How Teacher Turnover Disrupts School Improvement Efforts

Jennifer Holme, *University of Texas at Austin*
Huriya Jabbar, *University of Southern California*
Katelin Trautmann, *University of Texas at Austin*
Janet Solis Rodriguez, *University of Texas at San Antonio*

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Executive Summary

In many schools, teacher turnover is a persistent problem, requiring school and district leaders to constantly search for, hire, and train teachers, often only to lose them after a short time. Many studies of teacher turnover have focused on the human capital consequences of turnover (i.e., what happens to student achievement when an experienced or effective teacher leaves). **Our study**, by contrast, examines how turnover impacts the social fabric of schools, such as teacher relationships, collaboration, and improvement efforts.[1]

We conducted longitudinal case studies of four large comprehensive high schools in a metropolitan area in Texas over a four-year period, all of which served large proportions of students in poverty (40 percent or greater). We conducted 165 in-depth interviews and 195 hours of observations of teacher team meetings. We focused on understanding the processes and mechanisms through which turnover influenced schools' efforts to improve learning in mathematics and in English language arts.

Turnover significantly impacted all four schools: over the four years of our study, the schools lost between 47 percent and 88 percent of their entire teaching staff. These high rates of persistent teacher turnover disrupted schools' abilities to create and sustain the organizational conditions that matter for school improvement. These conditions include a positive school culture, trust, shared vision, and the ability to learn and improve over time.

WE FOUND THAT TURNOVER HURT SCHOOL-IMPROVEMENT EFFORTS BY DAMAGING KEY ORGANIZATIONAL CONDITIONS:

- Teacher turnover damaged the social networks and relationships that teachers relied upon for support, especially on smaller teams (e.g., professional learning communities or teacher teams).

- Turnover disrupted the shared meanings and goals within teacher teams and across schools, which were necessary for improvement.

- Turnover depleted institutional memory and impeded the ability of teachers to engage in problem solving and learning collectively.

- Through these processes, turnover destabilized schools in our study by undermining the critical organizational conditions necessary for school improvement.

Some organizational practices helped to protect schools from the negative effects of turnover. Key among these were continuity on teacher teams and strong systems for preserving institutional memory (documentation of processes, year-to-year calendars) so that teacher teams could continue their work, learn, and improve, even in the face of churn.

Turnover can destabilize schools, as our work shows. Yet, turnover is rarely considered a causal factor in understanding the success or failure of local, state, and national educational policy initiatives. Our work illustrates that turnover is an important—and often hidden—barrier to school improvement, as it is very difficult to implement any policy or reform effectively with high churn.

WE OFFER THE FOLLOWING RECOMMENDATIONS FOR POLICY MAKERS AND PRACTITIONERS TO AID SCHOOLS IN THE FACE OF TURNOVER AND STAFFING CHALLENGES.

School and district leaders should:

- **Prioritize the stability of teacher teams or professional learning community (PLC) membership when making teacher assignments.** Stability in PLCs helps to cultivate strong relationships among teachers, fosters professional growth over time, and allows a team to build collective knowledge. Invest in systems to institutionalize knowledge. When turnover occurs, systems to track prior lessons and decisions help teachers remember what was done the previous year so that teams and teachers are not "reinventing the wheel."

- **Protect time and space for teacher collaboration.** Cutting in on PLC meeting time with trainings can diminish overall teacher satisfaction, impede relationship development, and potentially contribute to turnover.

- **Recognize and reduce the burdens placed on continuing teachers when turnover and vacancies occur.** Acknowledge that continuing teachers are carrying extra loads due to turnover and, when possible, reallocate time burdens away from teachers or provide such teachers with extra support or compensation.

Policy makers and leaders, including in institutions of higher education, should:

- **Collect and report longitudinal teacher turnover rates along with shortage and vacancy data** for schools to improve transparency about how turnover affects schools.

- **Invest in schools with the highest turnover rates,** providing them with additional funding, targeted support, and partnerships to increase retention and fill vacancies.

- **Consider turnover and shortages in accountability expectations.** When setting state expectations about improvement and/or sanctions, consider the fact that some schools disproportionately experience high rates of turnover, which can disrupt school-improvement efforts.

Background

Studies that have explored the consequences of teacher turnover have focused primarily on the human capital consequences of turnover (e.g., how the loss of a teacher who is experienced, qualified, or talented might impact student outcomes).[2] These studies have found that high rates of turnover can negatively affect student achievement. [3]

Less research has examined how turnover affects teachers' work and school-improvement efforts, or what we call the organizational and social impacts of turnover on schools. Our study fills this gap by focusing on how turnover influences the social fabric of schools.[4]

We draw on concepts from organizational sociology and educational reform. These perspectives help us understand how or why schools improve—and how or why they don't. Scholars of educational reform have identified the organizational conditions that create so-called "effective schools," or schools that produce strong student outcomes. Key conditions include strong leadership, a positive school culture, professional orientation and commitment, and strong instructional guidance and alignment.[5] Our study investigated how turnover shaped these conditions, which are necessary for schools to improve, and examined the ways school practices might be mitigating—or exacerbating—any adverse effects of turnover.

