RESEARCH REPORT

Human Capital Challenges in Round 4 Partnership Districts

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Section One: Introduction

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Michigan began implementing its Partnership Model of school and district turnaround during the 2016-17 school year with the intention of improving operations and outcomes in Michigan's low performing schools and in the districts in which those schools reside through a combination of new supports and accountability measures (Strunk et al., 2020). In the spring of 2018, the Education Policy Innovation Collaborative (EPIC) at Michigan State University began a longitudinal evaluation of the implementation and efficacy of Michigan's Partnership Model (see previous reports here). In April 2023, the latest round of school districts signed Partnership Agreements with the Michigan Department of Education (MDE). These agreements outline improvement goals for the schools identified for turnaround, or Partnership status. A critical component of being able to achieve such improvement goals is having a staff of educators with the capacity and expertise to support the strategies that work toward those goals.

Therefore, the purpose of this report is to establish a baseline on the state of human capital in Round 4 of Partnership districts and schools during the year they were identified (2022-23). We describe their challenges related to teacher retention and recruitment and the consequences that these challenges have on school improvement efforts. We also provide an overview of the strategies that Partnership districts and schools were implementing to improve retention and recruitment. To do so, we bring together evidence from our annual survey of teachers and principals in Michigan's Partnership districts, case studies of six Partnership districts, and statewide administrative data on teacher employment and turnover.

CONTEXT

For Partnership schools to reach their school improvement goals, they will need strong recruitment, retention, and professional development for their teachers, leaders, and other staff. Research on school turnaround has consistently demonstrated the importance of effective teachers and staff stability (Malen & Rice, 2012). Indeed, schools rely on teacher buy-in and hard work to implement turnaround plans and improvement initiatives (Cucchiara et al., 2015), and effective teachers have been key to successful school turnaround efforts (Henry et al., 2020; Pham, 2022; Strunk et al., 2016). Persistent teacher and leader turnover can hinder turnaround efforts, as schools may struggle to sustain improvement efforts and recruit new high-quality candidates (Harbatkin & Henry, 2019; Henry et al., 2020; Strunk et al., 2016).

Yet, as Partnership schools seek to strengthen and support their staff, they face a challenging landscape. While teacher attrition has been increasing across the state for years, this is particularly acute in districts facing a high degree of racial and socioeconomic inequality (Hopkins et al., 2021), like those that participate in the Partnership Model (Singer & Cullum, 2023). The COVID-19 pandemic and its effects may have exacerbated these issues as reflected in rising rates of teacher turnover and a shrinking supply of credentialed teachers, as previously seen in prior cohorts of Partnership districts (Harbatkin et al., 2023b; Kilbride et al., 2023a).

One reason for these high turnover rates is teacher working conditions, which are the result of the demands on teachers, the resources available to them to meet those demands, and their organizational climate (Lipsky, 1971). Difficult working conditions in Partnership districts and schools are in part the result of persistent social and economic inequalities that impact students and teachers (Milner, 2012; Kraft et al., 2015) and insufficient resources over time (Arsen et al., 2019).

The organizational climate of a school can help mediate the effect of job demands and resources on teacher working conditions. Indeed, prior research has shown that factors such as school leadership, relationships with colleagues, professional support and learning opportunities, and elements of school culture help explain the high rates of teacher turnover in high-poverty and racially segregated districts and schools (Simon & Johnson, 2015). Thus, while greater demands and inadequate resources can increase the challenges facing teachers, districts and schools can implement organizational supports that improve teacher working conditions (Kraft et al., 2015, 2021). Notably, for previous rounds of Partnership schools, the Partnership Model helped these schools maintain lower turnover rates than comparable non-Partnership schools, both before and throughout the COVID-19 pandemic (Harbatkin et al., 2023b). The Partnership Model could similarly help current Partnership districts and schools strengthen the organizational climate for their teachers and ultimately improve teacher retention.

As context for those forthcoming efforts, the findings in this report offer a detailed look at human capital issues in the current round of Partnership districts and schools during their identification year. The topics in this report include: trends in teacher turnover over time, challenges with teacher retention and recruitment, the consequences for school improvement efforts, and how districts and schools were seeking to improve retention and recruitment during the 2022-23 school year.

KEY FINDINGS

- Partnership districts, and especially Partnership schools in those districts, face substantial human capital challenges. These include high teacher turnover, difficulty recruiting teachers (especially experienced or high-quality teachers), and reliance on substitute teachers in lieu of credentialed candidates.
- 2. These human capital challenges are consequential for Partnership district and school improvement efforts, resulting in: lower instructional quality, obstacles to improving instructional practices and systems, and difficult working conditions for school leaders and teachers.
- 3. Partnership districts are enacting multiple strategies to address their human capital issues. Many districts are taking steps to strengthen their teacher recruitment pipelines, especially through Grow Your Own (GYO) teacher programs, and they are increasing salaries and offering other financial incentives to improve recruitment and retention. Partnership school leaders are focused on providing support to teachers and improving their working conditions.



Section Two: Data and Methods



To understand human capital challenges in Partnership districts and schools, we used a convergent parallel mixed methods research design (Hewitt & Mansfield, 2021). We collected both quantitative and qualitative data, analyzed these data separately, and then integrated the findings. Using multiple types and sources of data allowed us to triangulate our findings and develop a richer understanding of the topic (Creswell & Clark, 2017). In this section, we describe our data sources and methods of analysis (see Table 2.1 for an overview).

TABLE 2.1. Data Sources							
Data	Outcomes of Interest	Source	Year	Subgroups			
	Survey Data						
Teacher and principal surveys ¹	Perception of human capital challenges, employment intentions, strategies related to human capital	EPIC- developed survey	Spring 2023 (all schools in Round 4 Partnership districts) Fall 2018, fall 2019, spring 2021, and spring 2022 (Round 4 reidentified Partnership schools)	All schools in Round 4 Partnership districts Partnership schools and non-Partnership schools in Partnership districts			
	Case Study Data						
Partnership district leaders, principals, and teachers	Human capital challenges, consequences, and strategies	Interviews Focus groups	2022-23 school year	Traditional public school and charter case districts Cases of reidentified and newly identified Partnership districts			
	Statewide Administrative Data						
Educator administrative records	Mobility out of school and district, exit from teaching profession, and teacher credentials	MDE and CEPI	2017-18 through 2021-22	Teachers in Round 4 Partnership schools, non-Partnership CSI schools, and all other Michigan schools			
Federal COVID-19 relief funding	Budgeted spending in general categories	MDE	ESSER I and II, the Governor's Emergency Education Relief Fund (GEER), the competitive ESSER Education Equity Fund (EEF) ESSER III and Section 11t funding	Partnership and non- Partnership districts Traditional public school and charter districts			

SURVEY DATA

Round 4 Partnership schools were first identified in November 2022. We fielded our survey of all teachers and principals in Partnership districts from February through March 2023. We asked all teachers and principals a range of questions about their experiences, perspectives, and opinions about their school and district. One goal of Partnership is for these districts to direct their resources and efforts toward their lowest-performing schools, which are those identified for Partnership. We surveyed everyone in the district, regardless of whether they worked in a designated Partnership school. This approach allows us to gain insight into the different experiences and perceptions of educators in Partnership and non-Partnership schools within a given year and over time.

To conduct the survey, we worked with the MDE and Partnership district leaders to identify the population of teachers and principals in Partnership districts and to obtain their contact information for survey administration. We administered the survey electronically to 9,065 teachers and 356 principals. The response rate was 44% for teachers and 48% for principals. (See Appendix A for subgroup response rates.)

We analyzed the survey data to understand human capital challenges in Partnership districts. We summarized teacher and principal responses across a range of questions, including perceptions of hiring difficulty, the extent of teacher turnover, the quality and experience of staff, working conditions, availability of and reliance upon substitute teachers, employment plans for the next school year, and school and district strategies for recruitment and retention. From these responses, we also used factor analysis to create survey constructs that capture the extent of a school's human resource hindrances and the internal and external factors that affect hiring. For all analyses, we applied survey weights to adjust for differences in observable characteristics between respondents and non-respondents. (See Appendix B for additional details about survey items, constructs, and weighting.)

In addition to analyzing responses for Partnership districts overall, we compared responses between Partnership schools and non-Partnership schools in Partnership districts. We present subgroup results when differences between groups are statistically significant for teachers at minimum (the small number of principals limits our power to detect significant differences across principal groups), or in limited instances, where we want to highlight similarities alongside differences. Otherwise, we present Partnership district-wide responses. When we present item-level subgroup results in which at least one difference is not statistically significant, we use stars to denote statistically significant differences.

We also asked survey respondents to provide open-ended responses. We asked each respondent, "If you have any additional comments, please feel free to write them in the space provided below." Thirty-six percent of survey respondents provided a substantive response to the open-ended question. Respondents who answered the open-ended question were demographically comparable to those who did not, although there were some modest differences between these groups. Respondents who answered the open-ended question were demographically comparable to those who did not, although there were some modest differences between these groups (see Appendix C for additional details). Specifically, somewhat lower proportions of Black teachers and principals provided an open-ended response relative to the population, which suggests that the open-ended data may not be adequately representative of the perspectives or

experiences of Black teachers in Partnership districts. Moreover, respondents who answered the open-ended questions reported somewhat more negative school perceptions, experiences, and working conditions on other items in the surveys than those who did not answer open-ended questions. Thus, the findings from these data should be interpreted with some caution. Still, the open-ended responses give a glimpse into the issues that teachers and principals wanted to address. We qualitatively coded the responses to categorize them into topical categories (e.g., accountability, COVID-19, culture/climate, staffing), and further analyzed the responses in those categories to note the most salient themes.² For this report, we used the open-ended data to complement the qualitative findings from our case studies (discussed below).

In addition to the spring 2023 survey, we have four years of teacher and principal survey data from Partnership districts in Rounds 1, 2, and 3 (from fall 2018, fall 2019, spring 2021, and spring 2022). The historical survey data includes any Partnership school that was originally identified for Partnership status in Rounds 1, 2, or 3 and then reidentified in Round 4. We do not have complete longitudinal data for newly identified Partnership schools, released Partnership schools, or schools that were never identified for Partnership status. (For additional details on survey methodology and response rates for prior survey waves, see Strunk et al., 2022). We use historical survey data from reidentified schools to contextualize our findings from the most recent survey wave with prior trends in human capital challenges.

CASE STUDY DATA

We also conducted a qualitative case study of six Round 4 Partnership districts, which we refer to with pseudonyms (Table 2.2). We intentionally sought both traditional public school (TPS) and public school academy (PSA)³ districts, and both reidentified and newly identified districts. During the 2022-23 school year, we conducted a set of interviews and focus groups with our case districts to collect data on human capital challenges. We started by interviewing leaders at the district or charter management organization (CMO) levels for our cases. We then interviewed the principals of Partnership schools in the case sites. We were also able to conduct focus groups with Partnership school teachers in four of the case study districts. We asked all participants directly about human capital challenges and current strategies for addressing them, and we also asked more generally about their district and school plans for improvement, instructional and non-instructional initiatives, and challenges they face. (See Appendix D for a sample interview protocol.)

TABLE 2.2. Partnership District Case Study Sites						
District Pseudonym	Sector	Round 4 Identification Status				
Ducks	Traditional Public	Reidentified				
Hurricanes	Charter	Reidentified				
Rangers	Charter	Reidentified				
Blizzard	Traditional Public	Newly Identified				
Hornets	Traditional Public	Newly Identified				
Condors	Charter	Newly Identified				

We analyzed our case study data in three stages. First, after each interview and focus group, we

wrote a memo to summarize key points about the district or school's human capital challenges and strategies as well as the way those intersected with other plans and initiatives in the district or school. Second, we compiled our findings from each interview or focus group into a matrix, which allowed us to compare human capital challenges, the consequences of those challenges, and existing strategies between and across cases. Finally, we wrote a summative memo that synthesized the core findings related to human capital by case district and overall.

We use the case study data in this report in two ways. First, we draw on quotes from our interviews and focus groups as supporting evidence for a variety of findings on human capital challenges in Partnership schools and districts. Second, we present "vignettes," or snapshots, from specific case districts to provide holistic examples of how these complex and multifaceted issues can affect a Partnership district.

ADMINISTRATIVE DATA

Finally, we used administrative data on schools and teachers to contextualize our findings on human capital trends over time. First, we examine teacher mobility and turnover. We compare teachers in Round 4 Partnership schools with peers in two other groups of schools (Table 2.3). The first group are schools that are similarly low-performing to Round 4 Partnership schools and were identified by MDE for Comprehensive Support and Intervention (CSI) but were not identified for Partnership status—we label these as "Non-Partnership CSI" schools. The second group, "All Other Schools," contains every other Michigan school that is not a Round 4 Partnership school nor a non-Partnership CSI school.

TABLE 2.3. Teacher Turnover Administrative Data Sample					
Treatment Group	N School-Years (Unique)	N Teacher-Years (Unique)			
Partnership Schools (Round 4)	541 (111)	11,872 (3,903)			
Non-Partnership CSI Schools	673 (143)	13,988 (3,995)			
All Other Schools	15,100 (3,113)	378,461 (96,893)			
Total	16,314 (3,367)	404,321 (104,791)			

Note: The number of school-years and teacher-years represent the total number of school or teacher observations across all years (e.g., a teacher that is in our dataset in 2017-18, 2018-19, and 2019-20 has three teacher-year observations). The number in parentheses is the number of unique schools or teachers in the dataset (e.g., a teacher that is in our dataset in 2017-18, 2018-19, and 2019-20 is counted as one unique observation).

