



Contextualizing Professional Learning and Teacher Motivation: Pilot Study Findings

Introduction

The Research Partnership for Professional Learning (RPPL) identified increasing teacher motivation and engagement with professional learning (PL) as a priority in their [2021 learning agenda](#).

Adult learning theory emphasizes the importance of agency—the learner’s ability to actively participate in their own learning process, take ownership of their knowledge acquisition by making choices, set goals, and self-regulate their learning—in changing practice (Knowles et al., 2014). However, educator PL is often designed by school system leaders or external professionals several levels removed from the classroom, leaving little opportunity for teacher input or agency.

RPPL’s Learning Agenda calls for experimenting with providing teachers choices over what they learn and how they learn it and opportunities to make adjustments to better align with local needs and conditions (Hill et al., 2021). To yield generalizable knowledge to the sector on these important design questions and ultimately inform testable interventions, we must first describe the range of possible approaches for making decisions about PL. Schools and systems could use a variety of data to incorporate teacher input and contextualize PL, such as student learning evidence, instructional practice observations, pedagogical knowledge, individuals’ sense of self and collective efficacy, and teacher perception of priority areas. The abundance of relevant data sources raises many vital questions: What are the most effective

data points to contextualize PL to specific schools? Who should be engaged in selecting, analyzing, and interpreting data to make decisions about PL priorities, and how are those stakeholders best engaged? How do these choices influence teacher investment in PL and their commitment to new practices?

We sought to learn how two Leading Educators partner districts select, analyze, and interpret data to make decisions about PL priorities and how teachers' and leaders' involvement in these processes influenced their perceptions of the quality and utility of PL. The researchers aimed to produce a framework to describe the continuum of approaches for gathering and using data, including stakeholder input, to design effective PL. We identified two separate axes on which we believe these decisions vary and present five distinct approaches situated within that space in which schools and systems make PL decisions.

A surprising paradox emerged from our analysis; despite considerable differences between these two districts, they had strikingly similar outcomes in relation to stakeholder satisfaction with PL and their motivation to engage in it. Beyond differences in their characteristics, the two districts differed considerably in their approaches to PL, including the degree to which decision-makers involved various stakeholders in PL decisions, topics and activities for PL, and the evidence used to make those decisions.

Given these varying characteristics and approaches, achieving such similar outcomes contradicts our expectations and suggests that agency may not play as critical a role as hypothesized. At the same time, however, we found other evidence consistent with our expectations: individuals' involvement in PL decision-making correlated with their motivation and satisfaction, suggesting that input may be an important factor. This apparent contradiction in our findings presents a challenge for school systems seeking to improve teacher efficacy by increasing their interest and engagement with PL. Understanding which aspects of PL benefit from additional input and stakeholder choice—and in which contexts—is critical to setting up future interventions for designing engaging and effective PL. This report contrasts findings between the two districts, illuminating relevant features of the context and decision-making process.

Ultimately, the findings raise important questions for future research on PL design and efforts to increase teacher engagement. They also offer a framework for leaders to use as they consider the many choices involved in designing PL.

Data Collection and Methods

Two Leading Educators' partner districts expressed interest in the study's research questions, and teachers and leaders from those two were recruited to participate. Although both

districts have been multi-year partners of Leading Educators, they differ in several key ways. They are presented anonymously here in this report as District A and District B.

District A	District B
<p>This large urban school district serves more than 100,000 students; nearly 90% are students of color, and 70% are economically disadvantaged.</p> <p>Our partnership with this district has included several strands of work, including 1) facilitating curriculum-based PL aligned to priorities and focus areas selected with school leaders and principal managers and 2) participating as a partner in a PL initiative supporting a new district curriculum. This second initiative has taken a central, district-selected approach to designing standardized, modular PL.</p>	<p>This suburban school district serves fewer than 10,000 students, 70% of whom are students of color and 52% who are economically disadvantaged.</p> <p>Our partnership with this district has included several strands of work, including 1) facilitating a Fellowship to support teacher leaders in leading curriculum-based PL in their schools and 2) serving as a strategic planning partner in district-wide PL initiatives.</p>

We employed a mixed-methods research design. For the qualitative component, we interviewed a number of teachers, school leaders, and system leaders from each district. Interviews lasted approximately 60 minutes and covered the current state of PL within their schools, including questions about the focus areas of PL, decision-making, contextualization to individual needs, alignment across the district, investment, and the impact of PL. We also asked about their opinions on the ideal process for making decisions about PL.