WE ASKED:

What was the nature of teacher turnover on our campuses?
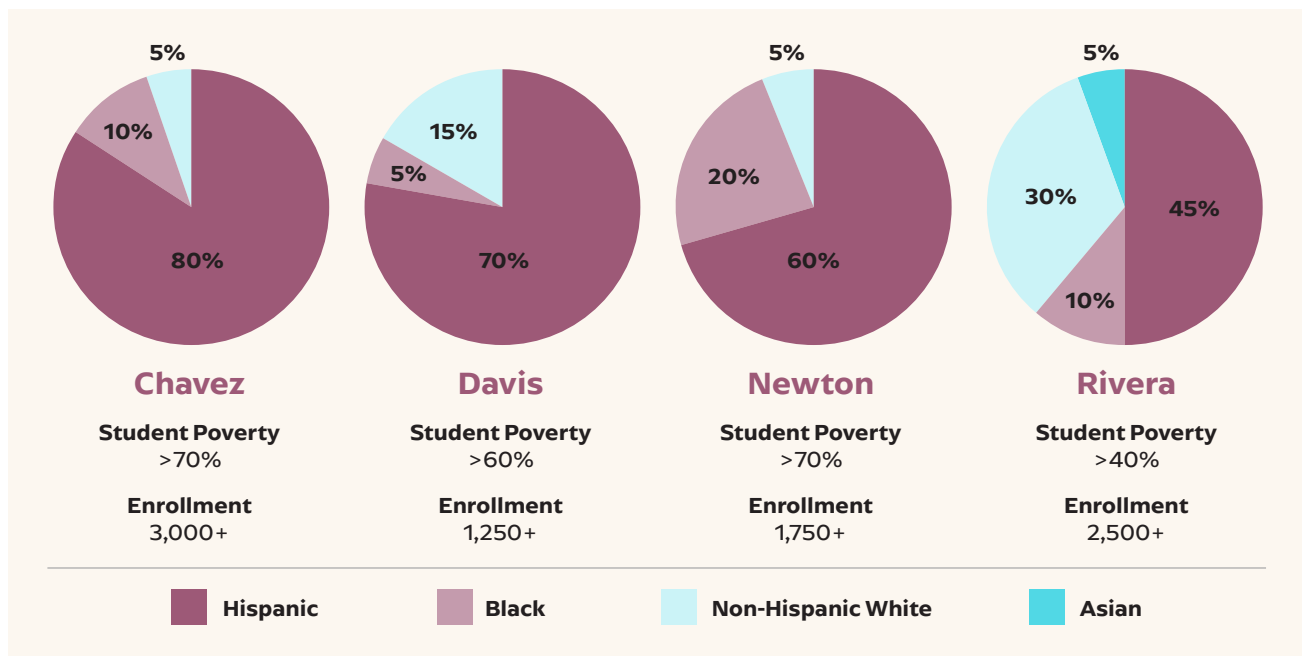
How does turnover shape:

- ◆ **the formation of networks and relationships among teachers?**
- ◆ **the creation of shared understandings among staff?**
- ◆ **the ability of teachers to collectively solve problems, learn, and build institutional memory?**

How do schools' internal structures (e.g., staff groupings and team practices) shape the relationships between turnover, organizational dynamics, and efforts to improve learning opportunities for students?

The Study and Data

We conducted longitudinal case studies of four large comprehensive high schools in a metropolitan area in Texas over a four-year period.[6] We collected data from fall 2019 to spring 2023, with a brief pause in spring 2020 due to the COVID-19 pandemic. (See **our report** on the pandemic's influence on our schools.[7]) All the schools served a majority of students of color, and in all schools, at least 40 percent of the student body qualified for free or reduced-price lunch.

Table 1. Description of Schools in our Study

Chavez
Student Poverty >70%
Enrollment 3,000+

Davis
Student Poverty >60%
Enrollment 1,250+

Newton
Student Poverty >70%
Enrollment 1,750+

Rivera
Student Poverty >40%
Enrollment 2,500+

Legend: Hispanic | Black | Non-Hispanic White | Asian

Note: All demographic data are rounded to protect confidentiality

By collecting data longitudinally, we were able to examine how the loss of teachers in one year influenced the social organization of the school (i.e., collaboration, relationships, and shared meaning) in subsequent years. Over the four years, we conducted 165 interviews with principals, assistant principals, instructional coaches, and teachers across our sites. We also conducted targeted observations of whole-school meetings, department meetings, and monthly observations of math and English professional learning community (PLC) meetings, completing over 195 hours of observations.