In this report, we describe teacher mobility patterns in Partnership schools relative to patterns in our comparison groups described and summarized earlier. Specifically, we plot teacher-level mobility rates by year across each of the groups. We run this analysis separately for three mobility outcomes: left school, left district, and left Michigan education. We coded a teacher as "left school" in year t if the teacher transferred to another school in Michigan in year t+1. We coded a teacher as "left district" in year t if the teacher transferred to another school in Michigan that

resides in a different district compared to the year t school. It is worth noting that these categories are not mutually exclusive and that if a teacher is coded as "left district," they are also coded as "left school." If a teacher transfers to a different school within the same district, they will be coded for "left school" but not "left district." The final mobility category is "left Michigan education." A teacher is categorized this way if they are teaching in year t and do not appear in the dataset in year t+1. As above, a teacher will also be categorized as "left school" and "left district" if they are coded for "left Michigan education."

Second, we use data on teacher credentials to examine rates of under-credentialed teachers over time. Based on state administrative data on Michigan teacher assignments, the "under-credentialed" measure indicates the share of teachers who are either uncertified or who are certified but teaching in a subject area for which they are not certified (Kilbride et al., 2023a). We include teachers in core subject areas in our calculation (elementary, mathematics, ELA, science, and social studies), and we calculate an overall under-credentialed rate for Partnership schools, non-Partnership CSI schools, and all other Michigan schools. We summarize under-credentialed rates for these groups over time. The precise rates of under-credentialed teachers warrant cautious interpretation given some gaps in the teacher credential data (Kilbride et al., 2023a), but they offer evidence on the level and persistence of issues with hiring credentialed teachers over time.

Finally, we use data on the federal COVID-19 relief funds to highlight the extent to which Partnership and non-Partnership districts planned to use these funds to address human capital issues. Such funding was allocated through three different rounds of federal legislation: the Coronavirus Aid, Relief, and Economic Security (CARES) Act; Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act; and the American Rescue Plan (ARP) Elementary and Secondary School Emergency Relief (ESSER) Fund (Office of Elementary and Secondary Education, Department of Education, n.d.). Each district in Michigan submitted official budgeting documentation for the following funding sources associated with these laws: ESSER I and II, Governor's Emergency Education Relief (GEER), Education Equity Fund (EEF), ESSER III, and Section 11t funding. We combine these funding sources into two groups based on the timing of their appropriation and allocation. The first group includes ESSER I and II, GEER, and EEF. The second group includes ESSER III and Section 11t. These datasets specify the amount of funds each district budgeted in six different categories: salaries, benefits, purchased services, supplies/materials, capital outlay, and other expenses. We combine salaries and benefits into one "human capital" category. We calculate the share of funds budgeted for human capital and for the other categories and compare these budget allocations for Partnership and non-Partnership districts. We do so separately for TPS and charter districts due to differences in how they classify human capital expenditures in their budgets.





Section Three: Scope of Shortages in Partnership Districts

Staffing and human capital remain major issues for Partnership districts, especially for Partnership schools, and oftentimes these challenges are multifaceted. Partnership districts and schools have grappled with high rates of teacher turnover and difficulty recruiting credentialed and high-quality teachers. This results in difficulty establishing positive working conditions and impeding

Human capital challenges can lead to a continuous cycle that ultimately hinders school improvement efforts.

improvement efforts, especially related to instructional quality. As depicted in Figure 3.1, the extent and consequences of these human capital challenges can lead to a continuous cycle that ultimately hinders school improvement efforts.

First, it is important to understand the extent of the human capital challenges that Partnership districts and schools are facing in order to adequately contextualize how those challenges may hinder the school improvement efforts that district and school administrators are undertaking. Since our study of Partnership districts and schools in Michigan began in 2018, human capital challenges have repeatedly been raised as a concern (see our Year One, Two, Three, and Four reports) and there has been some evidence that the COVID-19

pandemic worsened such problems (Hatch & Harbatkin, 2021). Initial analyses of case study and survey data suggest these challenges exist within Round 4 Partnership schools. Importantly, these human capital concerns are not limited to just the teachers in the classroom—even though a stable and highly effective workforce is critical for the achievability of such improvement goals—but extend to school and, in some cases, district leadership. Leadership turnover in these Partnership districts will affect the continuity of improvement efforts and strategies in place to achieve those goals. Combined, these could exacerbate both the challenges and consequences faced by Round 4 Partnership schools described in Figure 3.1 and later explained in depth in Section 4.

... and challenges with retention and recruitment further weaken working **Difficult working** conditions and conditions create improvement efforts. challenges for teacher retention and High teacher turnover rates recruitment... Difficulty recruiting high-quality teachers Social and economic Difficulty filling inequalities affect students teacher vacancies and teachers Difficulty filling Poor school climate non-instructional and leadership position vacancies Difficulty improving (e.g., bus drivers, social instructional systems workers) and practices Reliance on substitute teachers Low pay relative to other districts Lower instructional quality Limits on educator and school leader capacity

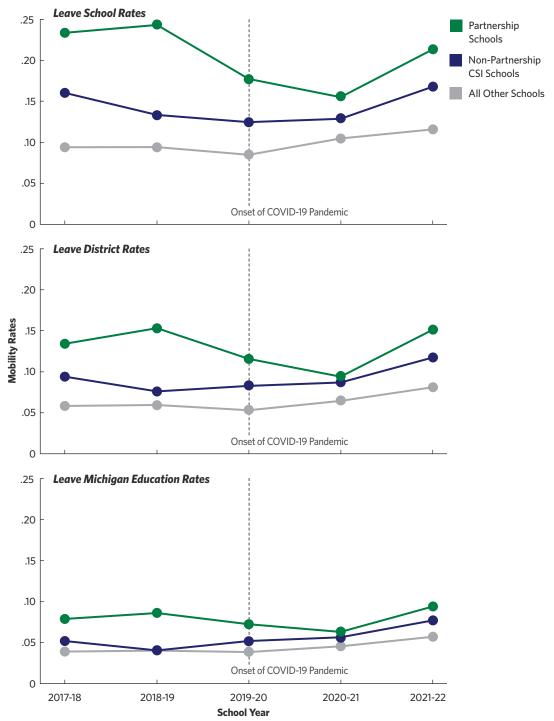
FIGURE 3.1. Human Capital Challenges and Consequences in Partnership Districts

PARTNERSHIP DISTRICTS AND SCHOOLS CONTINUE TO EXPERIENCE HIGH LEVELS OF TEACHER AND LEADER TURNOVER

For the 2022-23 school year, principals and teachers in Round 4 Partnership districts reported teacher turnover as a major issue. Leaders and teachers from our case sites frequently spoke about teacher turnover as a major and persistent challenge. One Blizzard teacher put it this way, "We have a teacher turnover problem... I always say it reminds me of being a waitress in a restaurant. You just keep watching them come in and go, come in and go. They get the experience and leave."

Administrative data show that this is a long-standing issue for Round 4 Partnership schools. Figure 3.2 displays the share of teachers who left their school over time in Partnership schools, other non-Partnership CSI schools, and all other schools in Michigan. Over the past five years, reidentified and newly identified Partnership schools alike have had higher levels of teacher turnover than other non-Partnership CSI schools and all other schools in Michigan.

FIGURE 3.2. Teacher Turnover Rates for Partnership and Non-Partnership Schools Over Time



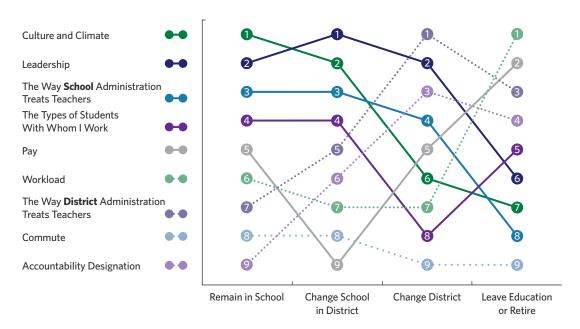
Note: Marker heights represent average turnover from school, district, and Michigan education respectively. These measures are nested. Leaving the school includes teachers leaving the district and Michigan public education. Leaving the district includes teachers leaving Michigan public education. The teacher sample is restricted to just those teachers assigned to a single school. Partnership schools are those schools newly identified and reidentified in Round 4 for Partnership status. Schools released from Partnership status in prior rounds are included in one of the other two categories (depending on whether they are identified as CSI or not).

Turnover rates had been declining before the COVID-19 pandemic. Through the 2021-22 school year, however, turnover sharply increased for reidentified and newly identified Partnership schools alike. Other non-Partnership CSI schools also had increased turnover, though levels remained lower than in Partnership schools. All other schools in Michigan had much smaller increases in turnover on average.

Many Factors Contribute to Teacher Turnover

We asked teachers to indicate the extent to which different factors informed their employment plans. As shown in Figure 3.3, school culture and climate, leadership, and the way school or district administrators treat teachers were among the top factors for teachers who plan to remain within their schools as well as those who plan to change to a school within or outside their district. Workload and pay were the top reasons for teachers to indicate they planned to leave the profession.

FIGURE 3.3. Ranked Partnership District Teacher-Reported Reasons for Employment Plans by Intended Pathway, 2022-23



Note: Teachers were asked about the extent to which each of the above items factored into their reported plans for the following school year. Response options were not a factor, a minor factor, a moderate factor, a major factor, or a primary factor. Marker colors denote items, numbers provide the rank of each item based on the share of teachers under each reported plan selecting it as a major or primary factor.

School and District Leadership Are Common Reasons for Teacher Turnover

To understand these factors further, we rely on case study interviews and open-ended survey responses where teachers elaborated on the ways in which these school and district factors shape their employment intentions. In particular, teachers expressed the importance of school leadership. For example, one Blizzard teacher explained that she is interested in staying in her school because of the principal's "professional trust" in the staff:

He's not feeling the need to constantly be breathing down our necks or making sure that we're doing everything that we're supposed to be doing. He trusts us to—in a professional [sense]—he trusts us to do our jobs. He's not constantly breathing down our necks. Everybody's just doing the best they can, and he knows that.

Likewise, a Hornets teacher explained that support from the school administration is one of the reasons they stayed at their school:

I actually feel pretty supported...the current principal and the assistant principal, so far, haven't done me wrong...Our principal has experience in that, and he's continually checking on me and my department and asking—he seems like he's in our corner.

Conversely, other teachers described how negative views of and experiences with leadership can push them to leave their schools or districts. In nearly one-third of open-ended responses, teachers voiced concerns about leadership. When teachers raised issues with their school leaders, they often focused on stress, a lack of support, and poor communication. For example, one teacher described a managerial climate of "micromanaging" and explained that "teachers are stressed out... Many of our teachers do not plan to return next year." A teacher in another district likewise wrote, "Administration is poor and does not help teachers as much as they think...The constant stress from student and administration issues, and numerous other issues are taking their toll on my mental health." In addition to school leadership, district leadership can also negatively affect teacher retention. For instance, this quote from a Hurricanes teacher helps capture the way teachers can feel overburdened and underappreciated by their schools and districts:

When you know you're putting your best foot forth and you're still not feeling like you're doing enough...If we're always reprimanded by what they don't see or if it's a deadline or something for an administrator...It's just so much stuff or things that can push you away from the field right now because it's very hectic for the teachers...we can't do everything, but sometimes it feels like we are expected to do everything, and it's hard sometimes.

This theme is further illustrated in the O1/Case Study Vignette on the next page.

Teachers similarly expressed feeling mistreated and undervalued by their districts in their openended survey responses. For example, one teacher wrote, "I often feel administration does not have any idea what the classroom is like post-pandemic...When admin tries to tell me what to do or come up with the hundredth new initiative—that's when I have problems." Likewise, a teacher in another district wrote that "there is a huge disconnect between downtown administration and what actually happens in schools and what they 'think' should be happening."

Our findings here, and in previous reports, underscore the role of principals in teacher retention efforts, as teachers have consistently ranked school leadership as a major factor in their decisions to stay in their roles. These school and district leaders are playing key roles in not just teacher retention, but also school climate and culture, goal-setting and expectations, establishing and fostering collaborative processes, and making organizational decisions (Finnigan & Stewart, 2009; Hallinger & Heck, 1998; Jacobson et al., 2005; Leithwood & Jantzi, 1990)—all of which are central to school improvement efforts.

O1/Case Study
Vignette

Hornets District Leadership Issues Affect Teacher Retention

For those who plan to leave their district but continue teaching, the way that district administrators treat teachers was the top-ranked factor influencing their employment plans (Figure 3.3). A key example of this comes from the Hornets district, where there has been a high degree of district-level turnover in recent years.

The district's leadership issues have resulted in poor strategic planning, and more generally a sense of instability and lack of district support. As one district-level administrator shared:

Our central office leadership just has not been stable to take the time to say, "What are our critical needs? What are the causal factors of those needs, and then how do we move forward in addressing those needs?" Those needs for teachers and those needs for students.

