around 6,000 classroom teachers, 340 school administrators, and over 1,000 additional faculty and staff (Tennessee State Report Card). 69.2% of teachers are White, 21.9% of teachers are Black/African American, 2.7% are Hispanic or Latino, and 1% are Asian. Nearly half of school administrators are White, and the other (almost) half are Black or African American, with 2.2% of administrators being Hispanic or Latino and less than 1% Asian.

The district's vision is to be the fastest-improving urban school system in America, ensuring that every student becomes a life-long learner prepared for success in college, career, and life. MNPS's mission is to deliver a great public education to every student, every day.

PHENOMENON OF INTEREST

Essential to achieving the district's mission and vision is a high-quality and engaged workforce. Each year the district has an average attrition rate of 13%, which equates to losing around 1,600 employees each year, about half of which are teachers. While hiring and attrition are about steady, onboarding new employees is costly and time-consuming. The talent management team wants to improve retention rates so that fewer employees leave the district each year. They have identified employee onboarding as a strategy that could help accomplish this goal. The talent management team wants to investigate ways to improve its onboarding processes for new personnel to create an onboarding experience that will increase employee engagement and retention.

Currently, there is a standard district-wide onboarding process. The hiring manager communicates with human resources (HR) whom they would like to hire. HR emails the job candidate, and the candidate must formally accept the job offer. That triggers a series of processes. Organizationally, the new employee's information is entered into the district HR and technology systems to get the required accounts set up to access the district-wide communication and software tools. Individually, the new employee must complete all the required paperwork (e.g., tax forms, health insurance, background check) and review and acknowledge the district policies and employee handbook.

The HR team hosts an orientation website to assist newcomers to the organization. It includes a checklist and frequently asked questions document for certificated and support staff to guide them through the onboarding process and their first days within MNPS. Employees also

attend a new employee orientation for support staff and the New Teacher Academy (NTA) for certificated staff. The new employee orientation is designed for support staff, reviews the initial employment paperwork and processes, and highlights important information from the support staff handbook. The NTA is a yearlong induction program that creates a cohort of new teachers to guide them through their first year in the district. The goal is to inspire and motivate educators while providing them with support and collaborative opportunities to succeed in their new role. NTA occurs during the summer with a two-day gathering. On the first day, educators learn about the district expectations for “teaching well, relating well, and living well” within MNPS. On the second day, educators choose to attend various content break-out sessions that are the most interesting and relevant to them. Throughout the school year, there are four additional opportunities for new teachers to connect and build relationships with their cohort, learn more about the district and the students of MNPS, and learn about the district and community resources available to them.

Simultaneous to district onboarding, the hiring manager assumes responsibility for onboarding the new employee to the departmental team or school faculty. Currently, there is no standard procedure across departments or schools. The hiring managers develop their own processes for acclimating the new employee to the work environment and training them on their specific job role and responsibilities, department/school mission and vision, leadership structures, and policies and procedures.

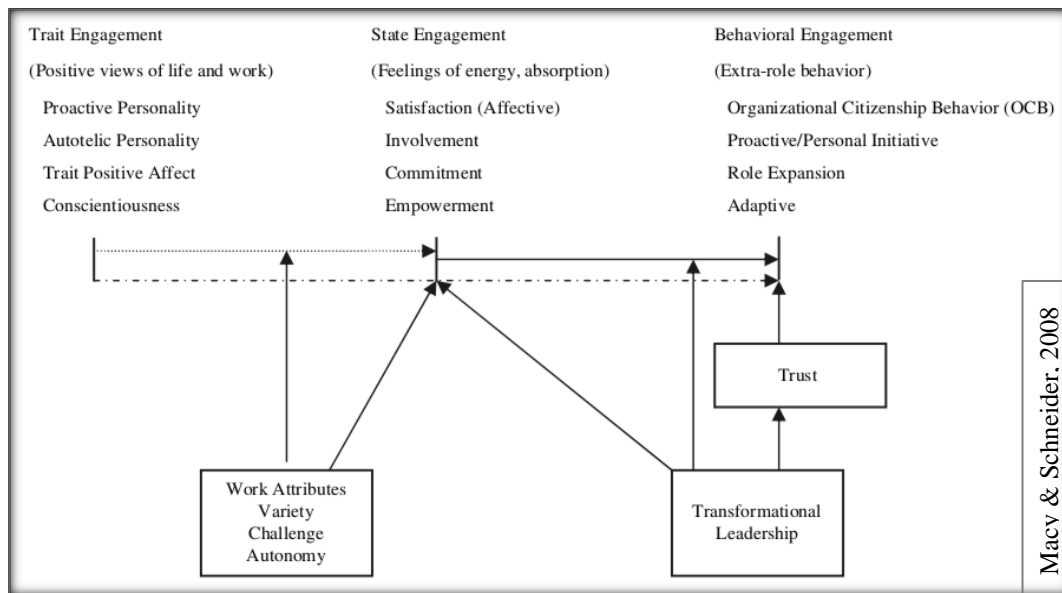
THEORETICAL FOUNDATIONS

Foundational to the desired outcomes for employee onboarding are the constructs of employee engagement and retention, and organizational socialization. These constructs offer insight to understand employee and organizational behavior and how they influence each other. Together employee engagement, retention, and socialization theories can offer a fuller picture of the necessary elements to create an onboarding program that supports and retains its employees.

EMPLOYEE ENGAGEMENT AND RETENTION

Engagement is “a positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli & Bakker, 2004). Engagement can range from being highly productive in a job role to a more generalized sense of satisfaction with the work. Halbesleben (2010) found that “engagement was positively associated with positive outcomes at work, including a stronger relationship between dedication—an identification-based component of engagement—and commitment and turnover intention.” Working in an educational organization is very demanding, which makes it necessary to have an engaged workforce. To assess and promote engagement, it is necessary to understand the complex nature of engagement and the factors contributing to engagement.

Macy and Schneider (2008) proposed a framework “for understanding the elements of employee engagement.” They recognized that engagement is complicated and has many facets and organizational factors that can influence employee engagement in their work and organization. They describe three types of engagement, trait, state, and behavioral, and identify underlying organizational factors that can influence an employee’s engagement level.

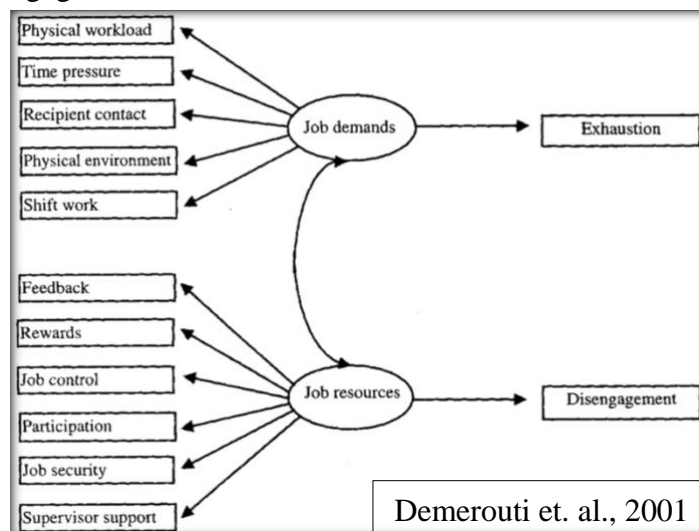


Trait engagement is dispositional and individually focused. The personality and conscientiousness of the employee are contributing factors to trait engagement. Employees that are more extroverted or proactive in their work tend to be perceived as more involved and engaged in their work. This type of employee exhibits what Schaufeli & Bakker (2004) would term dedication, which is "characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge."

State engagement is psychological and, probably, the most recognized form of engagement. This form of engagement is the energy and commitment the employee has towards their work—according to Schaufeli & Bakker (2004), an employee's vigor and absorption. Underlying this type of engagement, employees respond to having meaningful, challenging work, and transformational leaders within the organization. Employees also enjoy having some level of variety and autonomy in their work as well. In *Drive: the surprising truth about what motivates us* (2018), author Daniel Pink identifies autonomy, mastery, and purpose as the essential elements to employee motivation. Additionally, in their book *The Progress Principle* (2011), Amabile and Kramer found that when employees experience progress, both big and small, in their work, that progress contributes to a positive work environment and increased engagement levels in employees. These same work attributes are the foundation of increasing levels of employee engagement, according to Macy and Schneider (2008) as well.

Behavioral engagement is the employee's perception of their job role. Employees engaged at this level often expand their job role and "go the extra mile" out of personal desire rather than an obligation pushed by an external force. In a study of Dutch teachers, Bakker and Bal (2010) found "evidence for a causal relationship between week-levels of work engagement and job resources, suggesting that engaged workers can create their own job resources." Another contributing factor to employee engagement is the employee's sense of self-efficacy (Klassen et al., 2013). As employees/teachers gain confidence in their ability to accomplish goals, work collaboratively with their colleagues, and positively influence their organization, they avoid burnout and can achieve behavioral engagement (Friedman, 1999).

According to Schaufeli and Bakker (2004), "engaged employees have a sense of energetic and effective connection with their work activities, and they see themselves as able to deal well with the demands of their job." The job demands-resources model of burnout (JD-R model) can contribute to further understanding engagement and what factors support engagement or contribute to disengagement.



The model delineates between job demands and job resources. Job demands contribute to exhaustion, and, more importantly, to this work, job resources contribute to disengagement. Halbesleben (2010) found a positive correlation between engagement and job demands; however, the relationship between resources and engagement is well established and much more substantial (Bakker & Demerouti, 2007; Demerouti et al., 2001). Job resources are "physical, psychological, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands at the associated physiological and psychological costs; (c) stimulate personal growth and development." (Demerouti et al. 2001). Specifically, feedback, rewards, job control, participation, job security, and supervisor support are all directly related to employee engagement. Job resources can also "foster employees' growth, learning, and development; satisfy needs for autonomy and competence; and increase willingness to dedicate one's effort and ability to the work task" (Crawford et al., 2010).

Teachers know that access to job resources is necessary to succeed in their work and, therefore, contribute to work motivation or job strain (Bakker & Demerouti, 2007). Johnson and Birkeland (2003) found that teachers were able to connect job demands and resources, such as support from administration and colleagues, job assignment, workload, and access to instructional materials, to their effectiveness in the classroom (and consequently their intention to stay or leave their school). Unique to educators, student discipline issues are a contributing factor to teacher retention. Teachers understand that student discipline is part of the job; however, job demands and resources can impact a teacher's ability to manage the additional stress. Baker et al. (2007) found that "supervisor support, innovativeness, information, appreciation, and organizational climate can all be considered important job resources for teachers because each of these conditions was able to buffer the negative impact of pupil misbehavior on work engagement."

Not all job-related stress is created equal, which leads to the transactional theory of stress. Stress can be categorized as a challenge stressor or a hindrance stressor. Challenge stressors are perceived as opportunities for growth and professional gain. In *The Progress Principle*, these are identified as catalysts and nourishers. Conversely, hindrance stressors are perceived to derail professional growth and accomplishments. In *The Progress Principle*, these are identified as inhibitors and toxins. It is essential to categorize and recognize job demands as either a challenge or hindrance stressor. This allows the organization and individual to build in resources and support to minimize, or even eliminate, stress that prevents employees from meeting organizational goals. Understanding job stressors can also help organizations create an appropriately challenging environment where employees are engaged at all levels in the work and the organization.

Employee retention, especially the retention of highly productive employees, is vital to any organization. March and Simon (1958) developed a model, still relevant today. They propose two factors that contribute to an employee's decision to stay or leave an organization: ease of movement and the desire to leave. The employee needs to know there are suitable job alternatives available to them and have a desire to leave the organization. Griffeth et al. (2000) found that "job satisfaction, organizational commitment, job search, comparison of alternatives, withdrawal cognitions, and quit intentions" were the best predictors of employee turnover.

Underlying an employee's desire to stay or leave an organization is their level of engagement and job satisfaction (Hausknecht et al., 2009; Hom et al., 2012). Hausknecht et al. (2009) found that "job satisfaction emerged as the primary retention factor, followed by extrinsic rewards and constituent attachments." In their report *Managing for Employee Retention*, SHRM also notes the importance of social support and extrinsic rewards, such as recognition and employee benefits, as factors in an employee's decision to stay with an organization.

Conversely, job dissatisfaction is a commonly cited reason for leaving an organization. Many contributing factors, both personal and work-related, cause employees to become dissatisfied with their jobs and organizations. According to a report from SHRM, employees

cited "respectful treatment of all employees at all levels, compensation/pay, trust between employees and senior management, job security, and opportunities to use their skills and abilities at work" as the top five contributors of job dissatisfaction. Additionally, Griffeth et al. (2000) found that the working environment, autonomy, and leadership as reasons employees choose to leave their organization.

Teacher attrition tends to follow a U-shaped curve, with younger teachers and older teachers near retirement more likely to leave the profession (Hughes, 2012). Additionally, Ingersoll (2001) found that staffing issues result from teacher migration rather than teacher attrition, especially for urban, high poverty schools. Several organizational characteristics contribute to teacher attrition and migration. School climate, lack of administrative support, workload, student discipline and apathy, lack of parental involvement, and salary are sources of job dissatisfaction and ultimately factors that cause teachers to leave their school or the profession (Hughes, 2012; Ingersoll 2001).