Over the four years, the schools in our study experienced significant turnover among teachers and leaders. We report both annual and cumulative turnover rates below. Annual turnover rates, which are the standard turnover rates that are reported in research and accountability reports, reflect the percentage of teachers present in one year who departed by the next year. Annual turnover rates in our schools ranged from 13 percent to 61 percent in any given year. Cumulative turnover rates indicate the percentage of teachers who were present in year one but departed by year four—a longitudinal measure that portrays the losses in a school over time.[8] The cumulative turnover rates were between 47 percent and 88 percent, revealing that our schools suffered significant losses of teachers over the four years of the study.

Table 2. Turnover Rates

Over the four years, the schools in our study experienced
significant turnover among teachers and leaders.

Annual Turnover Rates

School	Annual Turnover Year 1 to Year 2	Annual Turnover Year 2 to Year 3	Annual Turnover Year 3 to Year 4
Chavez	19%	32%	56%
Davis	22%	31%	38%
Newton	39%	43%	61%
Rivera	13%	20%	27%

Annual turnover rates, which are the standard turnover rates that are reported in research and accountability reports, reflect the percentage of teachers pxresent in year one who departed by year two.

Cumulative Turnover Rates

The percentage of teachers at the school who were present in year 1 and departed by year 4.

72% Chavez

57% Davis

88% Newton

47% Rivera
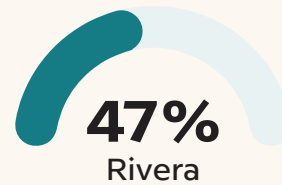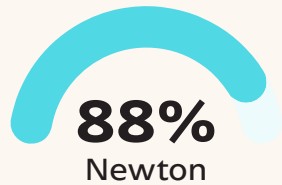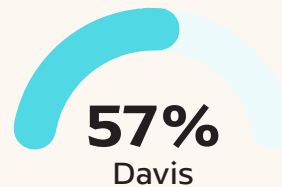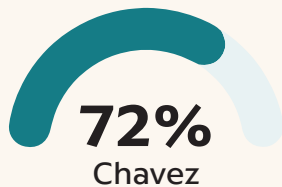
Note: Authors' calculations. Annual school-level turnover is calculated from August of one year (t -1) to August of the following year (t). Cumulative turnover represents the percentage of teachers in year one who left by the start of year four. At the PLC and department levels, a teacher who switches to a different PLC or department is considered to have turned over at that level but not at the school level.

We also calculated turnover rates for teacher teams or professional learning communities (PLCs). Turnover within PLCs across the years ranged from zero to 100 percent (meaning all the teachers on that team left, although some teachers might remain at the school, working on other teams). In these smaller teams, the loss of two or three team members (out of five or six) has a major effect on the group's work. However, these team-level statistics are rarely tracked or reported. Over four years, cumulative turnover rates ranged from 40 percent to 100 percent on PLC teams. We also noted a significant increase in vacancies by the end of spring 2023, but we could not systematically document vacancies due to a lack of available data.

Key Findings

HOW DID TEACHER TURNOVER IMPACT TEACHER RELATIONSHIPS?

Positive working relationships among teachers are important for school improvement. We found that teacher turnover altered the structure of relationships across schools and teams in ways that hampered collaboration and improvement efforts.

> "My go-to people are pretty much all gone."

Turnover Meant That Teachers Lost Colleagues They Could Go to For Advice and Support

With turnover, continuing teachers lost their reliable partners for instructional planning. At Rivera High School, the head of the math department noted that, because of the high turnover rates in the department, "My go-to people are pretty much all gone." Turnover was particularly damaging to relationships within PLCs, which are spaces where teachers develop and revise plans for instruction with their peers. An English teacher at Newton High School reported that he keenly felt the loss of a teacher who was his grade-level planning partner but who left after the pandemic: "We had a guy who ... ended up leaving from last year. He was my grade-level partner, and we had the ability to just sit down and knock stuff out real fast, not have to spend a lotta time talkin' back and forth. He kinda got it 'cause he'd been doin' it for a while."

At Chavez High School, a PLC lead reflected how the loss of an experienced colleague early in the year impacted her: "She was the one who ran my calendar. She was the one who, if there was something I was thinking, I text, or call, or email it. She was my right-hand person. For me, I've felt it a lot."

Departing teachers were often replaced by novice teachers, who continuing teachers found to be less-than-reliable instructional planning partners because they were often just "learning the ropes." For example, a math PLC member at Rivera said of a new hire: "Right now, I'm not really expecting [the new teacher] to do the work because he's adjusting." In our observations of team meetings, we noticed that new teachers often stayed quiet and struggled to keep up with the team's work rather than contributing substantively to the team's planning.

> "Right now, I'm not really expecting [the new teacher] to do the work because he's adjusting."