The issue has taken a toll on teachers and plays a role in teacher turnover. As one teacher in the district explained:

In regards to our district specifically...a lot of especially central office people left...There was this huge shake-up. It made everything just—everything just so much more difficult. There was a lack of communication and day-to-day operations were falling by the wayside. I know that that put a lot of people off. People have switched districts because of that.

While many Partnership districts have had stable district-level leadership, others have struggled with district-level issues, such as leadership turnover or contentious school board-superintendent relationships (Strunk et al., 2019). The experiences of teachers and administrators in the Hornets district illustrate how these district-level issues can negatively affect teacher retention.

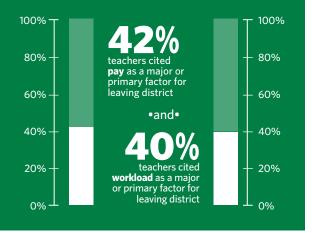
13

Pay and Working Conditions are Top Factors in Teachers' Plans to Leave

While district and school leadership factors ranked higher (Figure 3.3), a large share of teachers planning to leave their district and teach elsewhere cited pay (42%) and workload (40%) as

Factors That Contribute to District Exits:

A large share of teachers planning to leave their district and teach elsewhere cited pay (42%) and workload (40%) as either a major factor or the primary factor.



either a major factor or the primary factor. School leaders in our case studies cited pay and working conditions as factors contributing to turnover. They explained that neighboring districts successfully attract teachers by offering higher salaries or bonuses. For example, a Hornets district leader told us that "surrounding districts...have been able to pull some of our teachers because [they are] able to pay \$10,000, \$15,000, or even \$20,000 more to a teacher."

District leaders and principals also emphasized how difficult workloads and working conditions can push teachers to seek employment in other districts. As one Blizzard principal explained:

I would say a lot of the staff have told me that they don't want to leave...They like the community we serve, but it's stressful. It's a high-stress type of thing, and it's very challenging work, and when we don't have the bare minimums, it becomes a grind, and it becomes too much.

In addition, Figure 3.3 highlights that pay and workload were the top-ranked factors for teachers who plan to find a new job outside of education or to retire. Teachers strongly emphasized this in their open-ended survey responses. About one in five open-ended respondents wrote about themselves or their

colleagues being underpaid, especially considering their difficult workload. As one teacher wrote:

Teaching is such a rewarding profession most teachers do this job with kindness, grace, and to support students. I do not know if I would ever want a different career. That being said I truly hope that there is a change to come in the way teachers are viewed, supported, and paid. It is difficult for me to think about putting 10 plus years into this profession when I see the treatment, and overall pay scale. It makes me sad to see colleagues who just started thinking of leaving the profession and none of their reasons for doing so are related to students.

A Blizzard teacher offered more specifics about the workload issue and how that intersects with their concerns about pay:

Not only am I performing the work of multiple English teachers but I'm also performing the job of, basically, a social worker...I'm also performing—I'm on the robotics team even though I'm an English teacher. I'm on the [School Improvement Plan] SIP team. We have meetings every single day after school. I create 80 percent of my curriculum. There's just a million things that I'm doing and if I didn't force myself to sleep at night, I wouldn't

because I do not have time for anything. That's the most honest answer I can give you is because it's just so exhausting...that also said, the pay is not great for what we deal with.

In sum, Partnership districts—and especially Partnership schools within those districts—have struggled with teacher retention. They have long had high rates of teacher turnover, connected to difficult working conditions, and these challenges have only been exacerbated by the COVID-19 pandemic. Indeed, teacher turnover rates increased heading into the 2022-23 school year, and teacher perceptions and stated employment intentions suggest they will remain high or may even continue to increase.

Partnership Schools Have Had More Principal Turnover Than Non-Partnership Schools, but Current Partnership Principals Reported a Greater Intention to Remain

In addition to teacher staffing issues, Partnership schools have also struggled with leadership turnover and experience. For example, the Hurricanes principal told us:

When I got hired here as principal, I'm the fourth principal in the past two school years. Then my new instructional coach is the third instructional coach in eight months, and then the teaching staff, there's just been a bunch of turnover, about half turned over from last year.

Teachers also identified principal turnover as an operational challenge. In an open-ended survey response, a teacher shared that "administrative turnover is an issue":

Principals tend to stay for 5 years or less and then move on. In the 25 years that I have taught in [this district], I have had approximately 11 different administrators and I have only been in three elementary buildings!

Similarly, a Blizzard teacher said about her school, "Before we had [our current principal], we would get a new principal every two years...! started here in the year 2000."

Principal turnover has occurred at higher rates in Partnership schools than non-Partnership schools. Figure 3.4 shows survey responses about principal experience and tenure at their current schools. While Partnership and non-Partnership school leaders had similar levels of total experience as a principal, Partnership school leaders had been at their school for a shorter time than non-Partnership school leaders on average, and Partnership schools had more principal

About 87% of Partnership school principals reported that they planned to remain in their schools for 2023-24.

turnover in the past three years than non-Partnership schools. One bright spot for Partnership schools, however, is the high share of principals who intend to remain in their roles. About 87% of Partnership school principals reported that they planned to remain in their schools for 2023-24, compared to only about 72% for non-Partnership school principals. Partnership principals' intention to remain in their

schools is a positive indicator, since (as discussed earlier) school leaders play a key role in shaping the working conditions and school climate for teachers (Harbatkin & Henry, 2019).

10 8 6.9 Number of... 6 *** 2 2.5 1.8 1.4 Years as a Principal Years as Principal of **Different Principals** Current School in the Past Three School Years

FIGURE 3.4. Principal-Reported Experience and Tenure in Partnership and Non-Partnership Schools, 2022-23

Note: Principals were asked to report the total number of years they have been a principal, the number of years they have been a principal at their current school, and the number of different principals that the school has had in the past three years.

Non-Partnership Schools

HIGH TEACHER TURNOVER RATES IN PARTNERSHIP DISTRICTS AND SCHOOLS ARE LIKELY TO CONTINUE

Partnership Schools

Given the factors identified earlier that are driving turnover, it is likely that the challenging conditions in Partnership districts will lead to continued problems in the years to come. Figure 3.5 shows that approximately one out of five teachers working in Partnership districts in 2022-23 reported planning to leave their school, district, or profession next year. Prior research shows that these stated intentions, while not perfect predictors of actual employment decisions, are good indicators of turnover (Harbatkin et al., 2023a; Nguyen et al., 2022). Again, the issue is greater for Partnership schools than non-Partnership schools, as fewer Partnership school teachers intend to remain in their schools. In fact, open-ended responses from teachers suggest that these numbers may understate the actual prevalence of teachers considering leaving their schools, districts, or the profession. For example, one teacher explained:

I checked "continuing working at this job" only because there wasn't an "I don't know" button... I have spent the last couple of months considering what I could do with my career moving forward... [Teaching is] wearing me too thin. But I don't know what else I will/can do.

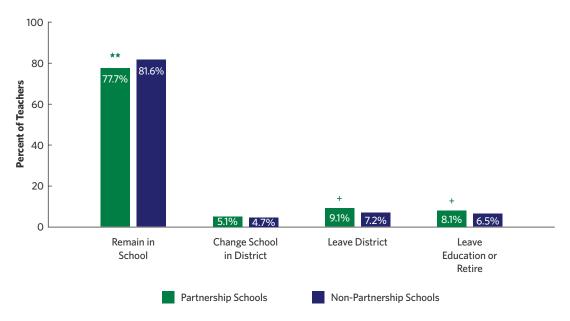


FIGURE 3.5. Teacher Employment Intentions for the 2023-24 School Year in Partnership and Non-Partnership Schools

Note: Teachers were asked, "Which of the following best describes your plans for next school year?" The options were: continue teaching in this school; serve in a different position next year, but in this same school; continue teaching in my district, but in a different school; leave this district next year to work in a different district or charter network; leave next year to pursue a job not in education; and retire. Remain in school collapses two answer options (continue teaching in this school and serve in a different position next year, but in the same school) because we focused on educator's intent to remain in their school in any capacity, regardless of whether they were in a classroom teaching role. +p<0.10, *p<0.05, *p<0.01, *p<0.01, *p<0.01

Other respondents similarly indicated that they selected "continue teaching in this school" or skipped the question altogether because they love teaching and want to continue to make a difference in students' lives but are struggling between this decision and their own physical and mental health (along with all the logistics of switching professions). These comments reinforce our prior findings that Partnership district teachers' employment intentions are good but not perfect signals of actual employment decisions (Harbatkin et al., 2023a). Thus, teacher employment intentions suggest that high teacher turnover in Partnership districts may continue, and might exacerbate difficult working conditions.

The Cascading Effects of Human Capital Challenges

With such trends emerging, it is likely that the stress and strain on Partnership district teachers and the obstacles to improving working conditions and instructional systems in their schools threaten to exacerbate and further perpetuate staffing issues. For example, a Blizzard teacher said:

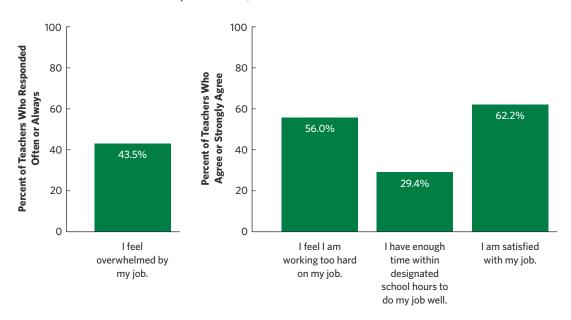
The degree that teachers are considering leaving is very high and concerning. I think that is a pattern especially recently with a lot of teacher burnout. I also think that as more teachers leave, that leaves more work for those who are left behind, and then the problem just continues to grow.

Teachers echoed these concerns in their open-ended survey responses. As one teacher wrote, "More than 30% of my school has left each year after the pandemic. I am leaving as soon as I can, hopefully this month. I am leaving the profession for good." The fact that human capital challenges are to some extent self-perpetuating highlights the urgent need for Partnership districts to address them. The factors that may contribute to teacher exits must be first understood. Survey results highlight difficult working conditions as a strong factor that may cause such human capital challenges to persist or even worsen. It is these difficult working conditions that can lead or contribute to educator sentiments about being overwhelmed, overworked, and dissatisfied with their job—all of which can have a negative effect on their mental health—and, given the cyclical nature of such problems, may only amplify the existing human capital challenges.

Many Teachers Report Feeling Overwhelmed and Overworked

Teachers in Partnership districts reported difficult working conditions. Figure 3.6 shows teacher responses on survey items related to teacher well-being and satisfaction. About 44% of teachers indicated that they often or always feel overwhelmed by their jobs. In addition, more than half felt they are working too hard, and fewer than 30% agreed that they have enough time during school to do their jobs well.

FIGURE 3.6. Indicators of Teacher Well-Being and Satisfaction in Partnership Districts, 2022-23



Note: Teachers were asked to indicate strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree for the following statements: "I am satisfied with my job," "I feel I am working too hard on my job," and "I have enough time within designated school hours to do my job well." Teachers were also asked to indicate never, rarely, sometimes, often, or always for the following statement: "I feel overwhelmed by my job."

Teachers echoed these concerns in their open-ended survey responses. Nearly one out of three open-ended responses included concerns about working conditions. As one teacher wrote, "The classic line that teachers are 'overworked and underpaid' is an understatement at my school." They continued:

I want you to know that teachers at my school seem to try their very best at maintaining high standards for student achievement, and to meet students' academic and socio-emotional needs. They are committed, and their collective

"hearts" are in the right place. Unfortunately, we are limited by oversize class rosters, huge special needs caseloads, excessive paperwork, and having to substitute teach when colleagues are out (which is often)... It is leading to a high turnover rate and teacher burnout, which is a shame because we have amazing teachers here. Students here are, overall, significantly behind grade-level standards.

This and other comments from teachers help illustrate the concerns of those respondents who reported frequently feeling overwhelmed, working too hard, and having too little time. Despite these challenges, a large majority (62%) of Partnership district teachers reported feeling generally satisfied with their jobs.

Educators Expressed Concerns About Teacher Demoralization and Poor Mental Health

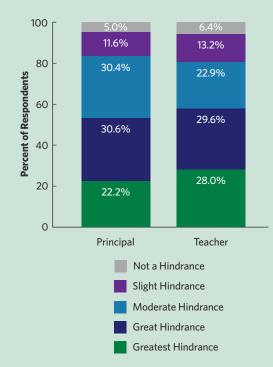
Relatedly, Partnership district teachers and principals are greatly concerned about teacher demoralization and mental health. We asked our survey respondents to rate the extent to which a variety of factors were a hindrance to school improvement for their school. As shown in Figure 3.7, over half of teachers and principals in Partnership districts indicated that teacher demoralization and mental health was a great hindrance or the greatest hindrance. These results underscore that teacher demoralization or mental health is a salient concern in Partnership districts among school leaders and teachers alike.

Additionally, in open-ended survey responses, teachers voiced their own feelings of demoralization and mental health concerns. This was one of the most salient themes throughout the open-ended responses: Nearly one out of three open-ended responses spoke to teachers' diminished morale in general, with 19% discussing teachers feeling undervalued and 14% specifically

referring to teacher mental health issues. Oftentimes, teachers made connections between their difficult working conditions and their well-being. For example, in one open-ended response, a teacher explained:

As a teacher, I do my best to meet the needs of all the students in my classroom, but there is only one of me and only so many hours in a day. Keeping up with the continuously increasing demands of this profession is becoming more difficult each year. We teachers are burnt out mentally, emotionally, and physically.