According to Herzberg's motivation-hygiene theory/dual-factor theory, reasons for satisfaction and dissatisfaction with a job coexist and are independent of each other (Islam & Ali, 2013). According to the theory, employees find some elements of their job motivating, which increases job satisfaction. On the other hand, some (i.e., hygiene) factors lead to dissatisfaction. For example, an employee can be satisfied with their work but dissatisfied with their working conditions (Basset-Jones & Lloyd, 2005). So, it is not enough to have engaged employees satisfied with their work to have high retention levels. Organizations also need to ensure that the "hygiene" factors such as overall organizational efficiency and working conditions are being addressed and do not become sources of dissatisfaction for their employees.

ORGANIZATIONAL SOCIALIZATION

Organizational socialization (OS) is a complex and robust process that is accomplished in many different ways. In the introduction to *The Oxford Handbook of Organizational Socialization*, OS is described as "the process through which individuals acquire the knowledge, skills, attitudes, and behaviors required to adapt to a new work role" (Wanberg, 2012). Newcomers require considerable investment in time and attention to set them up for success in a new organization. They need information to alleviate the uncertainty of joining a new organization and opportunities to build relationships to develop a social identity. How well a newcomer is socialized is up to the organization and how well it utilizes socialization tactics and activities to support the newcomer's transition into the organization and their new job role. OS is often "assessed as the extent to which one has a clear sense of the one's role and can demonstrate a working knowledge of the organization's history, language, and people" (Ellis et al., 2015).

A foundational model, still referenced and studied today, was developed by VanMaanen and Schein in 1979 (Bauer & Erdogan, 2011; Chao, 2012; Ellis et al., 2015; Saks & Gruman, 2012). They identified six tactics that operate on a continuum to socialize new employees into an

organization. This model rests on the notion that "*what* people learn about their work roles in organizations is often a direct result of *how* they learn it" (VanMaanen and Schein, 1979). These tactics can present formally, designed by the organization as part of the socialization process, or informally, naturally unfolding as the newcomer begins to interact in their new environment. The six tactics are:

- *Collective vs. individual*: Collective tactics put newcomers in groups and train/socialize them collectively vs. individual tactics, which attempt to socialize newcomers individually.
- *Formal vs. informal*: Formal tactics distinguish newcomers from other organizational members and target them specifically vs. more informal tactics where newcomers are mixed with established members of the organization.
- *Sequential vs. random*: Sequential tactics offer training and socialization to a newcomer in a series that must be completed in a specific order. Random tactics are those in which the training and socialization occur more on an as-needed basis and do not require a specific order.
- *Fixed vs. variable*: Fixed tactics have a timetable and defined transition from newcomer to accepted member of the organization. Variable tactics treat the transition to an accepted member of the organization as flexible and fluid.
- *Serial vs. disjunctive*: Serial tactics offer the newcomer a mentor or veteran employee who trains the newcomer and helps them adjust to the organization. Disjunctive tactics require the newcomer to learn specific job duties and expectations primarily on their own.
- *Investiture vs. divestiture*: Investiture tactics embrace the diversity and individuality of the newcomer vs. divestiture tactics in which the employee is expected to conform and behave in compliance with established members of the organization.
- *Tournament vs. contest*: Tournament tactics assess newcomers' ability and monitor their performance relative to others and may result in demotion (e.g., a probationary period). Contest tactics do not monitor newcomers' performance as closely nor compare them to their colleagues; they are assessed individually according to their merit.

These tactics, collectively, are used to develop a variety of OS activities. The most commonly identified and researched are orientation programs, job training, social activities, performance management, and communication (Saks & Gruman, 2012).



Many organizations offer some form of a new employee orientation as a way to communicate information to newcomers. It is important to note here that orientation, onboarding, and OS are not the same (Klein & Polin, 2012; Saks & Gruman, 2012). According to Saks & Gruman (2012), "orientation is considered to be part of the socialization process but distinct and different from socialization." Orientations are usually more technical or logistical and review the required paperwork and inform the new employees of important organizational policies and procedures (Bauer & Erdogan, 2011). Employee orientations also involve fewer people than onboarding and OS and have a much shorter timeline. Orientation programs have generally been found as effective, especially in lowering newcomer stress, sharing crucial organizational information, and contributing to overall OS success (Saks & Gruman, 2012).

Many jobs require some level of training by the organization, and when necessary, organizations train new employees on the specific procedures required to perform their new job (Saks & Gruman, 2012). Training programs help the organization set clear performance expectations to maintain standard operating procedures and organizational culture and values. Formal training programs can positively influence newcomers' self-efficacy, provide role clarity, and lower their uncertainty (Saks & Gruman, 2012).

Often, organizations will plan social activities to provide an opportunity for newcomers to begin to develop relationships with their colleagues. These are often more informal and involve what Saks and Gruman (2012) refer to as "socialization agents." Socialization agents are "individuals who help to facilitate the adjustment of newcomers through various actions such as providing information, feedback, resources, and so on." They are often the newcomer's colleagues they work most closely with, and they provide the social support the newcomer needs to adjust to the new working environment. As new employees are welcomed into the organization, activities should be planned that acknowledge and celebrate their arrival and strategically facilitate relationship-building to address the newcomer's professional and personal needs (Klein & Polin, 2012).

Essential to a newcomer's success is performance management. To quickly adjust to their new job role and demands, newcomers need feedback on their job performance from their colleagues and supervisors. Often organizations have a specific performance management plan

for new employees (Chao, 2012; Klein & Polin, 2012; Saks & Gruman, 2012). While newcomers receive feedback from their peers, their immediate supervisor's feedback is necessary to alleviate the newcomer's concerns and build their self-efficacy.

Furthermore, embedded throughout all of these activities is communication. Newcomers need a lot of information and usually have many questions, so frequent and timely communication from the organization is necessary for OS to be successful. Communication should not be one-way (organization to newcomer). It is essential to establish two-way dialogue, so newcomers have an opportunity to ask questions and seek out needed information (Klein & Polin, 2012). Managers, human resource personnel, and socializing agents all play a role in communicating with newcomers and providing them the information they need throughout their onboarding experience (Klein & Polin, 2012; Saks & Gruman, 2012).

OS has an impact on both the organization and the individual, with proximal and distal outcomes. For the individual, OS can provide role clarity, perceived fit within the organization, social integration, job satisfaction, and engagement. For the organization, OS can increase new employees' productivity, contribute to talent retention, and help an organization maintain strong organizational culture and values. Ultimately, for OS to have the best possible outcomes, organizational socialization needs to be viewed as an ongoing process that should reduce newcomer uncertainty, integrate the newcomer into the organization, and build newcomer self-efficacy.

SOCIALIZATION IS AN ONGOING PROCESS

Organizational socialization is an ongoing process that starts before the newcomer enters the organization and continues as the newcomer adjusts to and settles into their new role. OS should begin prior to the newcomer joining the organization and should continue through the onboarding period and include employee follow-up and program evaluation (Saks & Gruman, 2012). At different stages of newcomer adjustment, the organization should focus on providing the necessary tools and information the new employee needs to be successful (Saks & Gruman, 2012). The organization needs to be proactive in providing the necessary information prior to and upon entry to the organization to alleviate newcomer anxiety, then begin to provide the social and work-related resources the newcomer needs for a successful transition (Klein & Polin, 2012; Saks & Gruman, 2012).

REDUCE NEWCOMER UNCERTAINTY

The uncertainty reduction theory posits that individuals need to reduce the uncertainty that comes with interacting with new people or in new environments (Chao, 2012). One way to accomplish this is through organizational socialization. Applied to OS, this theory influences how newcomers interact with their colleagues and supervisors to gain information. On the flip

side, organizations need to be proactive and organize activities to reduce uncertainty for newcomers. Uncertainty reduction should also occur prior to and upon entry to the organization. It can be accomplished through various socialization tactics and activities. Orientation and training programs, performance management, communication, and social events can provide the opportunity for newcomers to acquire the information they need to reduce the uncertainty of their new environment.

INTEGRATE NEWCOMER INTO THE ORGANIZATION

Along with alleviating uncertainty, OS needs to address the newcomer's social/psychological needs when they join the organization. Human beings need to belong, especially in groups, to gain access to shared resources. This is true of newcomers to an organization and the foundation for two other theoretical models underlying OS, social exchange theory and social identity theory (Chao, 2012; Saks & Gruman, 2012). Social exchange theory is a way to describe how individuals interact within and with their environment. Through the lens of OS, organizational rules for how colleagues interact with each other influence newcomer relationships and job performance. Positive social exchanges can reduce uncertainty and increase employee engagement. All of which contributes to the newcomer developing a social identity within the organization. This happens as the newcomer begins to identify and align with others that are perceived positively and have shared goals and values. The social exchanges that occur help develop the newcomer's social identity with the ultimate goal of reducing uncertainty and allow the newcomer to gain a sense of belonging in the organization. As social relationships progress, newcomers gain a sense of loyalty and commitment to the organization (Bauer & Erdogan, 2011; Chao, 2012). This is also an opportunity to use OS to reinforce organizational goals, culture, and values (Chao, 2012; Klein & Polin, 2012). Uncertainty can be reduced by sharing stories and organizational history that communicate to the newcomer behaviors that are rewarded and valued by the organization, further integrating them into the organization.

BUILD NEWCOMER SELF-EFFICACY

One of OS's primary goals should be to provide the information and resources needed for the newcomer to gain the confidence that they can be successful in their new role. According to Ellis et al. (2015), self-efficacy can impact the socialization process, "which suggests that newcomers may react differently to their environments depending on their levels of self-efficacy." Self-efficacy can impact both the distal and proximal OS outcomes and contribute to a newcomer's sense of belonging, job satisfaction and performance, and organizational commitment (Bauer & Erdogan, 2011; Ellis et al., 2015).

According to Friedman (1999), three domains influence professional self-efficacy: task, interpersonal, and organizational; all of which can be influenced by how well the newcomer is

socialized into the organization. The task domain references the technical aspects of the job often addressed through orientation and training programs. The interpersonal domain encompasses the personal and professional relationships the newcomer can build through OS activities and the social capital resources available to the new employee. Lastly, the organizational domain refers to how the newcomer perceives their role and influence in the organization. Through OS activities, as the newcomer develops role clarity and begins to understand how they fit within the organization, they can recognize how their behavior and performance has the potential to impact organizational policies and performance.

RESEARCH QUESTIONS

THEORY OF ACTION

This study was focused on understanding how onboarding practices can improve employee engagement and retention. The theory of action is: If onboarding prepares employees to be successful in their first year on the job, addresses factors that lead to job dissatisfaction, and promotes employee engagement, then retention rates will rise, leading to improved academic outcomes for students. To investigate this claim, the guiding research questions were:

- RQ 1: What supports exist to help new employees address challenges and become engaged with the organization?
- RQ 2: What are the job challenges and sources of dissatisfaction for employees as they move into their third through fifth years on the job?
- RQ 3: In what ways are new employees being onboarded into the organization at the department/school level?

DESIGN AND METHODS

To conduct a thorough analysis to answer the research questions and make recommendations to improve onboarding in MNPS, existing data was provided by the district and new data was collected through employee interviews. As a result, this was a mixed-methods quality improvement study, using quantitative and qualitative data and analysis.

EXISTING DATA

The district provided individual school retention data and school climate survey data from the Panorama Teacher and Staff Survey. Individual school achievement data was retrieved from the Tennessee Department of Education. As a result, this was a school-level analysis to provide organizational context and test the theory of action that improving retention rates will improve student outcomes. The three data sources were combined and analyzed to examine the

relationships between climate (related to job satisfaction/dissatisfaction for teachers), retention, and student achievement.

Data for all three variables were available for the 2017-2018 school year ([Appendix A](#)). The retention data was reported as the percentage of teachers that chose to stay at their current school at the end of the school year. The school climate data was reported as the percentage of teachers that scored "favorable" in several categories: school resources, school leadership, overall school climate, feedback and coaching, staff-leadership relationships, and teacher efficacy. Achievement data from the TNReady state standardized assessments for English language arts (ELA) and math were also included in the analysis. Composite ELA and math scores were reported for elementary and middle schools as the percent of students who scored "on-track" or "mastered." However, a composite ELA and math score had to be created for high schools. Data from end-of-course exams for English 1, 2, and 3 and Integrated Math 1, 2, and 3 were combined and averaged to create the high schools' composite scores. Schools at all tier levels with less than 5% of students scoring "on-track" or "mastered" were not reported by the state, so the midpoint of the range, 2.5%, was assigned. For ELA, this value was assigned to two elementary, one middle, and one high school. For math, this value was assigned to five elementary, four middle, and seven high schools. Early learning centers and a few district specialty schools were not included in the analysis due to not having either climate survey data, academic achievement data, or both. One hundred twenty-one schools were included in the analysis (70 elementary, 32 middle, and 19 high schools).

Descriptive statistics were run for each variable using the data analysis tool pack in Microsoft Excel. Then, linear regressions were run in the statistical software, R. The regressions were used to examine the school-level relationships between school climate and teacher retention, teacher retention and student academic achievement, and school climate and student academic achievement.

The district also provided data from the district employee exit survey ([Appendix B](#)). The survey is voluntary for exiting employees to complete, and there were 568 survey responses from certificated, school-based employees across all tier levels from April 2015 to April 2020. Estimating the district loses about 800 certificated employees per year, over five years, this represents roughly a 7% response rate. The data was provided in a Microsoft Excel spreadsheet, each row representing one employee and their responses to each survey question. There were three closed-response questions, two of which were relevant to this project—the participants were asked to indicate why they chose to leave MNPS and about the next steps in their careers. The participants were asked to answer both of these questions, "check all that apply," from a predetermined list of options. The remaining questions were open-response. All questions were optional, and outside of providing their name and school, no demographic data was provided and attached to the survey responses.