Turnover Had a Negative Impact on Teachers' Investment in Relationships With New Teachers

High turnover rates on teacher teams also meant that teachers with longer tenure were reluctant to build new relationships with the constant stream of hired teachers. We observed this type of strain at Newton High School, our campus with the highest Black student population and turnover rates. As one Newton English teacher noted, reflecting on the culture among veteran teachers: "One of our colleagues who retired a few years ago, she was like, 'Yeah, unless somebody comes back a second year, I don't take a lot of time to get to know them because they're just going to be gone.'" High rates of chronic or repeated turnover can thus cause teachers to be less willing to invest emotional energy in building relationships with new colleagues. This can, in turn, drive further exits.

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Turnover Created Significant Additional Burdens (Time, Energy, And Responsibility) On Remaining Teachers

When novice teachers replaced departing teachers, turnover created an additional workload for continuing teachers, who felt they had to provide additional support to new teachers. For example, the Math Department chair at Chavez High School said, "The more teachers that we have that are new, the more time it adds to my role because then I have all these questions and all these concerns and constant emails and this and that because of people wanting answers."

In addition, new teachers' lack of experience meant that the continuing teachers had to shoulder more responsibility and take on more team tasks. For example, the lead of the Algebra 1 PLC at Davis observed that the new and inexperienced people were unable to contribute to the work of the team, resulting in a greater burden on the more experienced teachers:

"The more teachers that we have that are new, the more time it adds to my role because then I have all these questions and all these concerns and constant emails and this and that because of people wanting answers."

"It mostly turned into me and Jane[9] doing everything because everybody else just didn't know what they were doing or said they knew what they were doing and didn't …. Eventually, towards the end, the other members were able to actually contribute in a meaningful way. For most of the spring semester, a team of five was only being contributed to by two of the people."

These added pressures from turnover can create resentment or burnout among remaining teachers, potentially driving additional turnover.

HOW DID TURNOVER AFFECT COLLECTIVE GOALS?

Studies have shown that schools with a common vision and mission among leaders and teachers are more likely to improve.[10] We found that high levels of leadership and teacher turnover made it more difficult to establish common goals and shared understandings across schools and within teams.

Teachers In Schools with Frequent Leadership Turnover Were Reluctant to Invest In Each New Principal's Vision

Two of the four schools in our study (Chavez and Newton) experienced high leadership turnover rates. Chavez High School lost three principals in the four years of our research, and Newton High School experienced a disruptive midyear principal departure after several years of high principal turnover in the period before our study. In these schools, teachers expressed resistance to the vision that each successive principal brought to their school because they did not expect the principal or their associated reforms to last.

At Newton High School, teachers had become apathetic about changes that each new principal sought to implement. When a relatively new principal departed suddenly in the middle of the year, one teacher reflected: "Same old, same old … new principal, new superintendent, new … it doesn't matter." At Chavez High School, we found that teachers were resistant to the new leader's vision: "I've been through four principals here in ten years. I know I'll be here after you leave. You're just another person who I have to deal with until the next person comes."

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Teacher Turnover Disrupted Shared Understanding and Initiatives

Across all four schools, we observed how teacher turnover disrupted the training that district and school leaders had invested in for teachers. With high turnover, schools had to continually retrain the new hires on basic things like core values and systems of behavior management. The principal at Davis High School noted the problems that turnover created for the initiatives on the campus and the need to constantly revisit the training for the new teachers who were brought on board: "So, it makes it really hard to be consistent with our behavior management things that we're doing across the campus. We have our core values and collective commitments, and we did some really specific training, and so we just need to go back in and revisit that."

Turnover can thus undermine the improvement efforts schools engage in when staff members trained in new initiatives or efforts leave.

Similarly, turnover can disrupt shared goals created by teacher teams. For example, in the Algebra 1 PLC at Newton High, there was significant turnover between year two and year three. As a result, according to the PLC lead, teachers were still struggling to identify shared goals and were still "working on getting on the same page."

HOW DID TURNOVER AFFECT PROBLEM SOLVING, LEARNING, AND THE CREATION OF INSTITUTIONAL MEMORY WITHIN SCHOOLS?

The ability of teachers to identify a problem, discuss possible solutions, and deliberate as a team to select the best approach is critical for improvement. We found that turnover impeded these processes, thus undermining schools' abilities to marshal their resources toward deep, sustained improvement.

Turnover Reduced Teams' Available Time to Devote to Team Learning and Problem Solving

In PLCs with high turnover rates, the constant influx of new teachers meant that PLC meeting time was frequently devoted to onboarding new hires, thereby reducing the amount of available PLC time for curricular and instructional planning, peer support, and problem solving. At Newton High School, the English 1 PLC had a significant amount of turnover between years two and three of our study (a 64 percent turnover rate). In our observation notes of the team meetings, we documented how a great deal of meeting time was devoted to supporting new teachers on basic information about the schools. For example, our observation noted a "lack of understanding among new teachers about how tutorials work, and how the schedules change from A/B during holidays." Time spent discussing such logistics thus took away from time to review student data and discuss curriculum and lesson plans.