FIGURE 3.7. Teacher Demoralization/Mental Health as a Hindrance to School Improvement in Partnership Districts, 2022-23



Note: Teachers and principals were asked to answer the extent to which "teacher demoralization and/ or mental health challenges" were a hindrance to achieving their schools' improvement goals. Other open-ended responses connected worsening teacher mental health to the effects of the COVID-19 pandemic. For example, as one teacher shared:

The pandemic has shifted the most crucial component of education: connection. Trying to rebuild connections and trust with all stakeholders in a school community has been a huge challenge. In addition, toxic culture, poor attendance, increases in student behavior problems, mental health crises, and teacher shortages are making this profession untenable.

Likewise, another teacher said, "I have a never-ending to-do list that I feel I can never complete. The job has always been hard, but COVID made it a different level of hard."

Further, principals in our case studies and in open-ended responses spoke to the challenge of supporting teacher well-being. For example, one principal wrote about "the constant balancing act that administrators must perform." They continued:

We have to support our teachers by reducing their workload, increas[ing] professional development, and car[ing] for their mental health. On the other hand, we need to implement a countless amount of academic, mental health, attendance, and behavioral interventions which require time, energy, and resources from our burnt-out staff.

Taken together, these quotes further illustrate how working conditions and teacher morale in Partnership districts might perpetuate or even exacerbate teacher turnover issues.

PARTNERSHIP DISTRICTS AND SCHOOLS STRUGGLE TO FILL VACANCIES AND RELY ON SUBSTITUTE TEACHERS

With high rates of turnover, Partnership districts need to hire new teachers, and they hope to identify and successfully recruit high-quality candidates for those roles. Yet district leaders and principals reported substantial difficulties filling vacancies, due in part to the same factors that reportedly drive teacher turnover (e.g., pay, working conditions). A Hornets district leader described the issue in their district this way, "The last time I looked...we had about 50 openings. Out of about 50, almost 40 of them were teacher postings. That means we're short-staffed all over the district." In open-ended survey responses, teachers and principals reinforced this high level of concern: One out of four open-ended responses included concerns about labor shortages.

As shown in Figure 3.8, the share of principals who reported hiring difficulties for their schools, districts, or CMOs were more pronounced in Round 4 Partnership schools. Approximately 70% of Partnership and non-Partnership principals alike agreed that their districts had moderate or substantial difficulty hiring teachers. For their own schools, however, over 70% of Partnership school principals agreed that they had moderate or substantial difficulty. This was a significant difference compared to around 40% of non-Partnership school principals.

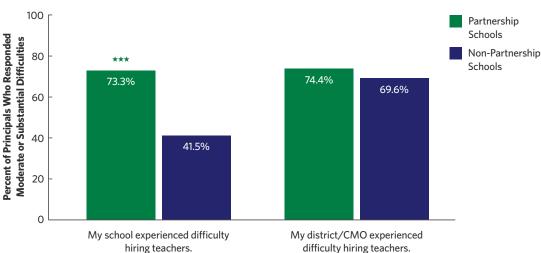


FIGURE 3.8. Principal-Reported District-Wide and School-Specific Difficulty Hiring Teachers for Partnership Districts, 2022-23

Note: Principals were asked to indicate no difficulties, minimal difficulties, some difficulties, moderate difficulties, or substantial difficulties for the following statements: "My school experienced ______ in recruiting and hiring teachers" and "My district or CMO experienced ______ in recruiting and hiring teachers." +p<0.10, *p<0.05, **p<0.01, ***p<0.001

Teacher Salaries and Competition for Teachers Result in Hiring Difficulties

In interviews and on the survey, principals identified competition from neighboring districts—especially related to teacher salaries—as factors that negatively affect hiring for their schools. As previously discussed, pay is a primary motivator in teachers' decisions to stay or leave their school, district, or profession. As a Ducks district leader explained:

Recruitment is tough right now because we tried different things out there. Teachers, there's not enough of them. Even when you have one that's good and they interview and you're ready to go, you make them an offer. They're like, "Well, I'm going to hold on because I'm interviewing at other places too."

District and school leaders emphasized salaries as a major factor in that competition. For example, one Blizzard district leader explained that they struggle to compete with neighboring districts, "We can't pay our teachers [as competitively], we can't pay our bus drivers. We can't pay our administrators as much as they should be able to get. Now, all the surrounding districts can therefore just snaq them for more money."

Overall, Partnership and non-Partnership principals alike largely identified teacher salaries and competition from nearby districts as negatively affecting their hiring, though a greater share of Partnership principals identified competition as a negative factor (Figure 3.9). In teachers' openended responses, about one quarter of the respondents discussed problems with inadequate pay. They emphasized (as one teacher put it) that their districts "underpay [their] teachers when compared to surrounding districts."

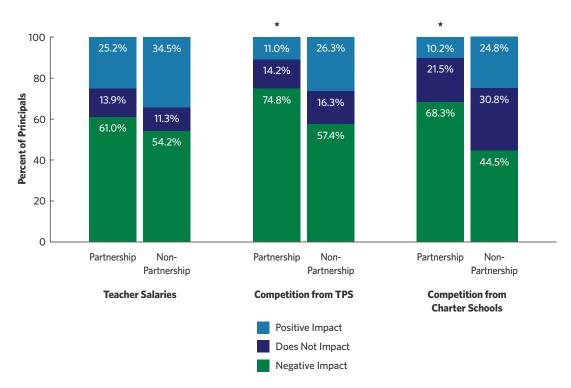


FIGURE 3.9. Principal-Reported Salary and Competition Factors Affecting Hiring for Partnership and Non-Partnership Schools, 2022-23

Note: Principals were asked to indicate the extent to which the following factors affect their ability to recruit and hire teachers in their school: "teacher salaries," "hiring competition from nearby [traditional public school] districts," and "hiring competition from nearby PSA/charters." The options were: very negatively impacts, somewhat negatively impacts, does not impact, somewhat positively impacts, very positively impacts. +p<0.10, +p<0.05, +p<0.01, +p<0.01

Most Partnership district principals reported employing subs for at least 10% or more of their teaching positions.

Partnership Districts Rely Heavily on Substitute and UnderCredentialed Teachers

Due to hiring difficulties, Partnership districts are heavily relying on substitute teachers. We asked principals to report the proportion of teaching positions in their schools that are filled by day-to-day, long-term, and emergency-permitted substitute teachers.⁵ Figure 3.10 shows the principal-reported share of teachers who are substitutes, for TPS and charter districts. Most Partnership district principals—60% of TPS principals and 87% of charter principals—reported employing substitutes for 10% or more of their teaching

positions, and many reported relying on substitute teachers at even greater levels. The problem is particularly acute for charter schools: About 55% of charter principals in Partnership districts reported relying on substitutes for more than half of their teaching positions.

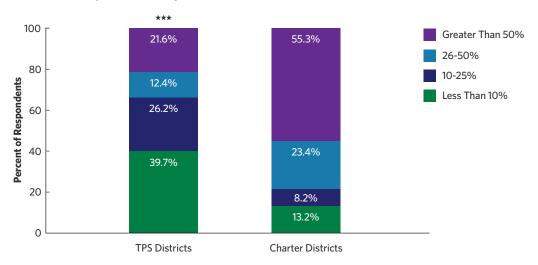
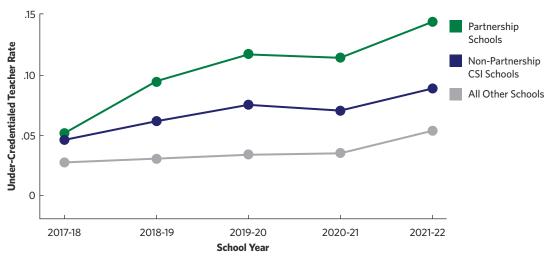


FIGURE 3.10. Principal-Reported Reliance on Substitute Teachers in Partnership Districts by Sector, 2022-23

Note: Principals were asked to indicate the share of teachers on a "typical day in a typical week during the 2022-23 school year" who are day-to-day subs, long-term subs, and emergency subs. Options were: <10%, 10-25%, 26-50%, 51-75%, 76-90%, and >90%. The graph presents the share of principals with at least that many substitute teachers. +p<0.10, *p<0.05, **p<0.01, **r<0.001

Administrative data on the rates of under-credentialed teachers highlight the magnitude and persistence of this issue for Partnership schools (Figure 3.11). While under-credentialed rates have increased over the past several years and especially in 2021-22, they have increased the most for Partnership schools. Over the past several years, Partnership schools have employed substantially more under-credentialed teachers than non-Partnership CSI schools and other schools in Michigan. By the 2021-22 school year, under-credentialed teachers filled nearly 15% of Partnership school teaching positions, relative to just 5% in non-Partnership/non-CSI schools in the state.





Note: Marker heights represent the average under-credentialed teacher rate. The under-credentialed teacher rate is defined as the share of teachers who are either uncertified or who are certified but teaching in a subject area for which they are not certified.





Section Four: Consequences of Staffing Challenges in Partnership Districts

Understanding the scope and challenges that Round 4 Partnership districts and schools face provides necessary context to exploring how those challenges affect the strategies educators and leaders use to reach their Partnership improvement goals. In Section 3, we highlighted how human capital challenges including teacher recruitment and retention, leadership turnover, and the availability of high-quality substitute teachers are interconnected. Now, we shift to focus on how such existing problems can further affect working conditions and improvement efforts in Round 4 Partnership districts as overviewed in Figure 3.1.

Given the nature of the Partnership Model, it is important that we examine how human capital challenges affect overall school improvement goals and the way these challenges impede the ability of schools and districts to improve instructional efforts and student outcomes. Historically, Partnership Agreements served as a contract with MDE to improve student outcomes over a 36-month period. This, of course, predates the COVID-19 pandemic and subsequent unfinished learning, but remains an important metric to ascertain progress toward improvement as well as a measure that identifies (or re-identifies) schools and districts for future rounds of intervention. With this setup, student outcomes and the capacity to provide high-quality instruction remain important but they are not the only ways in which we see that the human capital challenges in Partnership districts and schools may constrain efforts toward improvement goals.

STAFFING CHALLENGES HINDER IMPROVEMENT EFFORTS

Overall, principals and teachers in Partnership districts and especially Partnership schools see human capital challenges as a substantial hindrance to school improvement and believe these challenges to be greater in the most recent school year. Figure 4.1 shows the human resource hindrance construct from our survey data. The construct represents the extent to which educators believe human resources challenges—including insufficient supply of certified teachers, low teacher retention, lack of availability of substitute teachers, and low teacher attendance—are a hindrance to meeting improvement goals. We present values as a percentile ranking, where the 50th percentile represents the average educator (including both teachers and principals) response over three school years from 2020-21 through 2022-23. Thus, values below the 50th percentile would suggest that educators perceived less salient challenges than the average response over this period, while values above the 50th percentile would suggest more salient challenges.

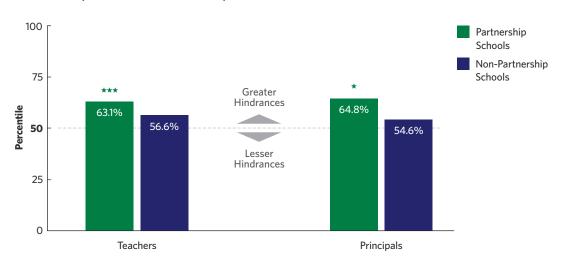


FIGURE 4.1. Human Resource Hindrance Construct for Partnership and Non-Partnership Schools, 2022-23

Note: Marker heights represent mean percentiles of Partnership and non-Partnership school educators in response to items related to human resources hindrances in the most recent survey wave. The 50th percentile line denotes the average response across all teachers and principals in the past three survey waves. A mean response above the line indicates that a given group reported greater human resource hindrances to improvement than the average respondent across all teachers and principals in each of the three survey waves. A mean response below the line indicates that a given group reported lesser hindrances. The questions for this construct were not asked in the first two survey waves. +p<0.10, +p<0.05, +p<0.01, +p<0.001

Here, the fact that teachers and principals in both Partnership and non-Partnership schools are above the 50th percentile indicates that educators perceived greater human resources-related challenges in 2022-23 than in prior years. Teachers and principals in Partnership schools perceived even starker challenges than principals and teachers in non-Partnership schools.

Our case study data reinforce the fact that these human capital challenges are a hindrance to school improvement. For five of the six case study districts, leaders identified human capital challenges as one of their top three issues to address as they work toward school improvement. One Blizzard principal said:

Top of the list...right now is the ability to sustain staff...Now more than ever since I've been working here the past four years, I more clearly see the impact of that [on] turnaround and not being able to sustain [staff]—the impact on the building, impact on the students, and just how vital it is.

The level of human resource hindrances over time in reidentified schools, as shown in Figure 4.2, helps put the current magnitude of these human capital challenges in context. In the 2020-21 school year (the first time we asked the questions for this construct), human capital challenges were relatively low. However, human capital concerns spiked in the 2021-22 school year as districts grappled with increased teacher turnover, elevated teacher absenteeism, and difficulty with substitute teacher availability (Harbatkin et al., 2023b; Strunk et al., 2022). Principals in reidentified schools reported similarly high levels of human resource hindrances in the 2022-23 school year, and teachers reported even higher levels than in 2021-22.