Data from the district employee exit survey was used to gain insight into job supports, job dissatisfaction, and what factors contributed to employees leaving the organization. The closed-

response questions on the survey were analyzed using Microsoft Excel. The responses were calculated to determine the top reasons for leaving the district and the top responses to the next steps. The open-response questions were reviewed in a qualitative data software tool, Dedoose, to identify patterns and connections to answer the research questions. The spreadsheet was uploaded to Dedoose, and each question automatically categorized the responses. Each question's specific responses were read collectively to identify patterns and shared experiences and sentiments among the exit survey participants. The responses were listed and tabulated for each occurrence, then ranked in order from most to least occurring ([Appendix C](#)).

NEW (QUALITATIVE) DATA

Interviews with employees and managers across all levels of the district were completed to understand the onboarding experiences of district employees, determine what supports are needed for employees to feel successful in their work, and identify factors that contribute to job dissatisfaction. Two interview instruments were created, one for managers and one for employees. Managers and employees were asked a series of questions related to job role and expectations, employee engagement, job challenges, and onboarding experiences ([Appendix D](#)). The interview questions were determined based on collecting the information needed to answer the research questions and themes from the literature's theoretical foundations for employee engagement, retention, and organizational socialization.

The target population was school-based and central-office employees with 3–5 years of experience in their current role and managers with a minimum of 3 years in a managerial role (having a team of direct reports). Nationally, teacher turnover tends to follow a U-shaped curve, and younger teachers have higher turnover rates than teachers who are mid-career (Ingersoll, 2001). MNPS has experienced this locally, and it is within this 3 to 5-year range teachers in MNPS leave the district at higher rates; that is why employees within this target range were interviewed. The goal was to interview 21 employees from 3 categories: teachers at each tier level (elementary, middle, high), school-based support employees, instructional and operational central-office employees, and ten managers: half school-based managers (principals, assistant principals) and half central-office managers/directors. In the end, 20 employees and 13 managers were interviewed for a total of 33 interviews ([Appendix E](#)).

The participants were selected from a list the district provided of employees that met the predetermined criteria of years of experience and position. The list was organized by category (employee or manager), location (central office or school), type of employment (instructional or support/operational), and tier level (district, elementary, middle, high). This process created sub-categories, and within each of these sub-categories, the list was randomized. Employees from the top of the list, then moving down, were individually emailed to participate in the study. If a selected employee did not respond after one week, one reminder email was sent before emailing

an invitation to participate in the study to the next employee on the list. Several rounds of invitations were sent to achieve the desired number of interviews.

Category/Location	Type/Tier	Total
School-Based Managers	2 elementary principals 3 middle school principals 1 middle school assistant principal 1 high school principal	7
Central Office Managers	4 instructional supervisors 2 support supervisors	6
School-Based Employees	3 elementary (2 instructional, 1 support) 5 middle school (all instructional) 5 high school (3 instructional, 2 support)	13
Central Office Employees	4 instructional 3 support	7
		33

Tier	Percent Economically Disadvantaged (range)	Quadrants	
Elementary	15.3%–43.6%	Southwest Northeast	Southeast
Middle	23.1%–62.1%	Southwest Northwest	Southeast Northeast
High	6.7%–61.9%	Southwest Northeast	

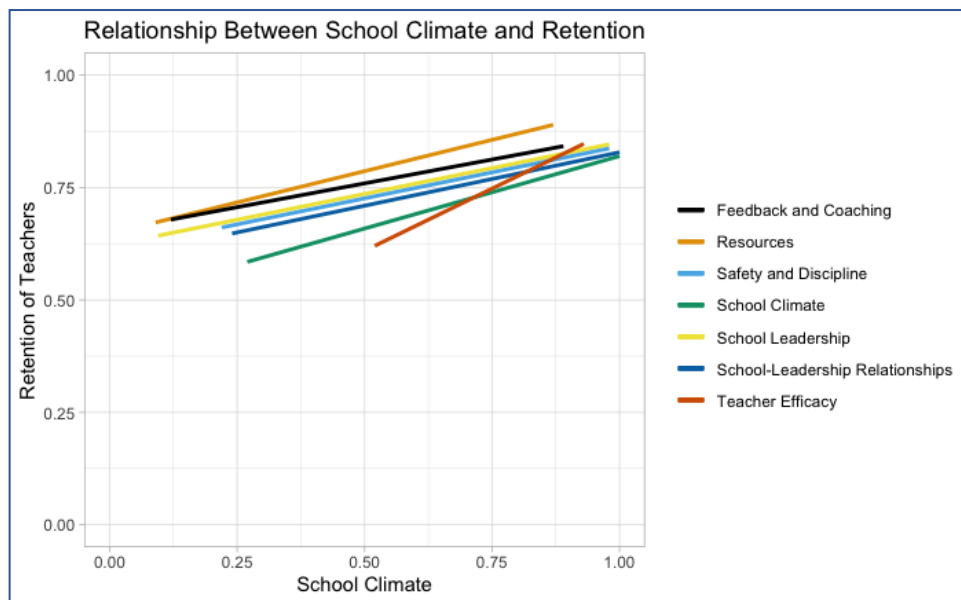
Once participants agreed to the study and signed the consent form, they chose the interview date and time and signed up via an online calendar tool, Calendly. Once confirmed, they were emailed the Zoom meeting information and link via email and calendar invite. All interviews were conducted via Zoom, a video conferencing platform, and each interview was recorded and transcribed. The interviews occurred between April 27, 2020 and June 11, 2020. They totaled just over 24 hours and averaged 44 minutes in length. The transcriptions were uploaded to the qualitative data analysis software tool Dedoose, and were reviewed and coded to identify patterns and connections to answer the research questions ([Appendix F](#)). The codes were created based on the interview questions related to the study's research questions and theoretical foundations. Once all the transcripts were uploaded, each transcript was read individually, and excerpts highlighted that were indicative of each code. Once all transcripts were coded, then the specific excerpts for each code were read collectively to identify patterns and shared experiences and sentiments among the interviewees. The responses were listed and tabulated for each occurrence, then ranked in order from most to least occurring ([Appendix G](#)).

FINDINGS

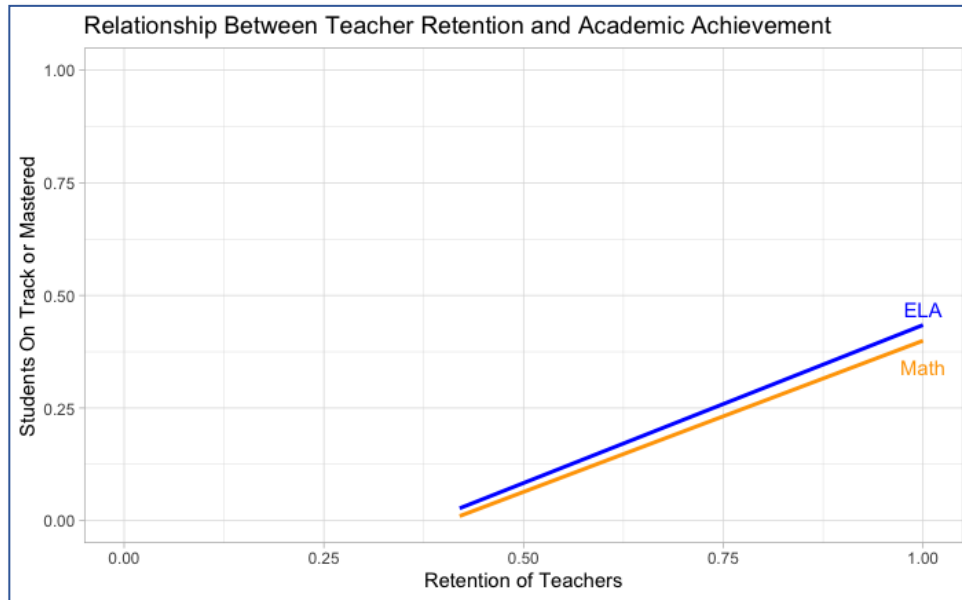
THEORY OF ACTION

Foundational to answering the research questions was data to support the theory of action; If onboarding prepares employees to be successful in their first year on the job, addresses factors that lead to job dissatisfaction, and promotes employee engagement, then retention rates will rise, leading to improved academic outcomes for students. It was predicted that a positive school climate would increase teacher retention and that increased teacher retention would improve students' academic outcomes. The quantitative data analysis showed statistically significant positive linear relationships between the variables ([Appendix H](#)). The predicted relationships were confirmed:

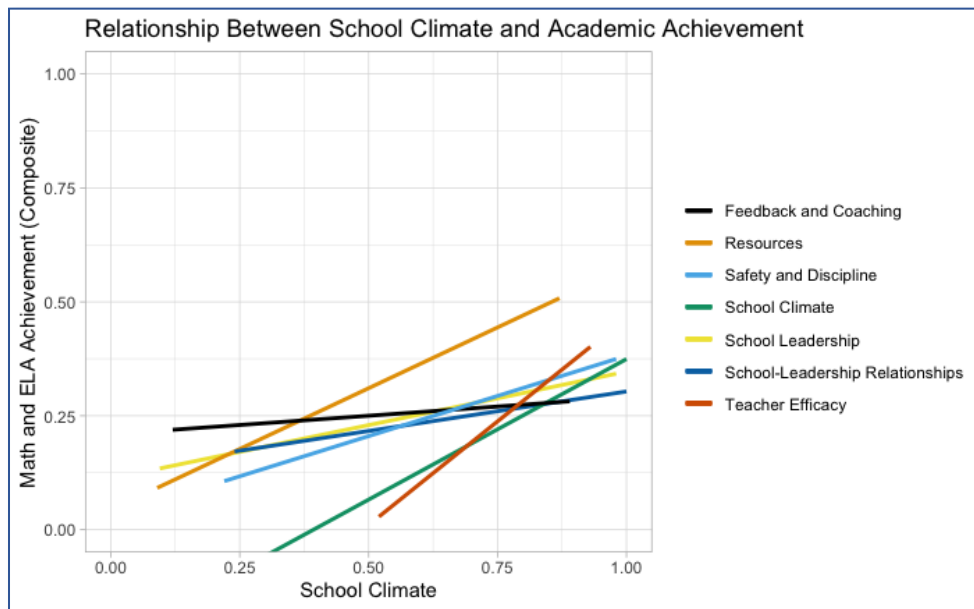
- The higher the percentage of teachers at the school that reported a favorable school climate, the higher the teacher retention rate for the school.



- The higher the teacher retention rate, the higher percentage of students that scored “on-track” or “mastered” on state standardized assessments in English language arts and math.



- The higher the percentage of teachers that reported a favorable school climate, the higher percentage of students that scored “on-track” or “mastered” on state standardized assessments in English language arts and math.





These findings supported the theory of action. If onboarding improves retention, the data tells us that will lead to improved outcomes for students. School climate data can identify sources of dissatisfaction for teachers and be proactively addressed in onboarding and socialization processes. The average rating of climate categories (lowest to highest) was: resources, feedback and coaching, school leadership, safety and discipline, and overall school climate.

RESEARCH QUESTION 1

WHAT SUPPORTS EXIST TO HELP NEW EMPLOYEES ADDRESS CHALLENGES AND BECOME ENGAGED WITH THE ORGANIZATION?

Research question one is a primary aim of onboarding processes—supporting new employees so they are successful and productive in their new job role and engaging them in the technical and social aspects of the organization.

FINDING 1: VERY FEW SUPPORTS EXIST FOR NEW EMPLOYEES TO BE SUCCESSFUL IN THEIR FIRST YEAR ON THE JOB

Data from the interviews and exit survey showed that employees do not receive adequate support their first year in MNPS. One teacher stated in their interview, *"It felt like there was pretty much zero support. I definitely felt like an island on an island on an island, you know."* Additional support for this finding comes from a school-based support employee that described their first year with *"You're just thrown out to the wolves."* Another employee commented in the exit survey, *"My fellow teachers were very helpful when I started, but there was little guidance from administration. A specified teacher or administrator to help me in the first few weeks would have been incredibly beneficial; someone to answer my questions and give me advice."* This is not to say that employees did not seek out the support and help they needed, but that it was not readily and automatically available to new employees through established policies and procedures.

The only consistent source of support identified in both the interviews and exit survey data were colleagues. Everyone interviewed had one or more colleagues they could identify that they would frequently go to with questions or when they needed help. Based on the interviews and exit survey data, this support came from team members, district coordinators, instructional coaches/specialists, and school or district administrators, as evidenced by this comment from the exit survey, *"The most support received was from my teams (both kindergarten and first grade). Since we plan together and share resources, we were able to all support each other as best as*

possible. We were able to discuss strategies, data, and changes. They were the best support. Another great support system is our literacy coach and math coach, (name) our literacy coach, has gone above and beyond for every grade level in our school. She fights for us, hears us out, plans with us, helps us find resources, and clears up any confusion we might have. Without the support of our coaches, our team would have struggled even more than it already has." This sentiment among teachers is consistent with the fact that all of the managers indicated in their interview that they rely on school or team personnel to provide support to new employees.