Turnover Impeded the Creation of Institutional Memory

When teacher teams are stable over time, they can build each year upon the "institutional memory" of team members about what was done in prior years, i.e., what lessons worked or were ineffective, what students typically enjoyed or didn't enjoy about various lessons, and what skills students struggled with. This enables teachers to build and improve upon what was done in previous years. With high turnover, as we saw during our observations, teacher teams stalled, repeated conversations from prior years, and as a result, we saw very little evidence of learning for improvement.

At the same time, teacher stability supported the collective work of teacher teams. When teacher teams were stable over time and had no vacancies, less of the team's time was diverted to the onboarding of new hires and/or substitutes. In addition, teachers were able to build each year upon the collective knowledge of team members. A teacher in the math PLC at Chavez described the beneficial effect of stability on institutional memory. Speaking of stability on the team, he said: "I think the most beneficial thing is the ability to look at the longevity of lessons and see their effectiveness. Being able to go from year to year saying, 'We did this lesson. It did not work well,' and we'll go on from there."

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In Some Cases, Intentional Team Changes Can Facilitate Improvement

In one of our PLCs, in year three, the teacher team did not work well together and was subsequently reconstituted by the principal, which led to positive change. This PLC had a great deal of interpersonal conflict among teachers. This team was intentionally changed the following year by the school administration, and this change proved to be positive, as the new team (which consisted of two of the original teachers and several new teachers) was much more on the "same page" when it came to goals and direction. However, because the team had several continuing members, they were able to carry forward the work from the prior year's team. The PLC noted the benefits of stability when there is a planned change: "I think the benefit is, especially when people stay, we start to learn what dynamics work in PLCs. Last year we learned a lot about what didn't work, and so we responded this year with the smaller PLC and core members who really worked well together. Even though we all have our frustrations … we work really well together. It's just a good vibe. … The longer people stick around, the more able we are to figure out personalities and who works well together."

WHAT SCHOOL PRACTICES MEDIATED THE IMPACT OF TURNOVER?

We found several factors and practices in schools that helped to mitigate the negative impacts of turnover.

> "Finally, this year, we have enough of a bank of lesson plans that align to what our campus specifically needs to do. ... So, we've had to reinvent the wheel multiple times, but now we have a wheel to work from."

Systems of Institutional Memory Helped to Buffer Teams from the Negative Effects of Turnover

A key factor shaping the extent to which turnover was harmful—or to which stability was beneficial—were the "systems of institutional memory" that teams had in place, i.e., systems of keeping track of group progress, materials, and goals, such as shared calendars, online storage systems, lesson banks, and even informal notebooks. When these systems were in place from year to year, they helped teams to continue the work in the face of turnover.

We use two contrasting cases from our study to illustrate the role of these systems of institutional memory. At Rivera High School, the English team experienced 66 percent turnover one year, when four of the six teachers left, either to other campuses or to other teaching assignments. However, they had strong systems of institutional memory. The new team was always modifying and building on the prior team's well-organized documents. Relative stability on the team for a couple of years led them to be able to build these systems. One teacher on the team said: "Finally, this year, we have enough of a bank of lesson plans that align to what our campus specifically needs to do. ... So, we've had to reinvent the wheel multiple times, but now we have a wheel to work from." When this team experienced a large turnover in members the next year, new teachers, too, drew from this "bank." Despite the turnover, teachers could focus on improving instruction and overall student learning experiences.

Newton High School was similar in turnover but had a completely different outcome. At Newton, 60 percent of English teachers left one year, but there were limited or, in some cases, *no systems* of institutional memory—things like lesson banks—to draw upon. In observations and interviews, teachers described "starting from scratch." New teachers had no lessons to build from. They could not even reflect, one teacher complained: "Well, how was English I taught last year for us to reflect and adjust?" Another teacher noted that "We can't build anything because we can't keep people here for more than one year. You're constantly starting over from scratch." The lack of systems for institutional memory exacerbated the negative results of turnover.

> "We can't build anything because we can't keep people here for more than one year. You're constantly starting over from scratch."

> "Just having that same nucleus of people, yeah, it helps the flow, the time we spend here on PLC."

The Success of Systems Was Enhanced by Continuity of Team Members

We also found that the effectiveness of the systems of institutional memory depended, at least in part, on the availability of continuing team members who remember their contents and can access them. For example, at Chavez, a math PLC lead was new to the school, and she noted that the fact that other teachers have remained stable within the team has helped the team access the materials and resources that were stored: "Absolutely I think it's a benefit that it's not a high turnover rate, and it's the same people from last year or two or three years ago. Again, this is only my second year, but you can see how well they work together, they know the calendar very well, they know their resources very well of what we've used in the last few years, so they're able to, okay, this worked for us, let's use this again, so just having that same nucleus of people, yeah, it helps the flow, the time we spend here on PLC."