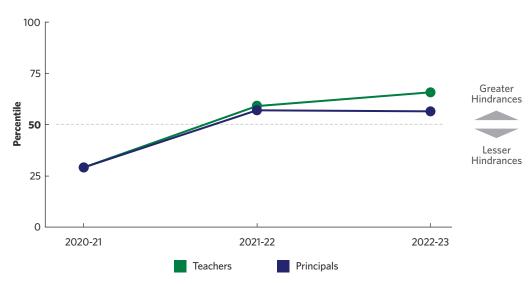


FIGURE 4.2. Human Resource Hindrance Construct for Reidentified Partnership Schools Over Time

Note: Marker heights represent mean percentiles of reidentified school educators in response to items related to human resources hindrances in each of the past two survey waves. The 50th percentile line denotes the average response across all teachers and principals in the two survey waves. A mean response above the line indicates that a given group reported greater human resource hindrances to improvement than the average respondent across all teachers and principals in each of the two survey waves. A mean response below the line indicates that a given group reported lesser hindrances. The questions for this construct were not asked in the first two survey waves.

As in previous rounds of the Partnership Model, the current (Round 4) set of Partnership district leaders and teachers struggled with instructional improvement and system-building due to human capital challenges (Burns et al., 2023; Strunk et al., 2022). As the analysis above has shown, however, the extent of human capital challenges has only worsened throughout the COVID-19 pandemic. This means that the current round of Partnership districts and schools face particularly significant obstacles to improving instructional practices and systems. These include starting from square one on establishing instructional routines and systems and a need to focus on basic pedagogical knowledge and skills.

Some Educators in Partnership Districts Are Concerned About the Efficacy of Instructional Improvement Efforts

When districts and schools struggle with retention and recruitment, this can often mean difficulty retaining experienced teachers or insufficient time to develop teachers' knowledge and expertise (Guarino et al., 2006). Figure 4.3 shows the share of teachers and principals at Partnership and non-Partnership schools who believe their staff has the knowledge and expertise to help students learn. While the majority of teachers and principals agreed that their staff had the requisite knowledge and expertise, up to 35% either felt ambivalent or outright disagreed. Teachers and principals in Partnership schools expressed lower levels of confidence in staff knowledge and expertise than those in non-Partnership schools.

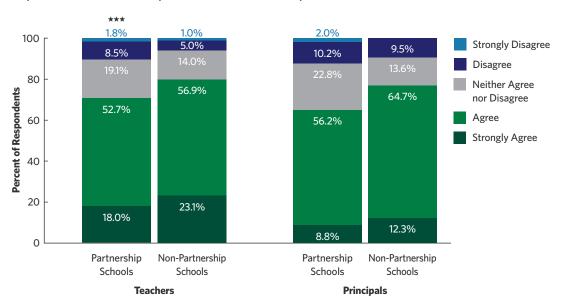


FIGURE 4.3. Teacher and Principal Perceptions of Staff Knowledge and Expertise in Partnership and Non-Partnership Schools, 2022-23

Note: Teachers and principals were asked the extent to which they agreed or disagreed with the statement, "Teachers in my school have sufficient knowledge and expertise to help students learn." +p<0.10, *p<0.05, **p<0.01, ***p<0.001

District and school leaders in our case study districts connected their concerns about instructional quality with their reliance on newer and under-credentialed teachers. For example, a Hornets district leader explained that "much of our staff right now is fairly new...That's a challenge of having seasoned teachers in place and having that experience within a classroom, classroom management, and then also just instructional delivery." Likewise, discussing instructional challenges, a Rangers CMO-level leader explained that "most teachers [at the school] don't have skills to teach standards...[there's a] lack of training in foundational pedagogy, unpacking standards, teaching essential concepts."

Partnership school principals in our case districts emphasized how relying on substitute and under-credentialed teachers affects instructional quality and student outcomes. For example, a Ducks principal told us, "We don't have a certified math teacher. For two years—my first and second year—we're down a certified math teacher...so how are my kids supposed to learn from a sub all year? It is a struggle." Likewise, a Blizzard principal explained, "I have students in classrooms with subs year-over-year, which doesn't support the achievement piece." A Hornets high school principal reflected on how relying on under-credentialed teachers throughout the district has had consequences even though their school is fully staffed:

But it has to go back even to the middle school level and knowing that you have had a student who has had substitute teachers in sixth, seventh, and eighth grade, and the impact it's going to have on that student when they get into high school.

These quotes highlight the challenge posed by high rates of turnover and difficulty recruiting credentialed teachers. They also reinforce the Partnership Model's emphasis on system-wide efforts; staffing issues in some schools can have consequences for others in the same district.

Leaders Struggle to Establish Instructional Routines and Systems

Ultimately, district and school leaders described how teacher turnover and the reliance on newer and under-credentialed teachers has set them back in terms of establishing strong routines and systems and implementing strategic plans. For example, a Ducks district leader explained:

Because of [turnover, shortages, and reliance on subs], we found that a lot of things that we put in place five years ago and have been building, half of our district doesn't know what that is, right? We're operating under a "why" and a "what" we're supposed to be doing, but we really don't have the "how" because a lot of our folks don't know how to do that.

Likewise, the Hurricanes principal explained that their current focus on curriculum and instruction is "not supposed to be a big departure" from what the school was already focused on, but "I think it has been, there's just been a lot of turnover here...It should just be, 'This is the curriculum. We're going to keep it rolling." A Hurricanes CMO leader added that the need to start over with training "quite frankly takes a lot longer than being able to hire someone that's highly qualified, highly motivated. That's a bit discouraging when they're not moving that needle as quickly as you need them to."

Leaders Need to Focus on Developing Teachers' Basic Pedagogical Knowledge and Skills

Given the churn that has been occurring in Partnership districts, many teachers employed in these districts are inexperienced (either overall or new to the district), under-credentialed, or long-term substitutes. Beyond the immediate consequences of this kind of workforce for instructional quality, district and school leaders described needing to invest more time and resources into professional development that focuses on basic pedagogical knowledge and skills. This means that districts are less able to invest in higher-level professional development. One Blizzard principal put it this way:

All of my teachers, the most—I have one teacher that has three years in gym of experience. One that has this is their second year and the other four classroom teachers, this is their first year. They don't have a lot of tools in their toolboxes. It turns into trying to model for them, meeting with them, showing them, giving them instructional strategies, showing them how it works in the classroom. Turn and talk to your partner, or I don't know. Pause, just wait time. Give them opportunity to think through before you move on. Some of that stuff you would think would be somewhat innate.

Similarly, a Ducks district leader explained that to meet their literacy goals, they are placing a major emphasis on "supporting the teachers who are here, supporting the long-term subs who are here in lieu of certified teachers." They continued:

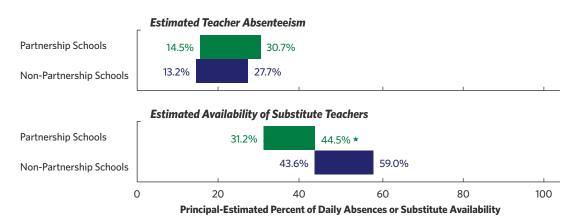
We were able to add instructional coaches from [the ISD] to particular schools, so one of our schools, which is basically heavily long-term subs, they get a very, very heavy dose of instructional coaching from the ISD... There was a list of different people, like administrators from central office and other folks who were assigned to different long-term subs just to check in on them.

This need to invest more time and resources in supporting teachers' understanding of basic pedagogical knowledge and skills is an important step toward being able to provide high-quality instruction in Partnership district classrooms. Teacher churn and workforce composition also creates concerns about repeatedly providing this level of professional development without the ability to provide higher-level professional development.

Absenteeism and Inconsistent Substitute Availability Creates Additional Strain on Teachers

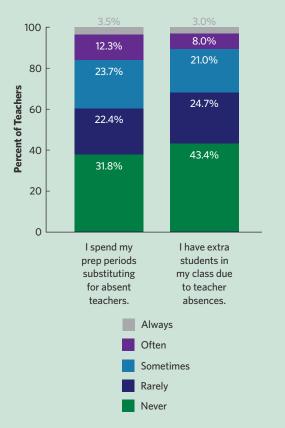
Teacher absences and the low availability of substitute teachers has historically created additional challenges for Partnership districts. For the previous rounds of the Partnership Model, these issues especially emerged during the 2021-22 school year; a combination of illnesses and stressful working conditions fueled an increase in teacher absences for Partnership districts, and schools struggled to secure substitute teachers to cover absent teachers (Strunk et al., 2022). We asked principals to report the percentage of teachers who were absent from school each day during the month of the survey, as well as how often a substitute teacher is available when a teacher is absent.⁶ (We rely on principals to self-report this data because we do not have access to teacher daily attendance records.) Figure 4.4 shows that schools in Round 4 Partnership districts on average faced high teacher absenteeism and relatively low daily substitute teacher availability, but Partnership schools had a harder time finding substitute teachers than their non-Partnership counterparts during the 2022-23 school year. These high absenteeism rates and high levels of difficulty finding substitute teachers to cover those classes are at comparable levels to what principals reported in previous rounds of the Partnership Model during the 2021-22 school year.

FIGURE 4.4. Principal-Reported Teacher Absenteeism and Availability of Substitutes for Partnership and Non-Partnership Schools, 2022-23



Note: The first panel of bars provides the estimated range of daily teacher absenteeism in February-March 2023, based on responses to the question, "Think about teacher and staff absences over the last month. Approximately what proportion of teachers and other staff were absent from school (for all or part of the day) each day?" The second panel provides the estimated range of the percent of time substitute teachers were available to fill in for teachers who were absent based on responses to the question, "When teachers are absent, approximately what proportion of the time are substitute teachers available to teach their classes?" Response options for both were <10%, 10-25%, 26-50%, 51-75%, 76-90%, and >90%. To create estimated ranges, we assign the minimum value of the selected response option as the lower bound and the maximum value as the upper bound. We then take the weighted mean of the lower and upper bounds, respectively, across all respondents. The figure to the left of each bar represents the estimated mean lower bound and the figure to the right of each bar represents the estimated mean upper bound. +p<0.10, +p<0.05, +p<0.01, +p<0.001

FIGURE 4.5. Teacher-Reported Coverage for Teacher Absences in Partnership Districts, 2022-23



Note: Teachers were asked to indicate how often "I spend my prep periods subbing for absent teachers" and how often "I have extra students in my class due to teacher absences."

For many teachers, a consequence of their schools' human capital issues is that they sometimes must give up their prep time to cover classes. Sometimes, this is the result of overall staffing shortages. As one Blizzard teacher explained, "We do not get prep because we're down staff people." The principal of that school elaborated:

The morale gets low because I mentioned when we don't have the PE, and we don't have the science, we can't offer the contractual special so teachers are in the classroom for seven-and-a-half hours without their 50-minute planning. They get compensated but that's a drag.

More often, teachers have to cover for those who are absent when there is not a substitute available. For example, a Ducks district leader explained:

We have teachers filling in [due to a lack of substitute teachers]. During their planning time, they're teaching someone else's class, so then they lose their planning time. That's probably the biggest thing that is affecting the morale is having to cover teachers when they're out.

These kinds of disruptions broadly affected teachers in Partnership districts, some more acutely than others. Due to teacher absences, over two-thirds of teachers in Partnership districts reported ever giving up their prep time, and over half of teachers in Partnership districts reported ever having extra students in their classrooms (Figure 4.5). About one in six teachers reported always or often subbing during their prep periods, and nearly one in ten reported always or often having extra students in their classes.

In interviews, district leaders, school leaders, and teachers frequently brought up the fact that many teachers have had to give up prep periods to cover for an absent teacher. They especially emphasized the way that these instances can erode teacher morale and degrade working conditions. The following comment from a Ducks principal helps illustrate the nature of this issue:

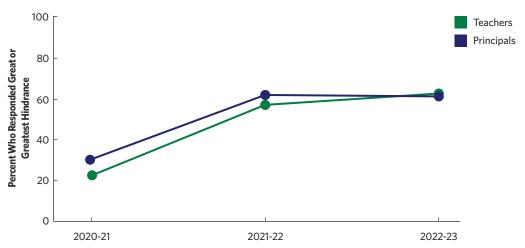
I think the teachers never know what the day's going to look like because of teacher shortage...It's a lot of subbing on your [prep period], and that can be draining...They come in every day, and they're waiting for that email from me like, "Hey, we have got to do a rotation because we got uncovered classes." That's not fair...Our teachers are just drained. When you come in at 7:15, and you're running' from 7:35 to 2:45, and you're going to the bathroom during planning period real quick for—or during passing time for three minutes and trying to eat lunch and all that, and you just don't have a

break—they're exhausted...Like I said, we try to give them breaks and cover for them as much as we can, but they are team players, and they're—the staff that's here are here for the kids. They're going to do what's necessary for the kids but, at the same time, they've got to take care of themselves, too...at the end of the day, we've got to have classes covered. It's hard.

In our case study districts and open-ended survey responses, teachers also explained that they often are not compensated for subbing during their preps, which adds injury to insult. As one teacher wrote in an open-ended response, "The workload is significant and not really reimbursed."