In the exit survey, the top responses to the question "What additional help would you have liked to receive?" were administrative support, classroom/school discipline, onboarding, and mentoring. This is supported by exit survey and interview data in which employees commonly cited not receiving adequate training in and access to required software tools, curriculum, and commonly used procedures (e.g., requesting time off, requesting a substitute teacher), *"I did not receive proper training on Infinite Campus, Schoology or the how to write referrals."* For teachers, classroom management and discipline were other areas in which they did not feel adequate support. In the exit survey data, discipline was a common source of dissatisfaction, and teachers did not feel supported by school administration or district policies, *"I felt like I was hesitant to discipline a child or refer students to the office because I was afraid it would come back to me as some failure on my part."*

Additionally, the teacher interviews and exit survey indicated that teachers wanted to receive specific content related support and coaching. Teachers indicated a preference for having a mentor that teaches the same subject or grade as them. They appreciated having someone to go to with questions but also wanted that person to support their understanding and implementation of the curriculum. This comment is reflective of the sentiment, *"But it was difficult for her to know what to do because she was used to working with a different population."*

Managers also identified the need for resources and guidance to provide additional support to new employees; as evidenced by these two quotes from the manager interviews, *"It would be helpful to have a playbook of sorts, like here are best practices in onboarding, you know, and it's not just the onboarding, it's the development of structures and systems that support the employee and you know that help you as a manager"* and *"Each school makes it up on their own like each school is doing something different. It's up to each leadership team to figure out and I'm all for some autonomy, but maybe like best practice resources, recommended structures, meeting agendas like for monthly meetings, bringing new teachers together like things like that would be really, really helpful. So that we're not just like making it making it up on the fly or charged with doing all of this research to make sure that we're like following best practices."*

When managers were asked what help they need related to ongoing support for employees, they requested a wider variety of internal professional development opportunities or money for external opportunities, opportunities for teacher leadership and input, and for the district to remove unnecessary tasks/work and reduce district initiatives. As one principal stated, *"Yes, I think that there needs to be more professional development opportunities for*

teachers because when you think about it, for example, I have a teacher who's been a teacher for maybe 15 years and so there are limited opportunities to engage in new learning for some teachers." From another principal, "I mean, I would say yes, but that just comes with less government oversight less red tape less big asks from the district ... so that we can be physically present with people instead of having to rush around," and from a district supervisor, "But if you give us a whole lot of initiatives, then there's no white space. We need space in the way we design and rollout initiatives we need space so that managers can craft things that are going to work to make their teams most effective."

FINDING 2A: INITIAL TRAIT ENGAGEMENT IS HIGH, BUT JOB RESOURCES ARE LOW, PUTTING NEW EMPLOYEES AT RISK OF DISENGAGEMENT

Most employees join MNPS or a new role within the organization with trait engagement, which is dispositional and refers to an employee having a generally positive attitude towards their work. In the interviews, the top three reasons cited for staying employed in MNPS were a dedication to team/school, the work itself/having a personal mission, and the students. The comments from interviewees and participants in the exit survey indicated that MNPS employees are intrinsically motivated and driven by a personal mission to help and support the students in the district. A high school counselor stated in an interview, *"I care a lot about young people and making sure that they feel accepted and heard,"* this comment reflects the sentiments and similar statements of all interviewees and most of the participants in the exit survey. In the interviews, reasons (i.e., "why") for engagement were contributed to having a positive school climate, a commitment to the students and families, a personal mission for the work, and feeling valued and respected by their colleagues and school/district leadership. These statements from the employee interviews demonstrate the employees' engagement, *"I also just like really believe in public service, and I went to public school and so I think it's so important to give back"* and *"They value me and the talents and what I could bring to the table to help."*

However, based on the JD-R model, when job demands are high, and job resources are low, teachers are at risk of burnout and disengagement, making it difficult for employees to maintain their trait engagement and move into state or behavioral engagement. In the interviews, when asked what factors might contribute to the interviewee leaving MNPS, lack of support and job demands were two of the top responses. New employees, especially teachers, are easily and frequently overwhelmed by the demands of the job and lack of resources, illustrated by these simple and direct quotes from the exit survey, *"I did not have enough support as a first-year teacher and it became extremely overwhelming,"* and *"I feel like I didn't get much support especially my first year. I learned to survive with teacher moral support and self-help ... Admin could have checked up on me more that first year."* Add to that, not feeling adequately supported in their first year (Finding 1), the conditions needed to sustain and advance new employee engagement, such as adequate job resources and training, are not there.

FINDING 2B: OPPORTUNITIES FOR STATE AND BEHAVIORAL ENGAGEMENT INCREASE OVER TIME

Employees with a few years of experience in their role and in the organization are in the accommodation phase of organizational socialization. They have a deeper understanding of their immediate work environment and the district as a whole. At this stage, they are also able to begin to understand how to refine their instructional practice or job responsibilities to be more effective and efficient, a form of behavioral engagement. When asked how job requirements and challenges change over time (from 1st year of employment to years 3 to 5) a high school teacher in their interview stated, *“I think that they’ve changed from how like how do I teach this content, like how do I make this content accessible and like relatable to my students, and like engaging them and not that that’s not a concern anymore because it is, but I feel like my focus now is looking at more like systemic issues like what kids are not doing well or not perceived as doing well and like what are reasons behind that. Like what are things that I can do to disrupt like problematic systemic like beliefs and patterns. So I feel like I have like a bigger picture of what’s going on. Whereas when I was a baby teacher like I yeah just trying to, like, make them learn something.”* As they gain a better understanding of the system, they are also able to gain a better understanding of their students and how they are impacted by the systems and structures that are in place. Teachers begin to feel they can more readily support the needs of their students, like this quote from an elementary school teacher *“I also think I’ve gained a better understanding of what really matters and what just looks cute.”*

As employees settle in and gain a few years of experience, they begin to seek out or are assigned additional responsibilities that engage them in their school and the district. As one teacher notes in an interview, *“I think every year that expectation goes up a little bit more, like my first year, everyone knew they didn’t tell me this, but I’m sure they knew about surviving. Yeah. They pretty much let me be, and then the second year I got more asked of me. This year I was asked to have a student teacher and to be a mentor. So I assume next year, it would go up a little bit more and then probably at the five year mark I would be given a fair amount of responsibility. Yeah.”* While this quote indicates job demands go up every year, it also demonstrates the transactional theory of stress. Once employees move out of survival mode, additional responsibilities can be perceived as challenge stressors and opportunities for engagement and professional growth. With the right challenge stressors, employees can progress to state and behavioral engagement.

The top reasons cited for how interviewees were engaged in the district were leadership opportunities, participation in district work/committees, collaboration, and building/team relationships. When managers were asked how they could be better supported with employee engagement they requested money that can be allocated to employee incentives (e.g., employee events and professional development), frequent communication from the district about opportunities for teachers/employees, and guidance in school structures that promote

collaboration. This is one area where it's worth noting the difference between responses in employees and managers. Managers responses were related to supporting their team/direct reports and developing their professional capacity, whereas, employees' responses were related to being involved in their immediate school/team communities. The difference is demonstrated in these quotes; as one employee stated *"I'm the grade-level chair and athletic director, at the school level I really just help out however I can, whatever's needed."* but from the managers' perspective, *"I'm very big on relationships and building a human capital capacity throughout the building"* and as another manager stated, *"I'm constantly trying to let them know how appreciated they are because we all know education is not always the most thankful job area and knowing that they're burning the candle at both ends. A lot of times I just, I try to grow and encourage them and model that so they can do similar things for their team members."*

RESEARCH QUESTION 2

WHAT ARE THE JOB CHALLENGES AND SOURCES OF DISSATISFACTION FOR EMPLOYEES AS THEY MOVE INTO THEIR THIRD THROUGH FIFTH YEARS ON THE JOB?

Research question two seeks to better understand the sources of job dissatisfaction and how they contribute to MNPS employees leaving the organization.

FINDING 3: JOB DISSATISFACTION RESULTS FROM LACK OF VOICE AND POWER TO EFFECT CHANGE

As employees are being given additional responsibilities and potentially increasing their engagement, that does not always translate to them feeling like they have a real voice or any power in the decision-making process. As employees settled into the accommodation phase of their work and simultaneously became more comfortable in their job roles and responsibilities, they are able to more readily identify how external forces are impacting their ability to do their job. This ranges from direct support (or lack of) from their supervisor to district and state policies that directly impact their work in the classroom or on their teams. This is illustrated by a quote from the exit survey, *"Teachers need to have more of a voice in decision making and policy creation. We should be considered experts in our field, but we are treated by administrators and district leaders as if the adage is true, If you can't do, teach. I have never heard of a more ridiculous saying than that one. Teaching is an art. Many teachers spent thousands of dollars and many years to develop their art, however, when it comes to making decisions about what is best for students, teachers are treated as if we don't have a clue. Teachers don't teach for the money, we teach because of our love and passion for students and learning. Why not use that passion to guide decision making overall? We want our voices heard"*

because it is so rare that someone in power actually asks what we believe is best for the students.”

This is also reflected in the interviews, when asked what factors might contribute to the interviewee leaving MNPS, one of the most common responses was related to personal integrity. Many of the interviewees indicated they would leave if they were asked to compromise their beliefs and go against what is best for the students in their care, as two interviewees stated, *“There are moments that I get frustrated that I don’t like the way we’re doing something. I get through that. I don’t feel like I’m ever asked to do anything that’s not ultimately in the kid’s best interest. And that’s what would push me away from it, if I were being asked to do something that was ethically wrong for kids or adults,”* and *“If we’re not allowed to stay on mission because of the influence of political forces, then that could be it for me.”*

As teachers begin to better understand the needs of their students, they can identify how the current structures and supports help or hinder their ability to meet their students’ needs. Add that to their feelings of being unheard, undervalued, and excluded from the decision-making process and teachers begin to experience increasing levels of job dissatisfaction. As two employees stated in their interviews, *“We will put up with much less pay and much worse conditions if we feel like we are known and valued in our work. So I would say being known and being communicated with in a way where you feel valued I think that’s the key to job satisfaction and that’s the key to job dissatisfaction”* and *“That’s frustrating, like the feeling that like being promised that something is changing, and then it never does.”* This quote from an exit survey participant was indicative of many of the responses as well, *“If MNPS valued the voices of their teachers I would have stayed.”*

FINDING 4: ORGANIZATIONAL BEHAVIORS CAN CREATE JOB CHALLENGES THAT LEAD TO JOB DISSATISFACTION

MNPS employees generally have realistic expectations of their work; the primary source of dissatisfaction comes from organizational behavior, intentional or not. Employees are dissatisfied with the support and resources they receive to do their job and do not feel valued or respected for their contributions and efforts (Finding 3). This sentiment appeared among the interviewees and in the exit survey, which indicates that sources of job dissatisfaction are more generalized, are directly connected to organizational behavior, and can ultimately overpower engagement.

While there were several different job challenges identified, constant change in policy, lack of support and training, and time management were common across all employee categories. These job challenges can be categorized as hindrance stressors according to the transactional theory of stress (Crawford et al., 2010) and therefore contribute to job dissatisfaction. When asked to categorize the nature of job challenges, organizational processes related to scheduling, class size, caseload ratios, expanding job roles (adding responsibilities and

never taking any away), student discipline and placement, and imbalance in needs versus resources were cited across the board. As one employee pointed out in their interview, *“I feel like the district asks a lot of things of us and like things they want us to add to our plates. They don’t really take things off of our plates...”* Next, employees associated job challenges to communication. Specifically citing a general lack of communication from district leadership and district transparency, not feeling heard, and constant changes in expectations related to changes in district/state policies and initiatives. This is reflected in this comment from an interviewee, *“Like when things happen that affect my daily life or affect my job role and I’m not told about it by my leadership, and instead someone else is like I heard you’re doing that now and I don’t know how to respond because I haven’t been given that directive yet.”* Lastly, job challenges were attributed to a knowledge gap due to a lack of training in curriculum, district/school policies and procedures, and communication and software tools. One of the interviewees in a support position at the school level stated, *“I am a big advocate of training others. So, maybe like paraprofessional trainings, because none of that is really received.”* This comment from a teacher demonstrates their frustrations, *“I also think it would be helpful if at a higher level, there was more consistency in what we were doing.”* From the managers’ perspective, *“But if we also had more opportunities to get reimbursed for getting professional development from people outside of Metro Schools. I think that would really help with people feeling more comfortable and more expert in their role.”*

In the exit survey when asked “Why did you choose to leave your teaching position?” two of the top four reasons for leaving MNPS were school climate and dissatisfaction with current school administration (the other two were personal reasons and had another job offer). This relates directly back to the theory of action and the positive linear relationship between school climate and teacher retention. Based on district data, a positive school climate can increase teacher retention and student achievement. The top three lowest-rated categories on the climate survey were resources, feedback and coaching, and school leadership. This suggests that not feeling adequately supported, through the resources they are given to do their job and the support they receive from school administration, is a source of job dissatisfaction, which is a result of organizational practice(s), and does not only apply to new employees (Finding 1).

RESEARCH QUESTION 3

IN WHAT WAYS ARE NEW EMPLOYEES BEING ONBOARDED INTO THE ORGANIZATION AT THE DEPARTMENT/SCHOOL LEVEL?

Research question 3 was intended to better understand what onboarding looks like at the school or department/team level; what the employee experiences outside of the district level processes.