Teacher Relationships Were Enhanced by Geographic Proximity of Team Members

We heard how teachers' relationships were supported by geographic proximity. At Rivera, an English teacher talked informally with her colleague next door about "how a lesson is going or what she did about something." Another teacher went "next door" for "big, big problems" to a teacher who was "kind of the mom of our group." Grouping teachers intentionally in this way facilitated connection. When teachers moved within the building, this could disrupt social ties. A math teacher at Rivera noted, "It's not obvious, but the other change that I did is I went from upstairs, where most of the department is, to downstairs where there's only six of us. These are the folks that I socialize with now on a daily basis. I go to them for help. We tend to just support each other and all that good stuff." Another math teacher, located upstairs, similarly noted that he "doesn't interact as much" with the math teachers who are located downstairs.
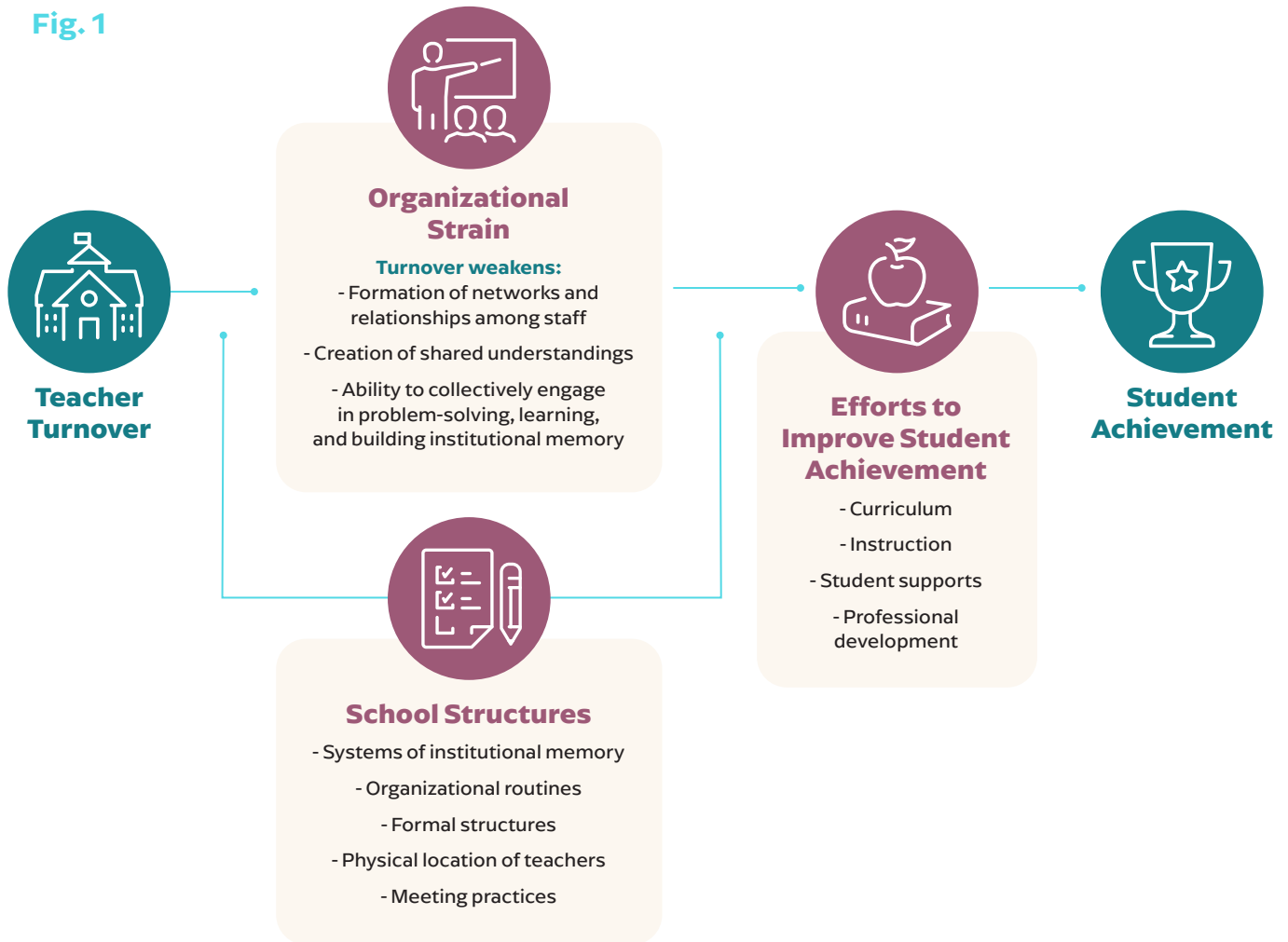
PLC Meeting Time Supports Teachers' Relationships and Team Learning