Ultimately, teachers and principals in Partnership districts perceive the lack of daily substitute teacher availability (and the resulting need for teachers to cover classes during their preparation periods) as a great hindrance to school improvement. Overall, 56% of principals and 57% of teachers in Partnership districts rated the lack of substitute teacher availability as a great or the greatest hindrance. Figure 4.6 shows the percentage of reidentified school principals and teachers reporting the lack of substitute teacher availability as a hindrance to school improvement over time. Their responses highlight how the issue remains as salient to teachers and principals as it was in the previous school year (2021-22) and at a much higher level than in 2020-21.

FIGURE 4.6. Lack of Availability of Substitute Teachers as a Hindrance to School Improvement for Reidentified Schools Over Time



Note: Teachers and principals were asked to indicate the extent to which "lack of availability of substitute teachers" was a hindrance to school improvement. Options were: not a hindrance, a slight hindrance, a moderate hindrance, a great hindrance, and the greatest hindrance.

Non-Academic Staff Shortages Create Additional Strain on Teachers and Principals

Non-academic staffing shortages also contribute to greater demands on principals and teachers, and ultimately create further challenges for instructional improvement and student learning. Some districts have had a difficult time filling their social worker and school counselor positions. For example, a Hornets district-level leader described how unfilled social worker and school counselor positions have created additional burdens for teachers and school leaders:

When you're missing people, then other people are picking up the slack. You have people that are burnt out and exhausted as a result...It's hard because the teacher becomes that social worker, and the principal becomes that person to try to find these resources for everyone. It becomes very difficult when that's happening.

A Hornets teacher elaborated on the way these shortages affect their working conditions:

We currently have half a counselor [at our school]. We currently have no social workers in this building. We could have the best curriculum out there, but our kids are in crisis, and we have no way of helping those kids. Instead, what are we doing? We're working on our own. We're trying to find accommodations to help our students. I don't know.

Teachers echoed these concerns in their open-ended survey responses. As one teacher simply wrote, "We need more social work support and school evaluation team staff (speech, psychologists, etc.)."

In addition to non-instructional staff in schools, leaders in multiple case study districts spoke about how school bus driver shortages required them to scale back on transportation services. For example, a Ducks principal shared, "We have bus driver shortages, so...not all of our kids have bus access this year." These shortages have implications for student attendance and academic progress. As one district-level Blizzard leader explained:

I think that there are some routes that we just don't have a driver for sometimes... and students get left at home for lack of drivers. That's an attendance problem that then leads to an academics problem because they're not getting the time in their classrooms that they need.

Likewise, in open-ended survey responses, some teachers raised concerns about bus driver shortages and their negative effect on students. As one teacher wrote:

On any given day up to three of the seven buses that service our school will not have drivers...Attendance is a huge issue because of this; nearly all of my absent students are absent because their bus did not run that morning and the family has no transportation. Some parents have to choose between going to work and taking their child to school.

Our findings from this school year show that non-instructional staffing issues that emerged during the COVID-19 pandemic have continued (Strunk et al., 2022). Non-academic staff shortages can exacerbate teacher workload because there is limited capacity to address student mental health and student attendance. Lack of structural support from non-academic staff members jeopardizes teacher retention and, ultimately, hampers school improvement efforts.

Staffing Issues Interrupt the Implementation of Academic Intervention Practices

District leaders, school leaders, and teachers explained that vacancies and shortages make it difficult for schools to implement high-leverage practices meant to improve student outcomes, such as academic intervention and tutoring. In some cases, interventionists need to play other roles in the school or cover classrooms when there is no substitute available. For example, a

Blizzard interventionist explained:

[My colleague and I are] Title 1 teachers and what happens is because we are understaffed, when there is a hole in the building that we can't let go—if there's a teacher missing or someone is absent or someone quits, then we have to fill in those roles and discipline is definitely something—when the building is kind of crazy—we also support in that aspect as well, so it takes away from doing interventions and being able to see our reading groups... There are times when we don't have the opportunity to see the kids that are on our caseloads.

In other cases, schools are stretched too thin to implement academic interventions with fidelity. For example, a Hurricanes interventionist explained:

Interventionists do best when you have ten children and under and that is not the situation. We're dealing with 22 children per class, that's a reading class, that's no longer intervention. Because it's impossible in 55 minutes to intervene with 22 children, so you're just teaching now. You just have a class. You're not intervening in any way, so it becomes—to me, it's just a dumping ground.

Teachers echoed these concerns in their open-ended survey responses. For example, a school respondent wrote:

I am supposed to be serving as a reading interventionist, but instead I am often pulled to cover for absent teachers or serve as a long-term sub...with funds being directed toward more academic intervention, I think it would be important to know how widespread the problem is and safeguard the time of interventionists to remain interventionists. Otherwise, interventionists essentially become subs and any additional support programs are barely worth the paper on which the plans are written.

Likewise, a teacher wrote, "Our half-time literacy teacher spends her time doing testing instead of actually providing intervention to students." The disruption of intervention practice is a major issue for two reasons. First, a major emphasis for Partnership districts is implementing academic intervention through a Multi Tiered System of Supports (MTSS). Second, small-group tutoring and intervention are considered key practices to accelerate learning in the wake of pandemic-related learning interruptions (Belsha, 2023).

SUMMARY

In sum, the degree of teacher retention and recruitment challenges creates substantial consequences for school improvement efforts. They exacerbate difficult working conditions, for example by creating additional work for teachers and limiting the support that administrators can provide. They also limit the scope of instructional improvement, as school and district leaders need to focus on establishing basic skills and core systems rather than building on a strong foundation. The consequence is a cycle, exacerbated by the COVID-19 pandemic, in which human capital challenges, difficult working conditions, and hindrances to improvement compound one another.





Section Five: Strategies to Address Human Capital Challenges

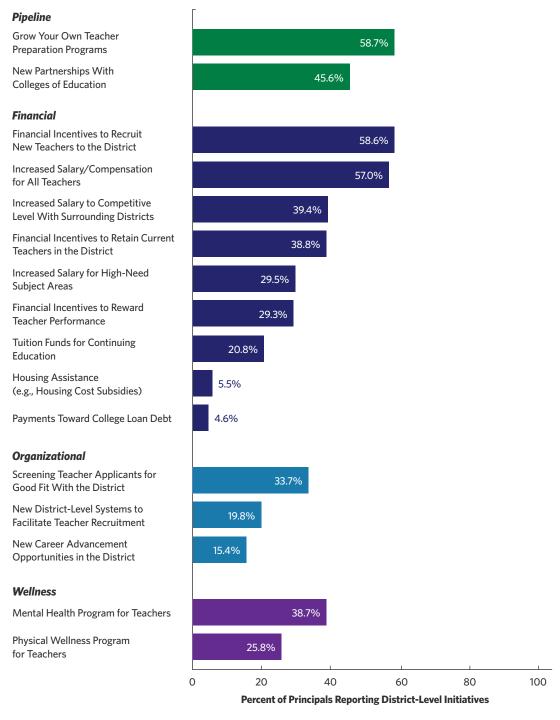
With these significant human capital challenges and downstream consequences, Partnership districts and schools are implementing several strategies intended to strengthen teacher recruitment and retention. Districts focused on strategies like GYO programs and increased compensation, while principals worked to support teachers and improve their working conditions. While these efforts have the potential to improve teacher retention and recruitment, district and school leaders report challenges with implementation and in some cases a need for greater support.

PARTNERSHIP DISTRICTS ARE IMPLEMENTING GROW YOUR OWN PROGRAMS AND OFFERING INCREASED COMPENSATION

Partnership districts are heavily focused on two types of strategies, as shown in Figure 5.1. First, principals are seeking to strengthen their recruitment pipeline by establishing new GYO programs (59%) and partnerships with colleges of education (46%). Second, they are increasing salaries (57%) and offering other financial recruitment (59%) and retention incentives (39%) for teachers. Existing research suggests that these strategies—if designed and implemented well—could help with recruitment and retention (Gist et al., 2019; Nguyen et al., 2023; Redding, 2022; Swain et al., 2019). While these seem to be the primary focus, Partnership districts are also implementing organizational and wellness strategies as a means to improve retention and recruitment.

Importantly, however, our case studies highlight some threats to the effectiveness of these strategies. It has been difficult for Partnership districts to provide sufficient incentives to attract enough candidates to participate in their GYO programs. In addition, neighboring districts are also increasing salaries and offering financial incentives, making it hard for Partnership districts to compete. We use 02/ Case Study Vignette from the Rangers district to illustrate the strategies that Partnership districts are using and some of the obstacles they face.





Note: Principals were asked to select all the teacher recruitment and retention initiatives that their district was currently implementing from the following options.



Rangers' Efforts to Improve Recruitment and Retention

Rangers is a charter school district that has been reidentified for Partnership. They have struggled greatly to recruit and retain teachers, which has hindered their school improvement efforts. In 2022-23, only around 20% of their teachers were certified. For the rest of their classes, they relied on substitute teachers. As the Rangers principal explained, "That is a gap for us this year. That goes back to why teacher recruitment and retention is a big deal."

Like most other Partnership districts (see Figure 5.1), the Rangers district is focused on creating a GYO program to move current staff members from long-term substitutes to credentialed teachers. This is an especially important approach for them given the challenge of recruiting new, high-quality teachers and the substantial number of substitute teachers they already employ. As the Rangers principal explained:

If we have long-term subs, then, and they are eligible, then we have given them the opportunity to say, "Hey, we have a stipend, or we have a reimbursement for—if you decide to take an alternative pathway to certification," then there is assistance available. We have worked really hard to try to maintain the staff that we do have come into the school—retaining the staff...as well as try to provide that support for alternative pathways as well.

As they've sought to create and strengthen this GYO pipeline, however, they've faced time, interest, and commitment barriers. The Rangers principal explained it this way:

RANGERS' EFFORTS TO IMPROVE RECRUITMENT AND RETENTION (continued)

Time commitment is a big one; time in for those programs. They're choosing not to, they have family obligations etc. outside of school. They're worried about workload. Not finances just because we offer to pay...so money is there to pay but they just had to complete the program.

In addition, and again similarly to other Partnership districts, the Rangers district is also using salary increases and financial incentives. The Rangers principal explained they had increased salaries "a great deal," and also used a number of financial incentives for recruitment and retention:

Through our 21h funds, through our Partnership Agreement, we have been able to provide incentives...Retention incentives, tuition incentives, sign-on bonuses, retention bonuses—all of those things have also been in place to try to help recruit and retain teachers.

They are nonetheless finding it hard to compete with districts that can also offer similar incentives in addition to higher base salaries. As the Rangers principal explained, "Salaries have changed, we're trying to be competitive, but after COVID with ESSER funds, there were some ridiculous offers out there like \$20K sign-on bonuses for nearby schools."

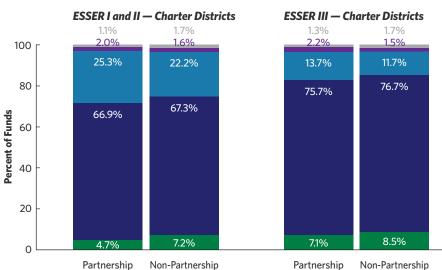
While the Rangers district uses under-credentialed teachers to some of the greatest degree among Partnership districts, the obstacles it faces in enacting recruitment and retention strategies are not unique. Other case study districts described similar challenges, from struggling with barriers to GYO programs for current uncredentialed staff to struggling to keep up with salary increases and bonuses from neighboring districts.

PARTNERSHIP DISTRICTS ARE USING COVID-19 RELIEF FUNDS TO BOLSTER HUMAN CAPITAL

COVID-19 relief funding data (which includes ESSER I, II, III; GEER; EEF; and Section 11t) show that Partnership districts planned to spend a significant share of their additional COVID-19-related funding on human capital (Figure 5.2). For TPS districts, human capital was the top expense for ESSER budgets. In ESSER I and II, Partnership and non-Partnership schools similarly budgeted over 40% of their funds for salaries and benefits. For ESSER III, non-Partnership districts budgeted even more of their ESSER funds (nearly 60%) for salaries and benefits, whereas Partnership districts remained at similar levels as the prior rounds of ESSER funding. For charter districts, the budgeting data are hard to interpret since human capital expenses for charter schools are often categorized under purchased services. While the data preclude definitive conclusions about charter districts, non-Partnership districts appear to have spent as much or more on human capital (in salaries, benefits, and purchased services) as Partnership districts.

ESSER I and II — TPS Districts ESSER III — TPS Districts 3.4% 19% 100 Other Expenses 7.4% 6.4% 9.1% Capital Outlay 11.6% 28.6% 16.5% 14.6% Supplies/Materials 80 11.1% **Purchased Services** 15.1% 24.1% 24.0% Salary/Benefits Percent of Funds 60 17.6% 59.3% 49.6% 46.7% 45.3% 40 20 0

FIGURE 5.2. District ESSER Budgeting Reliance by Partnership Status and Sector



Note: The graph shows the percentage of ESSER funds budgeted by expense type. We combine these funding sources into two groups based on the timing of their appropriation and allocation. The first group includes ESSER I and II as well as the GEER and EEF funds. The second group includes ESSER III and Section 11t. The difference between Partnership and non-Partnership traditional public district spending on human capital is statistically significant at p < 0.10.

Thus, while federal COVID-19 relief monies provided additional funding for Partnership districts to address human capital issues, other districts allocated these additional funds toward human capital expenses. As noted by the Rangers principal in the vignette earlier, these funds could undercut Partnership districts' financial incentive strategies and ultimately exacerbate teacher hiring difficulties due to competition with other districts.