FINDING 5: ONBOARDING AT THE SCHOOL/DEPARTMENT LEVEL VARIES WIDELY AND OFTEN DOES NOT ADDRESS THE UNIQUE NEEDS OF A 1ST YEAR EMPLOYEE

Employees did not feel adequately prepared to begin their jobs on day one. Even after her onboarding experience, a high-school teacher still felt unprepared for the first day of school; she recalled, *“But all that being said, like I remember kind of feeling like I still don't know like what to expect. I don't quite know what I'm supposed to do with my kids on day one, like, as far as like communicating you know, building level expectations for students and like explaining to them how their school day was going to work. So I remember kind of feeling dizzy by all of the kind of moving parts.”* Every employee and manager interviewed all described a different onboarding process at the team or school level. The new employee was often onboarded through regular routines and procedures that every employee receives, and little additional support was explicitly provided for new employees. One teacher spoke of her onboarding experience at a charter school, contrasting it to her onboarding experience at her current school, *“It was also helpful to hear like the school's history and the school's mission. And here's what our demographic looks like just those really basic questions that you wouldn't know if you hadn't been there before.”* Employees consistently cited needing more training and support for organizational policies and procedures and specific job role responsibilities. They often turned to their co-workers for support. However, they indicated they would feel more comfortable with a more formal process in place; as one teacher indicated in the exit survey, *“I would have benefited from a mentor teacher for the first two years then I'd probably would have been back for a third year. The person that was made available to me had her own caseload and wore many many hats which prevented her from ever really sitting down with me to explain things. She did what she could it just wasn't enough.”* When asked what additional help would you have liked to receive, onboarding and mentoring were two of the top four responses in the exit survey.

Even though the onboarding processes were all different, there were some similarities. The most common practices cited by managers and employees were check-ins (formal and informal), assigning a mentor, and having a new teacher/employee meeting. During the onboarding process, employees identified their colleagues or mentor, check-ins, and HR support/follow-up as the most helpful. The most commonly identified needs cited by interviewees during onboarding were having a mentor, the need for additional training in software tools and policies and procedures, and specifically from teachers, content and curriculum-related support. While many of the interviewees and exit survey participants indicated having a mentor, which was helpful, this was not everyone's experience. Many teachers stated the need for one, whether because they did not have one and felt it would have beneficial or because they had one and thought all teachers should be assigned one. The teachers also indicated a preference for having a mentor that teaches the same content or grade level, *“but it wasn't really helpful, they have mentors, um, which in theory is a good thing that I had a mentor but my mentor was the kindergarten teacher so she could only help me so much, it would have*

been more helpful to have someone who was actually assigned to be my mentor who was on my grade level and knew what was going on.”

For school-based support positions, there was a general lack of connection to the broader school community. Interview data indicated no formal process to onboard support employees, such as teaching assistants or school psychologists, into the school community. Many support employees described just showing up at their assigned schools and were on their own to integrate themselves into the school community. The experience reported by one of the school psychologists seems indicative of the larger population of support employees, *“I think there were like one or two days that we were like in our schools which was the first week before kids come back and so like if you've been there a couple of years, you've got stuff to do you know you've got like your office to set up or your things from the summer to clean up or whatever. But I had no computer. I had no office. I'd never met anyone in any of my schools before and I didn't know how to even if I had a computer didn't know how to use it because like I couldn't log into anything and I ended up just like hanging out with another psychologist.”*

When managers were asked what additional supports they needed relating to supporting new employees, the most common responses were an onboarding handbook or guidance in best practices with clearly defined processes outlined, timely access for employees to necessary communication/software tools, and frequent updates from HR regarding the status of newly hired employees, *“Each school makes it up on their own like each school is doing something different. It's up to each leadership team to figure out and I'm all for some autonomy, but offer best practice resources and recommended structures, meeting agendas like for monthly meetings, bringing new teachers together like things like that would be really, really helpful so that we're not just like making it up on the fly or charged with doing all of this research to make sure that we're like following best practices.”* A few managers had a very formal and detailed process for onboarding new employees; however, that was not the case for all managers. Most of the managers relied on processes already in place for communicating with all employees and faculty/team members to acclimate new employees to the organization. However, all managers seemed genuinely interested in wanting to better support new employees.

FINDING 6: EMPLOYEES ARE UNIFIED IN A COMMITMENT TO THE STUDENTS OF MNPS, BUT ARE NOT UNIFIED BEHIND A COLLECTIVE MISSION OR VISION

Very few employees could recite or even paraphrase the district's or their school/team's mission and vision. In fact, despite managers indicating they communicate their mission/vision in multiple ways in their interviews, it was lacking in all onboarding experiences for the interviewees (Finding 5). 29 of the 33 interviewees did not know the district mission or vision statement, a few sample responses to the question were, *“What is the districts? That's interesting. I don't know,”* and *“I know that the gist of it is around good outcomes for kids academically and social and emotionally. I can't quote it verbatim because it's changed a bunch*

of times.” That was more mixed when asked about their school/team’s mission and vision statements; about a third knew the gist, a third could state the mission or vision, and the final third did not know their school/team’s mission or vision statement. It is important to note that this is complicated by the change in district leadership about a year and a half ago. There was confusion about whether or not the previous superintendent's mission/vision was still in place or if the new superintendent had instituted a new mission and vision for the organization.

The desire to serve and support the children of MNPS was common across all employment categories in both the exit survey and interviews. However, employees are driven by a personal, rather than collective, mission, as expressed by these quotes from employee interviews, *“I think what keeps me engaged is seeing that the work that I’m doing matters”* and *“I guess that’s really more like a personal drive type of thing. I just have for so long, worked with individuals with severe disability and behavior issues that I just like personally have a drive and passion to help them as best I can.”* Employees did not appear confident that a mission and desire to help the students in MNPS exists at all levels of the organization (Finding 3). In both the interviews and exit survey data, there was a general sense that MNPS employees do not feel valued and heard and they have to adapt to continually changing state/district initiatives. Those two factors combined make it difficult for teachers to identify and buy into a collective mission that supports all students in MNPS that moves the organization forward.

DISCUSSION

Based on these findings, there are both technical and adaptive challenges that MNPS needs to address to create a robust onboarding process that will lead to employee retention.

The technical challenges are related to employees having the equipment, accounts, and training they need to feel prepared to begin their job on day one. This involves multiple departments within the organization. New employees need timely access to the necessary communication and software tools they are required to use. In addition to access, they need to be trained in using the software as well. Basic training needs to be provided prior to or upon entry into the organization, with ongoing training as needed throughout the first year of employment. Additionally, new employees need to know what resources are available to them and how to access and utilize them effectively to do their job. Managers need to be trained on best practices in onboarding and learn how to build a support system within the systems and structures they have in place to meet the unique needs of new employees.

The adaptive challenges are related to the district unifying behind a collective mission and creating a positive district and school climate in which teachers feel supported to adequately meet their students' needs. Ongoing leadership development is necessary to cultivate and maintain a positive working environment and build a culture around the district's vision and mission to meet organizational goals.

RECOMMENDATIONS

RECOMMENDATION 1

UPDATE AND COMMUNICATE A DISTRICT MISSION AND VISION, AND TIE MISSION AND VISION TO ALL DISTRICT INITIATIVES TO FACILITATE STAKEHOLDER ENGAGEMENT AND BUY-IN

Generally speaking, educators are an intrinsically motivated group, which is true of the employees within MNPS. While they are individually motivated by a personal mission and passion for the work, they are not tied to a collective mission set forth by the organization. This disconnect creates distrust between the employees and district leadership and prevents employees from fully embracing and implementing district initiatives.

MNPS leadership needs to determine a district mission and vision, developed with teacher and stakeholder input, and communicate it frequently to the entire MNPS community. The rationale for district initiatives needs to be tied back to the mission and vision, and schools and departments should align their mission and vision statements with the district.

RECOMMENDATION 2

CREATE A FORMALIZED COACHING PLAN FOR 1ST AND 2ND YEAR TEACHERS THAT TRANSITIONS TO MENTORING BY 3RD YEAR

A common theme among interviewees and exit survey participants is the struggle and overwhelming demands of being a first-year teacher. First-year teachers are overwhelmed by daily job roles and responsibilities and overwhelmed by organizational processes and procedures. To combat this issue and provide the necessary supports for first-year teachers, the district should create and implement a formalized coaching plan for teachers during their first two years of employment. Halbesleben (2010) found that the “development of employee resources is the best mechanism for organizations to consider as they focus on engagement-development interventions.” The new teacher coaching framework should include training on the required district communication and software tools, curriculum and instructional resources, and classroom management. This process should also provide support to 1st-year teachers in district and school policies and procedures.

As the teachers move into their third year, this should transition into a mentorship program that provides targeted support and training to help teachers achieve their short and long-term career goals. All of the managers spoke to providing differentiated support for their employees based on individual needs. As the teachers move into their third year and are ready to

take on additional roles and responsibilities, engagement opportunities can be aligned to the teachers' interests and goals.

This focused attention for new teachers can also contribute to building the teachers' self-efficacy, which, according to the quantitative analysis of the district data, has a positive relationship with student achievement. Halbesleben (2010) also notes that, in addition to job resources, self-efficacy contributes to an employee's state of engagement. This targeted support can move teachers beyond trait engagement to state and behavioral engagement.

Several years ago, the district had a loose version of this in place, the PALS program. The "PALS" were a small group of mentors (mostly former and retired teachers) that were assigned a group of teachers to meet with and support them in their first year in the district. The PALS program, while formal in structure, was informal in practice. The PALS did not have specific information or learning goals for the new teachers. The new teacher coaching framework would be formalized in both structure and practice. The district has a coaching network in place, and this initiative could be an adjustment to or expansion of that network. Most schools already have coaches in the building that could be trained to implement the new teacher coaching framework and guide new teachers through their first two years. Then in their 3rd year, the new teacher could be transitioned to a mentor to further their professional development.

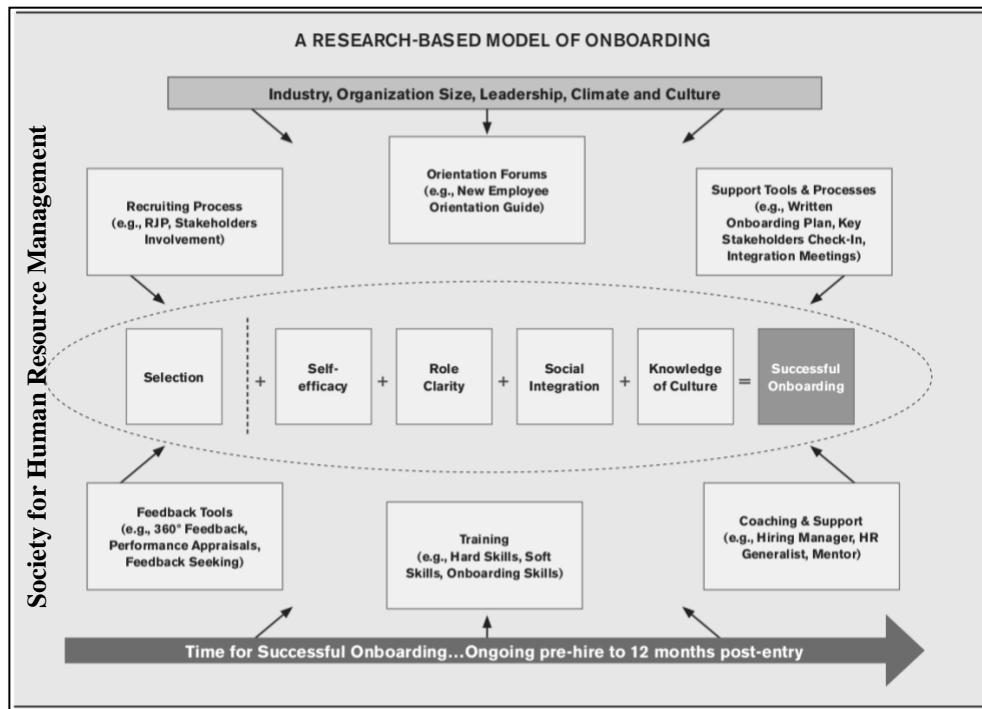
RECOMMENDATION 3

CREATE ONBOARDING TEAMS AT THE SCHOOL AND DEPARTMENT LEVELS

The district should support schools and central office departments in creating onboarding teams and provide guidance for creating a school or department/team-based onboarding program. District leaders should identify a small group of team, faculty, and staff members that can serve as the onboarding team to support newcomers to the team, school, or department. This team should be representative of the school or department community, and leadership should be directly involved in forming the team and guiding and planning the onboarding team's strategic initiatives.

These teams should coordinate and plan a new employee orientation and ongoing check-ins and support throughout the employees' first year. The team members can serve as a resource to the new employees and make sure new employees stay up-to-date with school/district happenings and have access to the resources they need to do their jobs. This team can serve to proactively meet a new employee's unique needs, rather than forcing new employees to seek out and search for the support they need on their own. Depending on the school's amount of turnover, this could be an entity in and of itself or integrated with the school's professional learning plans. This team can also support employees that are hired after the school year has started or mid-year.

The human resources department should adopt the onboarding framework from the Society of Human Resources and use it as the foundation for creating district-wide onboarding guidelines managers can use (which can overlap with the new teacher coaching framework). Additionally, the district can use Klein and Polin's (2012) Inform-Welcome-Guide checklist and the Socialization Resources Theory developed by Saks and Gruman (2012) to create a more comprehensive checklist hiring managers and onboarding teams can use to develop a thorough plan for integrating new employees into MNPS. Onboarding teams and district leaders should be trained in the onboarding framework and processes and provided data for continuous improvement in onboarding and supporting new employees.



RECOMMENDATION 4

IMPLEMENT A SCHOOL-BASED NEW EMPLOYEE ORIENTATION

The New Teacher Academy should continue at the district level but should be extended to include time at the building level with the newly created onboarding team and school administration. This orientation should occur before the rest of the faculty reports for the school year. Ideally, it should be required, and participants should receive a stipend or comp time. This is an opportunity for teachers and support staff to be given more detailed and in-depth training than what they would receive only attending the beginning of the year faculty meeting(s). The new employee training will provide additional contextual information for new faculty to better absorb and participate in the back to school faculty activities that typically take place.