Another practice that supported teachers' work was the regularly scheduled "off period" from teaching that teachers received so that they could attend PLC meetings, which typically lasted between 60 to 90 minutes. Teachers reported that PLC meetings were extremely valuable to them professionally because they provided a context in which relationships were formed and sustained and where teachers could get help and support for their work. A math PLC member at Chavez reflected on the importance of PLC time for support: "It's very nice to, one, have a break in the day to reflect, see how the lessons were going, conference with all the other teachers. How is the lesson going? How are students doing? The daily part of that was very helpful so we could very easily track how all our students were doing, maybe even trade ideas of what was working and wasn't working." While the team had daily PLC meeting time for the first three years of our study, in the fourth year, the district cut meeting time back to just two days per week. The teacher commented on how this hindered teamwork: "Now that we only have it a couple times a week, and it's a shorter time due to us losing our PLC specific period, we're a lot more behind in planning. We can't share as much anymore." As noted earlier, disruptions to PLC time, from supporting new teachers to getting administrator updates, meant that teachers had less time to get into the core of instruction, i.e., discussing lessons, reviewing student work, or comparing approaches to teaching a concept.

Teacher Turnover Strains Organizations in Hidden Ways, Contributing to Inequality

As our findings above illustrated, high levels of teacher turnover created significant damage to schools' organizational resources: they damaged teachers' relationships, impinged upon the school's vision, and damaged teachers' collective ability to solve problems, thus leading to *organizational strain* on schools that hurts their ability to improve student achievement. We present the following framework, which illustrates these dynamics. (See Figure 1.)

Fig. 1

Organizational Strain

Turnover weakens:
- Formation of networks and relationships among staff
- Creation of shared understandings
- Ability to collectively engage in problem-solving, learning, and building institutional memory

Teacher Turnover

Efforts to Improve Student Achievement
- Curriculum
- Instruction
- Student supports
- Professional development

Student Achievement

School Structures
- Systems of institutional memory
- Organizational routines
- Formal structures
- Physical location of teachers
- Meeting practices

Teacher turnover may be one of the hidden ways in which racially and economically segregated and stratified schools can reproduce inequality and why it can be difficult to engage in deep and meaningful reform in such sites. Research has shown that turnover is unequally distributed across schools, disproportionately impacting schools serving marginalized students. This means that the organizational precarity that is created by turnover is unequally experienced across school contexts.

Turnover thus creates systematically unequal challenges for schools to engage in the type of deep reforms and institutional changes that policy makers, educators, and communities desire. Indeed, efforts to encourage continuous improvement and data-driven practices rely on stable organizations—and such practices can also contribute to teacher retention. Yet, our findings show that without some stability and institutional memory, it is difficult for teams to grow and build on what they have done before. We argue that it is essential for researchers and policy makers to acknowledge the potential fissures that structural inequity creates in schools' organizational processes, through turnover and other mechanisms, so that organizations can become more equitable and counteract, rather than reproduce, inequities.

Recommendations For School And District Leaders

Based on our study, we share several recommendations that we believe can help school leaders improve schools by ensuring teams are able to continue their work without being derailed when turnover occurs. Our recommendations have implications for improving retention by creating working conditions that improve the productivity and satisfaction of continuing teachers.

Prioritize stability of teacher teams (professional learning community (PLC) membership) when making teacher assignments.

Year-to-year stability in PLCs can promote strong teacher relationships, support instructional improvement, and enhance teacher retention. Reconstituting teams can occasionally be positive, but more often, team changes disrupt the team's learning and the relationships between teachers on the team, built over the prior year. Teacher quality, human capital, and talent are important, too, but all else being equal, decision makers should prioritize team stability, which can foster growth in all teachers.

Protect time and space for teacher collaboration.

When scheduling school events, meetings, and professional development, leaders should try to avoid disrupting PLC time. This time is invaluable to teachers and is where substantial learning occurs. PLCs are also where teachers get support and build a sense of connection and belonging to the school. Cutting in on this time with training, etc., can diminish overall teacher satisfaction, hinder relationship development, and potentially contribute to turnover. We also noted that leaders could consider classroom location, i.e., where teachers are physically located in a building. Although this was more minor, we found that the geographic location of teachers can help foster collaboration and support, as some prior research has found.

Invest in systems to institutionalize knowledge.

Encourage PLCs to create and maintain systems of institutional memory such as calendars or shared drives and databases that are well organized. When turnover occurs, these systems help teachers build off what the team did the previous year, so teams and teachers are not "reinventing the wheel." Ensure that these systems are in place for all teams and that they are accessible each year to new staff, perhaps even devoting support to help and train teachers on the systems used. It is also important to have team members who are stable within teams to remember what was stored and how to access it.

Treat the teacher team lead (PLC lead) as a key leadership role.