PRINCIPALS FOCUSED ON SUPPORTING TEACHERS AND IMPROVING SCHOOL CULTURE

In addition to district-level strategies, we asked principals in our survey and case study districts about school-level efforts to support teacher retention. As shown in Figure 5.3, school leaders reported mostly focusing on improving school culture (84% for both Partnership and non-

Partnership principals) and supporting teachers. Four out of the top five responses from Partnership principals were strategies to support teachers, including: increased instructional coaching, new professional development for teachers, increased teacher involvement in decision making, and check-ins with teachers about well-being. A Hornets principal further explained, "I have tried to work with my newly hired assistant principal, making sure that we are ensuring that teachers feel supported. We're actively engaged in classroom visits. We're actively helping to support teachers and [their] students who have behavioral issues."

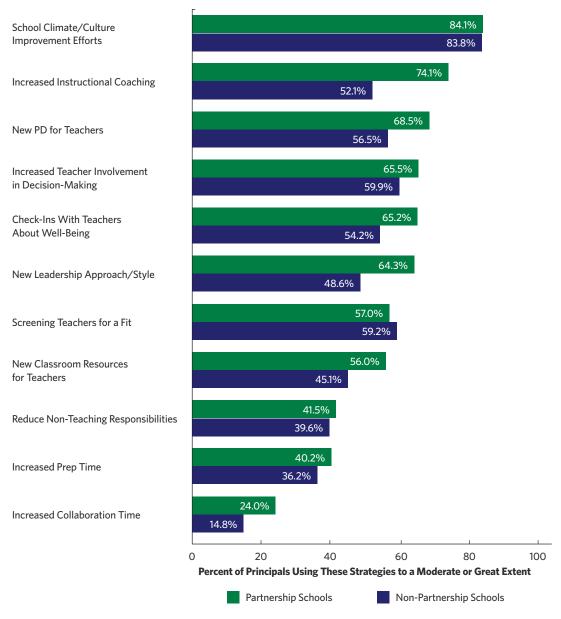
Four out of the top five responses from Partnership principals were strategies to support teachers.

The principals who we interviewed explained that they are focused on school culture and teacher support because they see these as the most important factors within their influence to improve teacher retention. As an example, a Ducks principal described his approach this way:

My mentality as a principal is I want my staff to know that I'm in the trenches with them. We're out in the hallways with them during passing time every day, every hour. We're in their classrooms with them. We're trying to support them every time that they need something. Next week is Teacher Appreciation. Man, we're going to try to spoil the heck out of them next week, intentionally spoil them. We think we do it every day, but next week we got to go over the top with them. Again, just letting them know that I respect them. I know it's a hard job because I did it. My assistant principal and my dean, they're all former teachers, as well. We all have the same message. It's hard. We believe in, if you need a bathroom break, give us a call and either—all three administrators will come and give you a bathroom break. We'll just do whatever we can. We're trying to build that family mentality where we take care of each other.

As reflected in this quote, Partnership school principals recognize the difficulty of teaching in general and in their schools in particular. They want to make teachers feel appreciated and respected and to alleviate some of the most challenging aspects of the job. Yet, staffing issues negatively affect school leaders' overall capacity to provide support to teachers. Indeed, as one teacher wrote in an open-ended survey response, "My administration team works hard to try and balance things, but in the end they can only do so much."

FIGURE 5.3. School Leader Retention Strategies for Partnership and Non-Partnership Schools, 2022-23

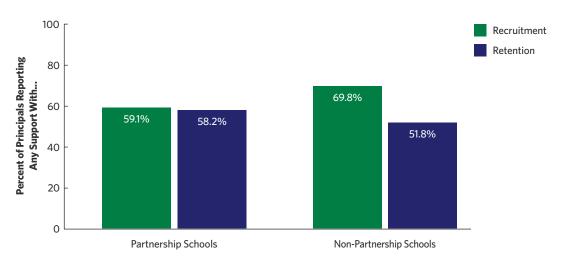


Note: We asked principals to indicate the extent to which their school was using each of the following teacher retention strategies. Options were: my school is not doing this, to a small extent, to a moderate extent, and to a great extent.

PRINCIPALS MAY BENEFIT FROM ADDITIONAL SUPPORT FOR THEIR SCHOOL-LEVEL RECRUITMENT AND RETENTION EFFORTS

Though districts and other organizations may be in a position to support school leaders with these efforts, a substantial share of principals said that they received no support at all with strategies to address teacher turnover in their schools. We asked principals to report whether they receive support with teacher recruitment and retention from their districts or other education entities. As Figure 5.4 shows, most Partnership school principals reported receiving support from at least one source on teacher recruitment (59%) and retention (58%). Although not shown here, most principals indicated that their primary support came from their districts and then other education entities (e.g., MDE, their intermediate school district, external organizations). This was expected given that other education entities might be providing district-level support and having districts allocate or disseminate accordingly. While this was encouraging, just over 40% of Partnership school principals reported receiving no support at all—an interesting phenomenon that might suggest a need for more support to schools from various sources. Finally, although slight, more Partnership school principals reported receiving any support with teacher retention efforts, but far fewer reported receiving any support with recruitment.

FIGURE 5.4. Principal-Reported Support With Teacher Recruitment and Retention in Partnership Districts, 2022-23



Note: Principals were asked to indicate which of the following organizations provided support for teacher recruitment strategies and teacher retention strategies: their district or charter management organization, MDE, their ISD, community organizations, or external educational organizations, or none of these. Principals could select all that applied, though the "none of these" option was mutually exclusive.



EPIC

Section Six: Key Takeaways and Policy Recommendations

The ability of districts and schools to recruit, retain, and develop their teachers substantially affects the efficacy of school turnaround efforts (Harbatkin & Henry, 2019; Henry et al., 2020; Malen & Rice, 2012). Therefore, for the newest round of Partnership districts, it is important to understand the current extent of their human capital challenges to use as a baseline metric for future years as we follow their progression through the Partnership Model. We conclude this report by restating our key takeaways and discussing some recommendations for educational leaders and policymakers.

KEY TAKEAWAYS

- Partnership districts face high levels of teacher turnover, have difficulty recruiting experienced
 and high-quality teachers, and rely on substitute teachers for a substantial share of positions.
 These issues tend to be even greater for Partnership schools than for non-Partnership schools
 in Partnership districts.
- These human capital challenges have made it difficult for Partnership schools and districts to improve instruction, implement high-leverage practices, and maintain positive teaching and learning conditions, thus hindering school improvement efforts.
- 3. Partnership district and school leaders are taking steps to improve teacher retention and recruitment—from greater support for teachers to financial incentives and GYO programs—but they face some obstacles stemming from the current state of the teacher labor market, the resources available to them, and the ongoing challenges their teachers and students face.

POLICY RECOMMENDATIONS

Continue Efforts to Strengthen the Supply of Teachers Statewide

The human capital challenges that Partnership districts and schools face are in part due to broader trends in the teacher labor market. While a falling supply of new teachers and rising rates of exit from the profession create issues for all Michigan districts and schools (Kilbride et al., 2023a, 2023b), those issues are acutely felt by Partnership districts and schools (Harbatkin et al., 2023b). Further, while Partnership districts do have additional funds that they can use for retention and recruitment (e.g., ESSER funding), other districts also have additional funds from many of the same sources and are similarly using those funds to recruit and retain teachers. In the context of a fixed pool of teachers and staff, other districts—with greater overall resources and often less challenging working conditions—still have a competitive advantage in teacher recruitment and retention. Additional funding for recruitment and retention efforts is important, but increasing the overall supply of certified teachers is also necessary to ensure that Partnership districts (and other districts with significant human capital challenges) can recruit and retain credentialed and high-quality teachers.

Therefore, to alleviate human capital challenges for Partnership districts and schools, Michigan policymakers and educational leaders should continue their efforts to strengthen the supply of teachers statewide. Lawmakers bolstered these efforts in the most recent state budget, providing new or additional funding for aspiring teacher fellowships and scholarships, GYO programs, student teaching stipends, and teacher mentoring and induction (MDE, 2023a, 2023b). The state should maintain its focus on plugging the "leaks" in the teacher preparation pipeline, strengthening the GYO capacity of districts, and providing mentorship and support for teachers (Kilbride et al., 2023a, 2023b; Michigan Public Act 103, 2023).

Partnership Districts Would Benefit From Additional Support From MDE and ISDs Around Retention and Recruitment Efforts

The Partnership Model is designed for MDE and ISDs to provide additional support to Partnership districts so that they can make improvements to human resources (among other areas) (Strunk et al., 2020). The majority of Partnership principals reported receiving support from their districts to aid efforts to address teacher recruitment and retention, yet a substantial share of Partnership principals did not report receiving any support. MDE and ISDs should have an opportunity to work with districts to improve their district-level retention and recruitment efforts as well as the support they provide for principals' school-based efforts.

MDE and ISDs should work with Partnership districts to determine what supports would be most helpful and then provide these supports to help improve teacher recruitment and retention. First, they can help districts strengthen the recruitment and retention initiatives that they are already implementing. For example, they can support districts as they seek to secure newly available state funding to support GYO programs (MDE, 2023a, 2023b), and provide guidance around how to use those funds to effectively design and implement those GYO programs. In addition, they can help districts by facilitating stronger relationships with nearby teacher preparation programs or providing guidance around the use of salary increases and recruitment or retention bonuses.

Second, state and ISD leaders can help with efforts to improve school and district leadership and school culture and climate, for example, by offering more coaching and professional development.

Finally, given that challenges with teacher recruitment and retention are influenced by broader teacher labor market dynamics (Harbatkin et al., 2023b), MDE and ISDs may be able to help address factors that are beyond the scope of district or school practices. For example, they could consider using available funds or other professional incentives (e.g., development and credentialing opportunities) to encourage teachers to accept jobs in Partnership schools.

Lawmakers Should Continue Increasing 21h Funding to Support Teacher Retention and Recruitment

The Michigan education budget includes a specific set of funding for Partnership Model districts, known as 21h funding. The Office of Partnership Districts allocates 21h funding among the Partnership districts to support their school improvement strategies and activities. Partnership district and school leaders have consistently reported that 21h funds have helped them in their school improvement efforts, and they have historically spent much of their 21h funding on staffing and educator development, though they also use these funds in other areas, such as investing in data systems or purchasing curricular resources (Strunk et al., 2022).

The most recent Michigan education budget included an increase in funding designated for Partnership districts: a one-time allocation of \$36 million, of which \$24M will go to the current round of Partnership schools, in addition to an annual allocation of \$6M. That means a total of \$42M in additional funding will be distributed to the current round of Partnership districts. To put this level of funding in context, Partnership schools employ about 3,000 teachers and Partnership districts employ about 9,000 teachers. This means that, on average, Partnership districts would have about \$14,000 in additional funding per Partnership school teacher, or about \$4,666 in additional funding per Partnership district teacher. Yet not all the 21h funding can or should be deployed for teacher recruitment and retention, given Partnership schools and districts have other pressing needs as well (e.g., instructional resources, academic interventions, supports and resources to improve student attendance).

Thus, while the increased 21h funding could allow Partnership districts to make some additional human capital investments, it is a modest amount given the magnitude of the human capital challenges and persistent social and economic inequalities. Indeed, recent research suggests that schools with difficult working conditions need to offer substantially higher salaries in order to attract and retain qualified teachers at the same level as other schools (Berman & DeFeo, 2023).

Pursue Efforts to Strengthen the Supply of Non-Academic Staff and the Availability of Student Supports and Services

In addition to teacher staffing challenges, issues related to non-academic staff hiring and retention emerged during the COVID-19 pandemic. Partnership districts increased their social work and school counseling offerings for students but have faced challenges staffing those positions, and also faced shortages in non-instructional positions such as bus drivers (Strunk et

al., 2022). These issues have persisted through the 2022-23 school year, placing an even greater strain on teachers. These issues contribute to teachers reporting higher rates of burnout and feelings of being overwhelmed and overworked.

Thus, MDE and lawmakers should consider ways to help Partnership districts fill nonacademic positions and more broadly address non-academic student needs. For bus drivers, additional transportation funding can enable districts to increase salaries and hire drivers in a competitive labor market; and policymakers can also explore changes to regulations that might ease bus driver hiring difficulties (Burgoyne-Allen et al., 2019). For social workers and school counselors, state policymakers could consider providing a financial incentive for social work and psychology graduates to work in high-need schools. Michigan's Section 31o funding represents an important investment in school social workers and counselors, though this funding will fade in the coming years as districts become responsible for full funding. Thus, additional funding provisions for Partnership districts and schools could strengthen their ability to retain these staff in the coming years. In addition, MDE can explore ways to collaborate more directly with the Michigan Department of Health and Human Services to ensure adequate mental health and other social services are available to families in Partnership districts.