This is an opportunity for new teachers and support staff to meet with school leadership to learn about the school's instructional and operational goals and procedures. Instructionally, the new employees can learn about the school's mission and vision, review job roles and expectations, school demographic and achievement data, and curricular and extracurricular activities. Operationally, employees can review the school's master schedule, daily schedules, year-long calendar of events, and school and district policies and procedures.

If the formalized coaching model is adopted for first and 2nd-year teachers, the school-based new teacher meeting could be integrated into the framework and provide time to allow the teachers and coaches to set a timeline and goals outlined in the new teacher coaching framework. All new employees should participate in the new teacher orientation; however, only first and 2nd-year teachers would participate in the formal coaching process.

RECOMMENDATION 5

IMPROVE DATA COLLECTION

5A: CREATE AN ONBOARDING INSTRUMENT AND SURVEY EMPLOYEES AT THE END OF THEIR FIRST YEAR OF EMPLOYMENT

Data collection and analysis is a necessary component of having a robust onboarding process. The district should create an onboarding survey required at the end of the first year of employment for every employee. The survey should be differentiated for certificated and support employees and employees that are district and school-based. This will provide ongoing data for continuous improvement efforts related to the district and schools/teams' onboarding processes. Insights from the data analysis can improve district-wide and school-based efforts to support new MNPS employees.

There are two instruments, one created by Robert J. Taormina and one created by Georgia T. Chao et al., that should be used to create a district onboarding survey. Taormina (1994) created a survey that addresses four aspects of organizational socialization; training, understanding of organizational goals and processes, co-worker support, and prospects for the future. Chao et al. (1994) categorize their survey into six dimensions; performance proficiency, politics, professional language/lingo, people, organizational goals/values, and history. The district could utilize the data from a combination of these categories to better understand how new employees are being socialized, socially and procedurally, into the organization and use the data to improve onboarding and organizational socialization more generally.

5B: UPDATE AND REVISE THE EXIT SURVEY TO INCLUDE DEMOGRAPHIC DATA, PRODUCTIVITY DATA, AND DISTINGUISH BETWEEN SCHOOL-BASED AND DISTRICT-LEVEL EMPLOYEES

On the back end of this process is employee retention. The data collected from the exit survey is minimal and does not appear to address district priorities. The exit survey should be sent to every employee that resigns or leaves involuntarily and should be incentivized to increase the participation rate. The survey needs to be redesigned to be quantitatively focused with closed response questions and Likert scales. It should connect individual data, including demographic data, productivity data (e.g., evaluation scores, level of effectiveness, TVAAS rating, attendance), and should be differentiated for school-based and district-level employees in a leadership/managerial position. The inclusion of open-response questions is appropriate but should be limited and focused on collecting additional information directly related to the district's strategic plan and human resources initiatives. As will be mentioned in the limitations section below, not all turnover is bad. Including productivity data can help the district more readily identify factors that contribute to voluntary vs. involuntary turnover and how to better support and engage productive, high-quality employees to retain them in the organization.

The survey could be organized around the themes in the theoretical foundations of this work. Questions related to employee perceptions about job demands, job resources, sources of dissatisfaction, school climate, and organizational socialization should be included to understand voluntary turnover within the district better.

CONCLUSION

This study investigated the onboarding experiences of educators and employees in a large, urban K–12 setting. It combined that with a review of the literature to determine how onboarding practices can be improved to engage and retain employees. Onboarding, and more broadly organizational socialization, is supported in the literature and by the district's data and employees as a necessary component of employee engagement and retention.

In the exit survey, many participants indicated their intention to continue teaching in another district. Additionally, the top reasons cited for leaving were: teachers that, under different circumstances, might have stayed (e.g., reduced commute, transfer denied or waiting on a transfer decision, and ability to work part-time), lack of instructional/classroom support, administration, and not feeling valued and heard. While there are factors out of the district's control that contribute to employee attrition, these exit survey responses indicate that there is a lot MNPS can control and work towards to support their employees and retain them within the organization.

As the saying goes, "*you never get a second chance to make a first impression.*" The onboarding experiences of new employees leave an impression. An employee can walk away

feeling supported and empowered or lost and anxious; it is up to the organization to make sure it is not the latter. Early and frequent support through a robust and proactive onboarding process is a step in the right direction. If MNPS invests in developing a more comprehensive onboarding program that expands out to central office departments and schools, supports new teachers, and communicates a collective mission and vision, it can achieve its goal to reduce turnover to create a high-quality, engaged workforce.

LIMITATIONS

This study focused on organizational factors related to onboarding and its theoretical foundations. However, there is a body of literature related to employees' personality traits and how they can impact an employee's entry into an organization and their decision to remain with the organization. Zimmerman (2008) found that "dispositional traits do have an impact on and individuals' turnover intentions and behaviors." In addition, proactive personality and person-organization fit have a body of literature supporting them and their impact on an individual's organizational socialization and intent to remain with an organization. However, these concepts are not considered in this study, and based on the interviews and exit survey comments, they are relevant to the onboarding processes for the organization.

MNPS has an organizational focus to increase teacher diversity; however, it is difficult to determine if this study can contribute significantly to that work. There is a noticeable gap in looking at this work through the lens of equity, diversity, and inclusion. The interviews' demographic makeup was: one Black male, nine Black females, nine white males, 13 white females, and one Hispanic female. Outside of that, the data used in the study had little to no demographic data attached to it. As a result, it is difficult to determine if it represents the views of teachers of color within the district.

This study was an initial look at onboarding and engagement throughout the district and attempted to reflect all personnel's diversity of experiences. However, the conditions of school-based personnel are quite different from the central office. Further research into this area for the organization should separate school-based onboarding policies and procedures from district-based ones. District-level employees work under very different conditions from school-based employees. While there is some overlap, data collection and analysis for future continuous improvement efforts related to onboarding, employee engagement, and employee retention should be collected and analyzed separately. Additionally, much work has gone into teacher mentoring and new teacher experiences, but there has been limited attention to school-based support staff. This study suggests more work is needed in this area.

There is an underlying assumption in this study that turnover is bad. However, that is not the case; not all turnover is bad. There is still work to distinguish between good and bad turnover and what conditions contribute to losing (or keeping!) high-quality, productive employees. Hom et al. (2012) categorized employees who leave an organization into four categories: enthusiastic leavers and stayers and reluctant leavers and stayers. There is evidence of these types of employees in the interviewees and the exit survey. With improved data collection, this study could contribute to MNPS bettering understanding their employees, the reasons they stay, and the reasons they go, to implement and maintain policies that help the district build an engaged and effective workforce.

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APPENDICES

APPENDIX A: DATA SET 2017-2018 SCHOOL YEAR

Variables	All Grades		High School		Middle School		Elementary School	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Math Achievement	0.23	0.20	0.13	0.18	0.23	0.22	0.26	0.19
English Achievement	0.26	0.26	0.24	0.24	0.24	0.19	0.28	0.19
Teacher Retention	0.75	0.12	0.76	0.11	0.73	0.13	0.76	0.12
Climate: Resources	0.39	0.13	0.40	0.19	0.35	0.13	0.40	0.12
Climate: School Leadership	0.58	0.18	0.54	0.18	0.51	0.17	0.62	0.17
Climate: School Climate	0.80	0.13	0.74	0.11	0.74	0.12	0.84	0.12
Climate: Feedback & Coaching	0.47	0.16	0.47	0.20	0.41	0.15	0.51	0.15
Climate: Safety & Discipline	0.62	0.17	0.59	0.19	0.50	0.14	0.68	0.15

APPENDIX B: EXIT SURVEY

RQ	Exit Survey Questions
NA	<ol style="list-style-type: none"> 1. Full Name 2. School where you were teaching 3. Email address 4. How did you enter the teaching profession? <ol style="list-style-type: none"> a. University Preparation Program b. Teach for America c. Nashville Teaching Fellows d. Other (open response)
2	<ol style="list-style-type: none"> 5. Why did you choose to leave your teaching position? (please check your top three reasons) <ol style="list-style-type: none"> a. Personal reasons (e.g., family decisions, moving, etc.) b. Professional growth opportunities c. Realized teaching doesn't suit me d. Had another job offer e. School Culture f. Lack of teacher voice in improving the school g. Lack of opportunities for advancement h. Dissatisfaction with current school administration i. Seeking higher pay j. Classroom resources k. Technology l. Professional growth opportunities m. Going back to school
2	<ol style="list-style-type: none"> 6. Please use this space to provide an additional explanation about your reasons above.
NA	<ol style="list-style-type: none"> 7. In terms of your next steps, please indicate one of the following: <ol style="list-style-type: none"> a. Accepted a position outside of education b. Accepted another teaching position at a Charter School c. Accepted another teaching position in another state d. Going back to school e. Accepted a non-teaching position in education in another district, state, or organization f. Accepted another teaching position at a private school in Middle Tennessee g. Accepted another teaching position at another district in Tennessee h. Other (open response)
1, 2, 3	<ol style="list-style-type: none"> 8. What support did you receive in this role that helped you? What additional help would you have liked to receive? (please explain)
NA	<ol style="list-style-type: none"> 9. How did the TEAM evaluation model affect your performance in the classroom?
1, 2, 3	<ol style="list-style-type: none"> 10. Could anything have changed your decision to leave MNPS? (please explain)
1, 2, 3	<ol style="list-style-type: none"> 11. Please make suggestions on how your school and/or MNPS can be improved.

APPENDIX C: ANALYSIS OF THE DISTRICT EXIT SURVEY

When asked:

- Why did you choose to leave your teaching position?

The top four reasons, in order, cited for leaving MNPS were personal reasons (e.g., family decisions, moving, etc.), school climate, had another job offer, dissatisfaction with current school administration.

- In terms of your next steps, please indicate one of the following:

After leaving MNPS, the top three “next steps” were cited, in order, as: accepted another teaching position at another district in Tennessee, accepted a position outside of education, accepted another teaching position in another state.

- Could anything have changed your decision to leave MNPS?”

The top 4 reasons, in order, cited for leaving were: teachers that, under different circumstances, might have stayed (e.g., reduced commute, requested transfer, waiting on a decision, and ability to work part-time), instructional/classroom support, administration, and feeling valued and heard.

- What support did you receive in this role that helped you?

The top responses were: teachers/colleagues, administration, instructional coaches/specialists, and professional development.

- What additional help would you have liked to receive?

Teachers top responses were administrative support, classroom/school discipline, onboarding, and mentoring.

APPENDIX D: INTERVIEW INSTRUMENTS

RQ	Employee Interview Questions
3	<p>What is your understanding of your job role and expectation? Is it different now than when you first started, how so?</p> <p>How do your role and job responsibilities match your expectations of what you thought it would be?</p>
1	<p>Do you know how to get job-related questions answered?</p> <p>Do you know who to go to or where the resources are that are needed to perform specific job-related duties/responsibilities?</p>
1, 3	<p>Do you know how to get job-related questions answered?</p> <p>Do you know who to go to or where the resources are that are needed to perform specific job-related duties/responsibilities?</p>
1	<p>In what ways are you engaged in the organization (school level and district level)? What is keeping you engaged in the work?</p> <p>What are the sources of dissatisfaction (that might lead to disengagement)?</p>
2	<p>As you move into your third/fifth year how have your job requirements changed? What challenges do you face?</p> <p>What is the nature of the challenge: learning/knowledge (i.e., there is something they need to learn), communication, organizational process (i.e., they have the skills required, but there is a breakdown of communication or process that is keeping them from being successful)?</p>
1, 3	<p>What do you recall about your onboarding experience at the district level when you first started?</p> <p>How were you onboarded within your specific team/department?</p>
1, 3	<p>How helpful do you recall it being?</p> <p>What was not present that you think would have been helpful, that you needed to know or be taught earlier on?</p>
1	<p>What support(s) do you feel like you needed to be successful in your first year on the job?</p> <p>What supports do you need currently to be successful in your job?</p> <p>How have the job challenges evolved over time?</p>
2	<p>What factors contribute to your decision to stay employed with MNPS? What factors might lead you to seek employment with another district/organization?</p>
1, 3	<p>What are the district's mission and vision?</p> <p>What are the mission and vision for your department/school?</p>

RQ	Manager Interview Questions
1, 3	What are the organization’s mission and vision? What are your department’s/school mission and vision? How does this align with organizational goals? How is that communicated to your staff/employees?
1, 3	How do you onboard new employees? How is onboarding different for people who are new to the organization, but otherwise experienced? What about for employees that have worked within the organization but are shifting roles? What do you do to support employees in their first 30, 60, 90 days and through the first year?
1, 3	How often do you check in with new (less than one year) employees? How often do you check in with employees at their third/fifth year of employment? How do you see the needs of employees shift from their first year to their third/fifth year of employment?
1, 2	How do you perceive employee challenges change from the first year of employment to years three/five? How is supporting employees different as they move from their first year of employment to years three/five?
2	What do you think leads to job satisfaction/dissatisfaction? What leads to turnover/retention?
1, 3	How do you engage new employees in the department/school? How do you maintain/keep employees engaged as they move into their third/fifth years of employment?
1, 2, 3	How could you be better supported with... -onboarding new employees, -providing ongoing support to experienced employees, and -employee engagement?
2	What factors contribute to your decision to stay employed with MNPS? What factors might lead you to seek employment with another district/organization?