We recommend that districts and school principals make careful decisions about who is appointed in these roles and try to avoid last-minute placement. We found that the person in this role played an essential part in helping to maintain structures, routines, and institutional memory and helped to improve practice. In making these appointments, consider the required skill set—someone who is organized, can keep systems in place, and is a good consensus builder. We also recommend elevating and supporting the PLC lead, i.e., with release time and training around these specific skills, or even by appointing an associate PLC lead who could help with continuity if there is turnover.

Recognize and reduce the burdens placed on continuing teachers when turnover and vacancies occur.

Turnover creates a great deal of stress for continuing teachers, especially when there are teacher shortages. When possible, reallocate time burdens away from teachers or provide such teachers with extra support or compensation.

Limit curricular changes during high turnover periods.

Hold constant as much as possible in a turbulent environment where there is high turnover, particularly within teacher teams. We encourage leaders to take care not to disrupt the knowledge and experience that have been collectively generated on teacher teams and in PLCs. Leaders can limit changes to curriculum during high turnover or at least carefully consider how changes to curriculum impact the knowledge and institutional memory of PLCs.

Recommendations For Policy Makers

We also recognize that these disproportionately high rates of turnover are symptomatic of broader systemic inequalities. While we focus this report on what school leaders can do, it is also important for policy makers at the district, state, and federal levels to act.

Invest in under-funded schools—which have the highest turnover rates—by creating more equitable and adequate funding systems, including extra supports for schools experiencing high turnover.

Funding formulas should take into consideration the additional resources required by schools with high turnover rates. These schools may benefit from grants to compensate teachers, support leaders, provide professional learning, or hire additional support staff. Ultimately, additional resources should be used to create a more supportive work environment that reduces teacher burnout and turnover.

Collect and report more turnover data to illuminate the impact of turnover on schools.

This means collecting and reporting data that are not currently reported, including **longitudinal (cumulative)** teacher turnover rates, vacancies, and shortages, to make transparent the ways that turnover impacts schools and which schools are struggling the most. This will help to target the schools struggling the most with greater support. Making these data publicly available would increase transparency and help stakeholders understand the scale and impact of staffing instability.

Prioritize funding for PLC leadership and release time for teachers.

Regular PLC time is critical for building and strengthening relationships within schools between teachers. PLC time can also help reduce turnover, as teachers said this time was instrumental to their job satisfaction. We recommend setting aside additional funding for leadership tracks that are compensated for critical roles, such as leaders and associate leaders of professional learning communities. These pathways should be clearly established, and roles should come with additional compensation to recognize the extra responsibilities and expertise required. This allows teachers to see a clear trajectory for growth and advancement within the educational system which can motivate teachers to stay and grow within the profession.

Consider turnover and shortages in accountability metrics and expectations.

The fact that some schools systematically experience high rates of turnover, which can disrupt school-improvement efforts, should be considered when setting state expectations about improvements and/ or sanctions. Recognizing that schools with high turnover face unique challenges that can impact student performance, policymakers should adjust accountability measures to account for these factors to ensure that schools are not unfairly penalized. This can reduce pressure on teachers, encouraging them to remain in their positions and schools over the long term.

Acknowledgments:

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[5]Anthony S. Bryk, Penny Bender Sebring, Elaine Allensworth, Stuart Luppescu, and John Q. Easton, *Organizing Schools for Improvement: Lessons from Chicago* (Chicago: University of Chicago Press, 2009).

[6]When sampling our schools, our goal was to select comprehensive high schools within one metropolitan area that were likely to experience some turnover over the four years of our study. We initially identified seven school districts that each had at least one high school with at least 40 percent of the student population identified as "economically disadvantaged" by the state, given that student poverty rates are connected to higher rates of turnover. This resulted in a list of fifteen eligible schools. We also sought to select schools that would experience *variability* in turnover rates. Because sampling on past turnover rates may not predict future rates, we selected schools with variation on levels of initial school culture/climate, which research suggests can be predictive of turnover (Kraft et al., 2016). Based on this analysis, we sampled two schools with what we characterized as "high" levels of initial school climate and two schools with "low" levels of initial climate compared to other schools in their home districts. Kraft, M. A., Marinell, W. H., & Shen-Wei Yee, D. (2016). School Organizational Contexts, Teacher Turnover, and Student Achievement: Evidence From Panel Data. American Educational Research Journal, 53(5), 1411-1449.

[7]Huriya Jabbar, Jennifer Jellison Holme, Sarah De La Garza, and Katelin Trautmann, "Repair The Fractures: Addressing the Impact of Covid-19 on Schools," College of Education, University of Texas at Austin, March 2021, http://sites.edb.utexas.edu/wp-content/uploads/sites/170/2021/04/RepairTheFracturesFinalVersion.pdf.

[8]Jennifer J. Holme, Huriya Jabbar, Emily Germain, and John Dinning, "Rethinking Teacher Turnover: Developing New Measures of Instability in Schools," *Educational Researcher* 47, no. 1 (2018): 62–75.

[9]All names are pseudonyms.

[10]Bryk et al., *Organizing Schools for Improvement*.