ENDNOTES

- 1. Surveys were administered to teachers and principals in all schools in Partnership districts, regardless of individual schools' Partnership status.
- We received a total of 1,811 responses to the openended question, of which 1,498 (83%) were considered substantive. We did not consider answers to be substantive if they only responded expressing gratitude, clarifying responses, or stating "N/A". We coded open-ended data from the same question in Wave 3 and Wave 4, and began coding with the previously established codebook. This codebook included both deductive structural codes that were created from previous Partnership reports and findings (e.g., labor shortages, student behavior, school safety) as well as inductive codes (e.g., diminished morale, teacher mental health, increasing workloads). Codes that shared features were bundled to form categories. For example, shortages of teachers, non-instructional staff, and subs were all categorized as labor shortages, within human capital challenges. To ensure trustworthiness in analysis, we employed several strategies. Collaborators met to discuss coding decisions and justify the bundling of codes into categories. Quotes from the survey responses are included throughout the report to both share the data with readers and support our findings.
- In Michigan, public school academies are publicly funded schools that operate independent of a traditional school district, often referred to as charter schools. We refer to these schools as "charter schools" as that is the more commonly used term.

- 4. We are looking at year-to-year mobility, which allows us to focus on very recent events and policy changes. One drawback to this approach is that these exit rates or "left the profession" measures may include some educators who left temporarily and returned to teach in a later year and some who switched from teaching to non-teaching roles within the state public school system.
- We asked principals to indicate the percentage of teaching positions filled by day-to-day subs, long-term subs, and emergency subs. We presented these as discrete categories, but some respondents selected high percentages for each category that added up to more than 100%. Upon further analyzing these data and interviewing some respondents to understand their responses, we came to understand that some respondents blurred the distinctions between these categories in their responses and therefore selected the same or overlapping percentages for each category. In addition, some respondents interpreted the categories differently from each other. For simplicity, instead of adding the values across the three categories, we focus here on the share of respondents who reported at least a certain level of reliance on substitute teachers, based on selecting a percentage-of-teachers response for at least one of the three types of subs. For example, if a respondent selected 10-25% day-to-day subs, 26-50% long-term subs, and 26-50% emergency subs, we placed them in the "26-50%" category. Thus, our estimates for reliance on substitute teachers are conservative and the extent of the issue could be even greater.
- 6. We asked principals to indicate the percentage of teaching positions filled by day-to-day subs, long-term subs, and emergency subs. For full explanation see endnote five.

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APPENDIX A: SURVEY RESPONSE RATE

TABLE A1. Partnership Survey Sample and Response Rates for Round 4 (i.e., Cohort 3), 2022-23						
	By Partnership Status		By School Type		TOTAL	
	Partnership	Non- Partnership	TPS	Charters	Overall Sample	
Teachers	46.4%	43.3%	43.1%	53.3%	44.2%	
	(1,246)	(2,763)	(3,487)	(522)	(4,009)	
Principals	61.5%	42.5%	44.7%	69.2%	48.3%	
	(67)	(105)	(136)	(36)	(172)	
Total Wave 5	47.0%	43.3%	43.2%	54.1%	44.4%	
	(1,313)	(2,868)	(3,623)	(558)	(4,181)	

TABLE A2	2. Partnership Su	rvey Sample a	nd Response	Rates for Rou	nds 1, 2, and 3	(i.e., Cohorts	1 & 2)
	By Partner	By Partnership Status		By School Type		By Cohort	
	Partnership	Non- Partnership	TPS	Charters	Cohort 1	Cohort 2	Overall Sample
WAVE 1 (2018-19)							
Teachers	42.3%	35.9%	38.0%	45.0%	42.6%	42.1%	38.3%
	(1,116)	(1,602)	(2,578)	(140)	(361)	(755)	(2,718)
Principals	28.3%	28.8%	25.8%	68.4%	16.7%	33.3%	28.6%
	(28)	(53)	(68)	(13)	(5)	(23)	(81)
Total Wave 1	41.8%	35.6%	37.5%	46.4%	41.7%	41.8%	37.9%
	(1,144)	(1,655)	(2,646)	(153)	(366)	(778)	(2,799)
WAVE 2 (2019-20)							
Teachers	57.1%	44.8%	49.0%	52.5%	59.3%	56.0%	49.2%
	(1,325)	(1,899)	(3,079)	(145)	(471)	(854)	(3,224)
Principals	50.7%	31.4%	35.6%	71.4%	48.0%	51.9%	37.8%
	(39)	(49)	(78)	(10)	(12)	(27)	(88)
Total Wave 2	56.9%	44.4%	48.6%	53.5%	58.9%	55.9%	48.8%
	(1,364)	(1,948)	(3,157)	(155)	(483)	(881)	(3,312)
WAVE 3 (2020-21)							
Teachers	43.3%	35.2%	37.8%	51.5%	46.4%	41.8%	38.5%
	(1,070)	(1,272)	(2,184)	(158)	(387)	(683)	(2,342)
Principals	66.0%	33.6%	45.0%	66.7%	65.5%	66.2%	46.6%
	(66)	(50)	(104)	(12)	(19)	(47)	(116)
Total Wave 3	44.2%	35.2%	38.1%	52.3%	47.0%	42.8%	38.8%
	(1,136)	(1,322)	(2,288)	(170)	(406)	(730)	(2,458)
WAVE 4 (2021-22)							
Teachers	31.7%	28.5%	29.3%	38.2%	32.5%	31.3%	29.9%
	(835)	(1,009)	(1,699)	(145)	(296)	(539)	(1,844)
Principals	39.8%	21.8%	27.2%	47.6%	35.5%	41.8%	29.0%
	(39)	(32)	(61)	(10)	(11)	(28)	(71)
Total Wave 4	32.0%	28.3%	29.3%	38.7%	32.6%	31.6%	29.8%
	(874)	(1,041)	(1,760)	(155)	(307)	(567)	(1,915)

APPENDIX B: SURVEY MEASURES AND ANALYSIS

Item-Level Analysis

In all waves of survey administration, the EPIC's survey of Partnership district principals and teachers focused on the following areas of the Partnership Model and related school and district contexts:

- understanding and awareness of the Partnership Model
- understanding and perceptions of school and district improvement goals
- perceptions of support from various organizations
- perceptions of school and district effectiveness and implementation
- perceptions of challenges, with a particular focus on staffing
- school culture and climate

A copy of the 2022-23 surveys can be found at https://epicedpolicy.org/wp-content/uploads/2023/10/ Yr5_Partnership_OnlineAppendix_Surveys2022-23.pdf

In interpreting findings from these survey items, it is important to note that responses to the questions about student challenges are perceptions only and are therefore framed by teacher experiences. Analyses of data from these survey responses should be interpreted as teacher perceptions that necessarily include some degree of uncertainty. Over the past few years, we had one teacher survey and one principal survey, where many, but not all, of the items were aligned across the teacher and principal surveys. For example, we asked only teachers about their school leader effectiveness and school instructional practices, and we asked only principals about district and school strategies for teacher recruitment and retention.

Construct Analysis

In addition to examining item-level descriptives, we also conduct factor analyses to create broader constructs from multiple survey items. In order to make comparisons across years, we draw from items that were asked over multiple survey waves. For these items, we stack teacher and principal responses for all four (or in some cases, two or three) years and conduct exploratory factor analyses on subsets of items intended to capture broader constructs using principal component factors. We determine the number of factors using parallel analysis (Horn, 1965), and use orthogonal varimax rotation to identify the separate factors.

Because we are interested in comparing subgroups, we examine factor loadings and internal consistency across populations (i.e., teachers vs. principals, Partnership vs. non-Partnership schools) and survey waves. Ultimately, we adjust to ensure meaningful and coherent factors that have (a) acceptable internal consistency based on Cronbach's alpha, and (b) similar factor loadings across subgroups. Drawing from the exploratory factor analyses, we run confirmatory factor analyses and generate factor scores for each respondent. Table B1 summarizes each construct that was developed in the confirmatory factor analyses.

TABLE B1. Summary of Constructs						
Constructs	Items	Population	Wave(s)	Cronbach's Alpha		
Human Resource Hindrance	Extent of hindrance: Low teacher attendance, low teacher retention, lack of availability of substitute teachers, insufficient supply of certified teachers	Teachers, Principals	Waves 3, 4, and 5	0.80		

To illustrate descriptive differences over time and significant group differences, we transform these factor scores based on the cumulative standard normal distribution and generate percentiles that represent a respondent's score on the normal curve. The average respondent would have a factor score of 0, which we would convert to a 50, representing the 50th percentile on the normal distribution. These percentile values are useful in comparing groups but not informative in the aggregate because the average will always be approximately 50. We then take the average of the percentiles within each group we are comparing.

Weighting

In all analyses (both item and construct level), we weight teacher and principal survey responses separately by year using sampling and nonresponse weights. We calculate the sampling weight using the school-level coverage of our sampling frame and calculate the nonresponse weight as the inverse probability of response within schools (for teachers) or districts (for principals). We do so based on demographic characteristics (race/ethnicity, gender) for both teachers and principals, certification type (i.e., elementary, secondary) for teachers, and Partnership identification round for principals.

APPENDIX C: OPEN-ENDED SURVEY DATA

Table C1. Comparison of Open-Ended Respondents and Non-Respondents Among Survey Completers in Wave 5 (2022-23)					
	Non-Respondents (N=2,683)	Respondents (N=1,498)			
Demographics					
Female	77%	80%			
Black	30%	22%***			
Hispanic/Latino	3%	3%			
White	64%	70%***			
Other Race	4%	5%			
Grade Level					
Lower Elementary (K-2)	30%	30%			
Upper Elementary (3-5)	32%	29%			
Middle School (6-8)	28%	28%			
High School (9-12)	32%	33%			
School Perceptions and Experiences					
Staff at this school work hard to build trusting relationships with parents.	69%	70%			
Students pay attention and listen to teachers and staff.	36%	30%***			
There is a high degree of staff turnover.	41%	49%***			
There is a high degree of student mobility.	45%	51%***			
Most of my colleagues share my beliefs and values about what the central mission of the school should be.	66%	67%			
Students in this school are struggling with academic content given pandemic-related interruptions to learning.	76%	80%**			
Students in this school are struggling to exhibit appropriate behavior given pandemic-related interruptions to schooling.	71%	76%***			
Working Conditions	<u>'</u>				
I feel overwhelmed by my job.	39%	53%***			
I spend my preparation periods subbing for absent teachers.	14%	17%*			
I have extra students in my class due to teacher absences.	10%	12%*			
I am satisfied with my job.	67%	55%***			
I feel I am working too hard on my job.	52%	62%***			
I have enough time within designated school hours to do my job well.	31%	23%***			
I feel prepared to teach in this kind of school environment.	70%	64%***			

Note: Teachers and principals who did not submit an open-ended response or who submitted a non-substantive response were coded as non-respondents. All perceptions, experiences, and working conditions variables in this table are binary (i.e., 0 or 1), with 1 indicating the teachers "agree" and 0 indicating teachers are "neutral" or "disagree". ^+p <0.01, ^+p <0.05, ^+p <0.01, ^+p <0.001

APPENDIX D: INTERVIEW AND FOCUS GROUP PROTOCOLS

We conducted semi-structured interviews—following a set of questions but allowing for additional probing questions and follow-ups with participants based on their answers. All our interviews and focus groups in 2022-23 lasted about one hour. We recorded each interview or focus group, which were transcribed verbatim for analysis.

District and School Leader Interviews

- 1. Please describe your district/school strategic priorities for the year.
- 2. It would be helpful to hear about the initiatives you are implementing this year to improve outcomes. How did you select or develop those initiatives? What do you believe are the strengths of those approaches? Any weaknesses? Are there differences in what you're implementing in Partnership Schools versus non-Partnership schools?
- 3. We understand you have been/are becoming a Partnership district. What are your perceptions of the Partnership Model? Could you also tell us about your engagement with the Office of Partnership Districts?
- 4. Can you tell us about your district's approach to reading/ELA curriculum? And to math curriculum?
- 5. Could you tell us about your district's approach to professional development? What is the nature of the professional learning system?
- 6. What is your district's approach to non-instructional issues that you are trying to address?
- 7. Overall, how would you describe working conditions in this district for teachers, staff, and principals?
- 8. What is your district approach to teacher recruitment and retention? What initiatives are you implementing to address this?
- 9. How does your district/school use data and evidence in planning and daily activities? What are your expectations for schools' use of data and evidence?
- 10. From your vantage point, what are 2-3 of the district's biggest, current challenges?
- 11. What have been the impacts of the COVID-19 pandemic on your district/school?
- 12. Historically, when your district/school has sought to implement a new improvement initiative, how well-prepared have you been to do so? What have the biggest obstacles usually been?
- 13. Is there anything else that you would like to share with us about the Partnership Model and your efforts to implement Partnership this year?

Teacher Focus Groups

- 14. We are interested in the infrastructure—or things your school has in place—for improving instruction, including curriculum, instructional frameworks, professional development, leadership, and other resources. We'd like to hear from each of you, what you notice about strengths and gaps in your school's approaches to help improve teaching and learning.
- 15. It would be great to hear more about leadership in your school/district. How would you describe the support from district and school leaders on instruction? And could you share a few ways your district and school leaders are working to retain teachers?
- 16. We're looking at the Partnership Model across schools in Michigan and would like to hear about how you're making sense of Partnership reform. What do you know about this state initiative? What are your perceptions of Partnership?
- 17. We are aware this is a challenging time for teachers. In your context and networks, to what degree are teachers considering switching schools or leaving the teaching profession? What is shaping their decisions to leave the district/profession? What changes or supports could prevent teachers from exiting the district/profession? Why are other teachers choosing to continue serving as a teacher at their school?



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