APPENDIX E: INTERVIEWEE DESCRIPTORS

<i>Category</i>	<i>Location</i>	<i>Tier</i>	<i>Type</i>	<i>Job Title</i>
<i>Employee</i>	CO	district	instructional	EL teacher
<i>Employee</i>	CO	district	instructional	school psychologist
<i>Employee</i>	CO	district	instructional	school psychologist
<i>Employee</i>	CO	district	instructional	school psychologist
<i>Employee</i>	CO	district	support	program specialist
<i>Employee</i>	CO	district	support	senior account clerk
<i>Employee</i>	CO	district	support	translator
<i>Employee</i>	SB	elementary	instructional	teacher
<i>Employee</i>	SB	elementary	instructional	teacher
<i>Employee</i>	SB	elementary	support	teaching assistant
<i>Employee</i>	SB	high	instructional	special education teacher
<i>Employee</i>	SB	high	instructional	teacher
<i>Employee</i>	SB	high	instructional	teacher
<i>Employee</i>	SB	high	support	school counselor
<i>Employee</i>	SB	high	support	teacher
<i>Employee</i>	SB	middle	instructional	special education teacher
<i>Employee</i>	SB	middle	instructional	teacher
<i>Employee</i>	SB	middle	instructional	teacher
<i>Employee</i>	SB	middle	instructional	teacher
<i>Employee</i>	SB	middle	instructional	teacher
<i>Manager</i>	CO	district	instructional	supervisor, central office
<i>Manager</i>	CO	district	instructional	supervisor, central office
<i>Manager</i>	CO	district	instructional	supervisor, central office
<i>Manager</i>	CO	district	instructional	supervisor, central office
<i>Manager</i>	CO	district	support	supervisor, central office
<i>Manager</i>	CO	district	support	supervisor, central office
<i>Manager</i>	SB	elementary	instructional	principal
<i>Manager</i>	SB	elementary	instructional	principal
<i>Manager</i>	SB	high	instructional	principal
<i>Manager</i>	SB	middle	instructional	assistant principal
<i>Manager</i>	SB	middle	instructional	principal
<i>Manager</i>	SB	middle	instructional	principal
<i>Manager</i>	SB	middle	instructional	principal

APPENDIX F: CODING DESCRIPTORS

Coding Descriptors	Employee Interview Questions	Research Question
Job_Clarify Job_Expectations Job_Needs (1st year, multiple) Job_Reality	What is your understanding of your job role and expectation? Is it different now than when you first started, how so? How do your role and job responsibilities match your expectations of what you thought it would be?	3
Get_Answers Who_Answers Job_Resources	Do you know how to get job-related questions answered? Do you know who to go to or where the resources are that are needed to perform specific job-related duties/responsibilities?	1, 3
How_Engaged Why_Engaged Sources_Satisfaction	In what ways are you engaged in the organization (school level and district level)? What is keeping you engaged in the work? What are the sources of dissatisfaction (that might lead to disengagement)?	1
Job_Resources Job_Challenges Nature_Challenges (communication, knowledge, processes) Sources_Dissatisfaction	As you move into your third/fifth year how have your job requirements changed? What challenges do you face? What is the nature of the challenge: learning/knowledge (i.e., there is something they need to learn), communication, organizational process (i.e., they have the skills required, but there is a breakdown of communication or process that is keeping them from being successful)?	2
Onboarding_Dept/school Onboarding_Needs Onboarding_Recall	What do you recall about your onboarding experience at the district level when you first started? How were you onboarded within your specific team/department?	1, 3
Onboarding_Helpful	How helpful do you recall it being? What was not present that you think would have been helpful, that you needed to know or be taught earlier on?	1, 3
Supports (1st year, current)	What support(s) do you feel like you needed to be successful in your first year on the job? What supports do you need currently to be successful in your job? How have the job challenges evolved over time?	1
Factors_Leave Factors_Stay	What factors contribute to your decision to stay employed with MNPS? What factors might lead you to seek employment with another district/organization?	2

MV_Dist MV_Sch/dept	What are the district’s mission and vision? What are the mission and vision for your department/school?	1, 3
--------------------------------------	------------------------------------------------------------------------------------------------------------	------

Coding Descriptors	Manager Interview Questions	Research Question
MV_Dist MV_Sch/dept Comm_MV	What are the organization’s mission and vision? What are your department’s/school mission and vision? How does this align with organizational goals? How is that communicated to your staff/employees?	1, 3
Onboarding_Dept/school Onboarding_Diff_How Job_Clarify Job_Expectations Job_Resources	How do you onboard new employees? How is onboarding different for people who are new to the organization, but otherwise experienced? What about for employees that have worked within the organization but are shifting roles? What do you do to support employees in their first 30, 60, 90 days and through the first year?	1, 3
Onboarding_Dept/school Onboarding_Diff_How Job_Resources	How often do you check in with new (less than one year) employees? How often do you check in with employees at their third/fifth year of employment? How do you see the needs of employees shift from their first year to their third/fifth year of employment?	1, 3
Job_Reality Job_Challenges Supports (1st year, current, general)	How do you perceive employee challenges change from the first year of employment to years three/five? How is supporting employees different as they move from their first year of employment to years three/five?	1, 2
Sources_Satisfaction Sources_Dissatisfaction	What do you think leads to job satisfaction/dissatisfaction? What leads to turnover/retention?	2
How_Engaged Why_Engaged Maintain_Engagement	How do you engage new employees in the department/school? How do you maintain/keep employees engaged as they move into their third/fifth years of employment?	1, 3
Onboarding_Support (engagement, new, ongoing)	How could you be better supported with... -onboarding new employees, -providing ongoing support to experienced employees, and -employee engagement?	1, 2, 3
Factors_Leave Factors_Stay	What factors contribute to your decision to stay employed with MNPS? What factors might lead you to seek employment with another district/organization?	2

APPENDIX G: ANALYSIS OF EMPLOYEE AND MANAGER INTERVIEWS

When asked:

- About the district's mission and vision statement:

29 of the 33 interviewees did not know the district mission or vision statement. That was more mixed when asked about their school/team's mission and vision statements; about 1/3 knew the gist, 1/3 could state the mission or vision, and the final 1/3 did not know their school/team's mission or vision statement.

- To state factors that contribute to staying employed in MNPS:

The top three reasons cited for staying employed in MNPS were dedication to team/school, the work itself/having a personal mission, and the students.

- To state factors that could lead to seeking employment elsewhere:

The top reasons cited for potentially leaving the district were pay/benefits, personal integrity (asked to compromise their beliefs), treatment, and lack of support and job demands.

- To identify sources of engagement:

The top reasons cited for how interviewees were engaged in the district were leadership opportunities, district participation, collaboration, and building/team relationships. This is one area where it's worth noting the difference between responses in employees and managers. Managers responses were related to supporting their team/direct reports and developing their professional capacity, whereas, employees responses were related to being involved in their immediate school/team communities. Reasons (i.e. "why") for this engagement were contributed to school climate, the students and families, personal mission, and feeling valued and respected.

- To clarify job role/expectations:

Employees generally know how to get school-related questions answered and typically follow the chain of command, first going to a colleague, then from there going to school administration. Getting district-related questions answered was mixed; employees had a harder time identifying who could answer district-related questions and finding answers to those questions (e.g., payroll, licensure).

Generally, employees and managers had a sense of their job role. However, they saw the expectations put on them as a moving target, and constantly changing depending on district initiatives. Teachers also identified that expectations/responsibilities increase over time as they gain years of experience. For support employees, it was mixed. Most support employees seemed to have a good sense of their role and expectations, however, they did not believe others (i.e. teachers and principals) had an accurate understanding of their job.

When asked about the reality of their work versus the expectation they had going in, the lack of training, constant change, and the addition and mismatch of responsibilities were elements of the job that were unexpected.

- To identify job needs and supports:

When asked what 1st year employees needed, interviewees stated that support was the most cited need. All new to MNPS employees needed operational support navigating a new organization and assurance they are meeting expectations. Specific to teachers, support with classroom management and discipline was commonly identified. Being assigned a mentor and receiving specific content related support and coaching was cited by teachers as a needed support in their 1st year as well. For all interviewees, setting clear expectations and onboarding support was identified as a 1st year need.

When asked about employees with several years of experience, the job needs changed. Interviewees indicated that employees with a few years of experience identified needing more autonomy, collaboration, and resources to do their job, and opportunities for professional growth and development.

The only consistent resource interviewees identified, in all positions, was their colleagues. Everyone interviewed had one or more colleagues they could identify that they would frequently go to with questions or when they needed help. This support came from team members, district coordinators, instructional coaches/specialists, and school or district administrators.

- To identify job challenges and the nature of those challenges:

While there were several different challenges identified by the interviewees, constant change, lack of support, lack of training, and time management were common across all groups and mentioned the most.

When asked to categorize the nature of the challenges, organizational processes related to scheduling, class size, caseload ratios, changing job roles (adding responsibilities and never

taking any away), student discipline and placement, and imbalance in needs versus resources were cited across the board. Next, employees associated job challenges to communication. They cited a general lack of communication, transparency, and not feeling valued or heard as their top complaints. And, lastly, job challenges were attributed to a knowledge gap due to a lack of training in curriculum, district/school policies and procedures, and communication and software tools.

- To identify sources of job dissatisfaction:

The most common sources of dissatisfaction were listed as safety and discipline, not feeling respected and valued, poor communication, and lack of support.

- To identify sources of satisfaction:

Sources of satisfaction come from having a positive impact, working in a supportive and collaborative environment, having colleagues they like and respect, and opportunities for leadership roles.

- To recall onboarding experiences and needs:

All employees recalled receiving and accepting the job offer through the human resources (HR) department and completing the necessary paperwork. About half of the employees recall this being a relatively easy and positive experience, the other half did not. Most of the teachers or school-based employees recalled receiving information about and attending the New Teacher Academy. If they were a classroom teacher, they mostly found it helpful; however, if they were in a support position or special education, they did not see the New Teacher Academy as directly relevant to them. No one recalled any follow-up from HR after entry to the organization. Nearly, all interviewees cited not having access to the necessary communication and software tools in a timely manner, nor receiving adequate training on them (e.g. email, Easy IEP, grading/attendance software).

Most employees and managers described different onboarding processes at the school or team level. However, the most common practices were cited as frequent check-ins (both formal and informal), assigning a mentor, and having a new teacher/employee meeting.

During the onboarding process, employees identified their co-workers or mentor, check-ins, and HR support/follow-up as the most helpful.

The most commonly identified needs cited by interviewees during onboarding were having a mentor, need for additional training in software tools and policies and procedures, and specifically from teachers, content-related support.

Managers identified the following needs:

- Supporting new employees:
 - Onboarding handbook or guidance in best practices, clearly defined processes
 - Timely access for employees to necessary communication/software tools
 - Frequent updates from HR regarding the status of a newly hired employee
- Employee engagement:
 - Money that can be allocated to employee incentives (e.g., employee events and professional development)
 - Frequent communication about opportunities for teachers/employees
 - Guidance in school structures that promote collaboration
- Ongoing support for employees:
 - Larger variety of internal professional development opportunities or money for external opportunities (e.g., related-arts teachers, support employees)
 - Opportunities for teacher leadership and input
 - Remove unnecessary tasks/work and reduce district initiatives

APPENDIX H: R PRINTOUT QUANTITATIVE ANALYSIS

This first two models test achievement, for English language arts and math, as an outcome and retention as a predictor. The prediction is the higher the teacher retention rate, the higher percentage of students that score “on-track” or “mastered” on state standardized assessments in English language arts and math.

English language arts

```
model_1E.2 <- lm(ELA_pct_on_mastered~1+Ret_Stay_18, data=Ret_Ach_Clim)
summary(model_1E.2)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Ret_Stay_18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.30818 -0.10846 -0.04567  0.06300  0.59300
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -0.2671     0.1018  -2.623  0.00986 **
## Ret_Stay_18   0.7014     0.1334   5.257 6.53e-07 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1759 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared:  0.1885, Adjusted R-squared:  0.1817
## F-statistic: 27.64 on 1 and 119 DF,  p-value: 6.53e-07
```

Math

```
model_1M.2 <- lm(Math_pct_on_mastered~1+Ret_Stay_18, data=Ret_Ach_Clim)
summary(model_1M.2)

##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Ret_Stay_18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.32080 -0.12482 -0.03867  0.04161  0.64962
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -0.2718     0.1063  -2.556  0.0118 *
## Ret_Stay_18   0.6713     0.1393   4.820 4.29e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
```

```
## Residual standard error: 0.1836 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared: 0.1633, Adjusted R-squared: 0.1563
## F-statistic: 23.23 on 1 and 119 DF, p-value: 4.29e-06
```

This model tests school climate as a predictor of teacher retention. The prediction is the higher the percentage of teachers at the school that reported a favorable school climate, the higher the teacher retention rate for the school. This is tested for multiple school climate categories: School Leadership (SL), Resources (Res), Staff-Leader Relationships (SLRela), Overall School Climate (SC), Feedback and Coaching (FC), Safety and Discipline (SD), Teacher Efficacy (TE).

```
model_ALL_Clim <- lm(Ret_Stay_18~1+Clim_SL_1718+Clim_Res_F17+Clim_SLRela_F17+Clim_SC_
F17+Clim_FC_S18+Clim_SD_S18+Clim_TE_S18, data=Ret_Ach_Clim)
summary(model_ALL_Clim)

##
## Call:
## lm(formula = Ret_Stay_18 ~ 1 + Clim_SL_1718 + Clim_Res_F17 +
##     Clim_SLRela_F17 + Clim_SC_F17 + Clim_FC_S18 + Clim_SD_S18 +
##     Clim_TE_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.28789 -0.07199  0.02298  0.07788  0.17053
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   0.417806   0.114335   3.654 0.000396 ***
## Clim_SL_1718   0.001345   0.170339   0.008 0.993715
## Clim_Res_F17   0.127940   0.096784   1.322 0.188915
## Clim_SLRela_F17 0.129041   0.102483   1.259 0.210618
## Clim_SC_F17    0.110781   0.135055   0.820 0.413823
## Clim_FC_S18   -0.049493   0.121905  -0.406 0.685525
## Clim_SD_S18    0.005871   0.132157   0.044 0.964648
## Clim_TE_S18    0.169452   0.179516   0.944 0.347252
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1081 on 111 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared: 0.1708, Adjusted R-squared: 0.1185
## F-statistic: 3.266 on 7 and 111 DF, p-value: 0.003425
```

The following are the individual models for each climate category as a predictor of teacher retention.

Climate: Resources and Retention

```
model_Res <- lm(Ret_Stay_18~1+Clim_Res_F17, data=Ret_Ach_Clim)
summary(model_Res)

##
## Call:
```

```
## lm(formula = Ret_Stay_18 ~ 1 + Clim_Res_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.28584 -0.06935  0.03294  0.07551  0.21086
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.64730    0.03079  21.022 < 2e-16 ***
## Clim_Res_F17 0.27830    0.07549   3.687 0.000346 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1095 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.1041, Adjusted R-squared:  0.09642
## F-statistic: 13.59 on 1 and 117 DF,  p-value: 0.0003459
```

Climate: Overall School Climate and Retention

```
model_SC <- lm(Ret_Stay_18~1+Clim_SC_F17, data=Ret_Ach_Clim)
summary(model_SC)

##
## Call:
## lm(formula = Ret_Stay_18 ~ 1 + Clim_SC_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.29191 -0.06257  0.02554  0.08115  0.18387
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.49766    0.06351   7.837 2.36e-12 ***
## Clim_SC_F17  0.32225    0.07866   4.096 7.76e-05 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1082 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.1254, Adjusted R-squared:  0.118
## F-statistic: 16.78 on 1 and 117 DF,  p-value: 7.761e-05
```

Climate: Feedback and Coaching and Retention

```
model_FC <- lm(Ret_Stay_18~1+Clim_FC_S18, data=Ret_Ach_Clim)
summary(model_FC)

##
## Call:
## lm(formula = Ret_Stay_18 ~ 1 + Clim_FC_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
```

```
## -0.27233 -0.05626 0.02374 0.08735 0.17432
##
## Coefficients:
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.65327    0.03260  20.038 < 2e-16 ***
## Clim_FC_S18  0.21206    0.06503   3.261 0.00145 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1158 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared:  0.08202, Adjusted R-squared:  0.0743
## F-statistic: 10.63 on 1 and 119 DF, p-value: 0.00145
```

Climate: Staff-Leadership Relationships and Retention

```
model_SLRela <- lm(Ret_Stay_18~1+Clim_SLRela_F17, data=Ret_Ach_Clim)
summary(model_SLRela)

##
## Call:
## lm(formula = Ret_Stay_18 ~ 1 + Clim_SLRela_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.28472 -0.06793  0.01914  0.07994  0.18479
##
## Coefficients:
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.59074    0.04487  13.165 < 2e-16 ***
## Clim_SLRela_F17 0.23766    0.06343   3.747 0.00028 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1093 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.1071, Adjusted R-squared:  0.0995
## F-statistic: 14.04 on 1 and 117 DF, p-value: 0.0002796
```

Climate: Teacher Efficacy and Retention

```
model_TE <- lm(Ret_Stay_18~1+Clim_TE_S18, data=Ret_Ach_Clim)
summary(model_TE)

##
## Call:
## lm(formula = Ret_Stay_18 ~ 1 + Clim_TE_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.27762 -0.06082  0.02258  0.08238  0.18005
##
## Coefficients:
##           Estimate Std. Error t value Pr(>|t|)
```

```
## (Intercept) 0.33256 0.09888 3.363 0.00104 **
## Clim_TE_S18 0.55341 0.12918 4.284 3.75e-05 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1125 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared: 0.1336, Adjusted R-squared: 0.1263
## F-statistic: 18.35 on 1 and 119 DF, p-value: 3.745e-05
```

Climate: Safety and Discipline and Retention

```
model_SD <- lm(Ret_Stay_18~1+Clim_SD_S18, data=Ret_Ach_Clim)
summary(model_SD)

##
## Call:
## lm(formula = Ret_Stay_18 ~ 1 + Clim_SD_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.30129 -0.06980  0.02238  0.08469  0.18252
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.61026    0.03884  15.713 < 2e-16 ***
## Clim_SD_S18  0.23131    0.06028   3.837 0.000201 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.114 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared: 0.1101, Adjusted R-squared: 0.1026
## F-statistic: 14.72 on 1 and 119 DF, p-value: 0.0002009
```

The following are the individual models for each climate category as a predictor of student achievement.

Climate: Teacher Efficacy and ELA

```
model_ELA_TE <- lm(ELA_pct_on_mastered~1+Clim_TE_S18, data=Ret_Ach_Clim)
summary(model_ELA_TE)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Clim_TE_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.28636 -0.12138 -0.04912  0.05711  0.54163
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -0.4806    0.1574  -3.053  0.0028 **
```

```
## Clim_TE_S18  0.9749    0.2057    4.740 5.97e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1791 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared:  0.1588, Adjusted R-squared:  0.1518
## F-statistic: 22.47 on 1 and 119 DF, p-value: 5.967e-06
```

Climate: Teacher Efficacy and Math

```
model_Math_TE <- lm(Math_pct_on_mastered~1+Clim_TE_S18, data=Ret_Ach_Clim)
summary(model_Math_TE)

##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Clim_TE_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.25433 -0.11544 -0.04945  0.05427  0.69044
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -0.4075     0.1663  -2.451 0.015700 *
## Clim_TE_S18   0.8430     0.2172   3.881 0.000171 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1891 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared:  0.1123, Adjusted R-squared:  0.1049
## F-statistic: 15.06 on 1 and 119 DF, p-value: 0.0001713
```

Climate: School Leadership and ELA

```
model_ELA_SL <- lm(ELA_pct_on_mastered~1+Clim_SL_1718, data=Ret_Ach_Clim)
summary(model_ELA_SL)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Clim_SL_1718, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.26085 -0.11613 -0.05127  0.07433  0.56702
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   0.12365    0.05959   2.075  0.0401 *
## Clim_SL_1718  0.23853    0.09855   2.420  0.0170 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
```



```
## Residual standard error: 0.1906 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared: 0.04692, Adjusted R-squared: 0.03891
## F-statistic: 5.859 on 1 and 119 DF, p-value: 0.01701
```

Climate: School Leadership and Math

```
model_Math_SL <- lm(Math_pct_on_mastered~1+Clim_SL_1718, data=Ret_Ach_Clim)
summary(model_Math_SL)

##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Clim_SL_1718, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.2558 -0.1323 -0.0526  0.0565  0.6709
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.10054    0.06144   1.636  0.1044
## Clim_SL_1718  0.23115    0.10160   2.275  0.0247 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1965 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared: 0.04168, Adjusted R-squared: 0.03363
## F-statistic: 5.176 on 1 and 119 DF, p-value: 0.02469
```

Climate: Resources and Math

```
model_Math_Res <- lm(Math_pct_on_mastered~1+Clim_Res_F17, data=Ret_Ach_Clim)
summary(model_Math_Res)

##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Clim_Res_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.36303 -0.12444 -0.04303  0.05001  0.65048
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.03741    0.05323   0.703 0.483549
## Clim_Res_F17  0.51562    0.13049   3.951 0.000133 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1893 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared: 0.1177, Adjusted R-squared: 0.1102
## F-statistic: 15.61 on 1 and 117 DF, p-value: 0.0001333
```

Climate: Resources and ELA

```

model_ELA_Res <- lm(ELA_pct_on_mastered~1+Clim_Res_F17, data=Ret_Ach_Clim)
summary(model_ELA_Res)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Clim_Res_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.33127 -0.12634 -0.04756  0.07436  0.49180
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   0.05013    0.05102   0.983   0.328
## Clim_Res_F17  0.55126    0.12507   4.408 2.33e-05 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1814 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.1424, Adjusted R-squared:  0.1351
## F-statistic: 19.43 on 1 and 117 DF,  p-value: 2.33e-05

```

Climate: Staff-Leadership Relationships and ELA

```

model_ELA_SLR <- lm(ELA_pct_on_mastered~1+Clim_SLRela_F17, data=Ret_Ach_Clim)
summary(model_ELA_SLR)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Clim_SLRela_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.25256 -0.11802 -0.06113  0.09436  0.57406
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   0.11736    0.07923   1.481  0.1412
## Clim_SLRela_F17 0.21079    0.11199   1.882  0.0623 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.193 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.02939, Adjusted R-squared:  0.02109
## F-statistic: 3.543 on 1 and 117 DF,  p-value: 0.06229

```

Climate: Staff-Leadership Relationships and Math

```

model_Math_SLR <- lm(Math_pct_on_mastered~1+Clim_SLRela_F17, data=Ret_Ach_Clim)
summary(model_Math_SLR)

```

```
##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Clim_SLRela_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.25070 -0.13082 -0.05680  0.06179  0.63456
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.14258    0.08224   1.734  0.0856 .
## Clim_SLRela_F17 0.13584    0.11626   1.168  0.2450
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2003 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.01153, Adjusted R-squared:  0.003086
## F-statistic: 1.365 on 1 and 117 DF, p-value: 0.245
```

Climate: Overall School Climate and Math

```
model_Math_SC <- lm(Math_pct_on_mastered~1+Clim_SC_F17, data=Ret_Ach_Clim)
summary(model_Math_SC)

##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Clim_SC_F17, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.25675 -0.11279 -0.04369  0.04145  0.69758
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -0.2634    0.1087  -2.424  0.0169 *
## Clim_SC_F17   0.6266    0.1346   4.656 8.58e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1851 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.1563, Adjusted R-squared:  0.1491
## F-statistic: 21.68 on 1 and 117 DF, p-value: 8.583e-06
```

Climate: Overall School Climate and ELA

```
model_ELA_SC <- lm(ELA_pct_on_mastered~1+Clim_SC_F17, data=Ret_Ach_Clim)
summary(model_ELA_SC)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Clim_SC_F17, data = Ret_Ach_Clim)
##
```

```
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.25678 -0.11430 -0.04678  0.08304  0.51252
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -0.2213     0.1057  -2.093  0.0385 *
## Clim_SC_F17   0.6070     0.1309   4.636 9.31e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.18 on 117 degrees of freedom
## (8 observations deleted due to missingness)
## Multiple R-squared:  0.1552, Adjusted R-squared:  0.148
## F-statistic: 21.49 on 1 and 117 DF,  p-value: 9.314e-06
```

Climate: Feedback and Coaching and ELA

```
model_ELA_FC <- lm(ELA_pct_on_mastered~1+Clim_FC_S18, data=Ret_Ach_Clim)
summary(model_ELA_FC)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Clim_FC_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.24920 -0.13072 -0.06206  0.06937  0.61080
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.22778     0.05488   4.151 6.26e-05 ***
## Clim_FC_S18  0.07141     0.10947   0.652  0.515
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1949 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared:  0.003563, Adjusted R-squared: -0.00481
## F-statistic: 0.4255 on 1 and 119 DF,  p-value: 0.5154
```

Climate: Feedback and Coaching and Math

```
model_Math_FC <- lm(Math_pct_on_mastered~1+Clim_FC_S18, data=Ret_Ach_Clim)
summary(model_Math_FC)

##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Clim_FC_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.22973 -0.13969 -0.06025  0.05610  0.62927
##
```

```
## Coefficients:
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.19126    0.05637   3.393 0.00094 ***
## Clim_FC_S18  0.09067    0.11245   0.806 0.42170
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2002 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared:  0.005433, Adjusted R-squared:  -0.002925
## F-statistic: 0.6501 on 1 and 119 DF, p-value: 0.4217
```

Climate: Safety and Discipline and Math

```
model_Math_SD <- lm(Math_pct_on_mastered~1+Clim_SD_S18, data=Ret_Ach_Clim)
summary(model_Math_SD)

##
## Call:
## lm(formula = Math_pct_on_mastered ~ 1 + Clim_SD_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.24797 -0.12029 -0.04268  0.04703  0.72018
##
## Coefficients:
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.01406    0.06511   0.216 0.829433
## Clim_SD_S18  0.35468    0.10106   3.510 0.000634 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.1911 on 119 degrees of freedom
## (6 observations deleted due to missingness)
## Multiple R-squared:  0.0938, Adjusted R-squared:  0.08619
## F-statistic: 12.32 on 1 and 119 DF, p-value: 0.0006344
```

Climate: Safety and Discipline and ELA

```
model_ELA_SD <- lm(ELA_pct_on_mastered~1+Clim_SD_S18, data=Ret_Ach_Clim)
summary(model_ELA_SD)

##
## Call:
## lm(formula = ELA_pct_on_mastered ~ 1 + Clim_SD_S18, data = Ret_Ach_Clim)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.25814 -0.12420 -0.05148  0.06021  0.54521
##
## Coefficients:
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.04393    0.06321   0.695 0.488482
## Clim_SD_S18  0.35068    0.09812   3.574 0.000509 ***
```

```
## ---  
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1  
##  
## Residual standard error: 0.1855 on 119 degrees of freedom  
## (6 observations deleted due to missingness)  
## Multiple R-squared:  0.09694,    Adjusted R-squared:  0.08935  
## F-statistic: 12.77 on 1 and 119 DF,  p-value: 0.0005088
```