For the quantitative component, we surveyed teachers, school leaders, and system leaders on questions related to the topics above. In addition to a set of questions about the type and frequency of the PL in which they participated, the survey also included measures of teachers' and leaders' satisfaction with PL, motivation to participate in PL, motivation to implement PL (Expectancy-Value-Cost for Professional Development scale; Osman & Warner, 2020), sense of collective efficacy (Collective Efficacy Scale; Goddard, 2002), and sense of individual efficacy (Ohio State Teacher Efficacy Scale; Tschannen-Moran & Woolfolk Hoy, 2001). Across the two districts, we completed 23 interviews and collected 160 survey responses.

We intentionally recruited teachers and leaders who had participated in Leading Educators' PL in the past as well as teachers and leaders who had never engaged with Leading Educators staff or our events. In light of this, study participants were encouraged to consider PL as a whole in their district when responding to the interview or survey questions and not focus exclusively on PL provided or supported by Leading Educators. Along with these

educators, we interviewed three Leading Educators staff members who supported these two initiatives to gain additional insight into each partnership's conditions, context, and history. This report focuses primarily on the responses from teachers and leaders in our two partner districts.

Lastly, while we met our overall recruitment target, recruitment was considerably more challenging in District A than in District B. As a result, we interviewed nearly three times as

	Survey			Interview			
District	System Leaders	School Leaders	Teachers	System Leaders	School Leaders	Teachers	LE Staff
District A	0	4	22	0	3	1	3
District B	3	21	138	3	7	1	3
Total	3	25	160	3	10	2	6

many teachers and leaders in District A and surveyed nearly six times as many teachers and leaders in District B. The relative willingness to participate in this study may signal cultural differences between the two districts that could be important to understand further when considering the generalizability of the findings from these two contexts to a broader education landscape.

For the interview analysis, we read through and cleaned interview transcripts generated using Otter.AI and then imported those into Dedoose, a qualitative analytic software program. Using an inductive coding approach, we completed three passes through the interview transcripts to iterate and revise our coding schemes. After completing the coding, we exported the full excerpts and attached codes and participant demographic information into R Studio to visualize the frequency of codes and conduct sentiment analysis using the 'tidytext' R package. For the survey analysis, we imported the responses into R Studio to examine the average ratings by question, role, and district and also to run multiple correlations exploring the potential relationships between key study constructs, such as whether involvement in decisions about PL is associated with teachers' and leaders' satisfaction with PL, as well as whether the discrepancy between participants' actual and preferred involvement correlates with their motivation to participate in PL.

We compiled these interview and survey results to share with the two teams at Leading Educators responsible for leading the contracts in Districts A and B and the RPPL and Annenberg teams and collectively made meaning of the results.

Processes for Contextualizing PL in Districts A and B

The format, frequency, and focus of PL varied considerably across these two districts.

Concerning the format and frequency, a clear majority of those in District A (57%) reported engaging in whole-school PL sessions on close to a weekly basis compared to only about a third of educators in District B (36%). In contrast, whereas a clear majority of teachers in District A (65%) reported receiving PL that was either specific to their grade level or their content area(s) on close to a weekly basis, fewer than a fifth of teachers in District B (17%) reported engaging in this type of PL with the same frequency.

In terms of its focus, the majority of District A interviewees mentioned five topic areas for ongoing PL: 1) student ownership/increasing the cognitive load; 2) setting student learning targets; 3) small groups and student discourse; 4) social-emotional learning and cultivating a sense of belonging for students; and 5) learning to use new curricular materials. In District B, a majority of participants mentioned three topics: 1) social-emotional learning and cultivating a sense of belonging for students, 2) restorative practices, and 3) culturally responsive pedagogy. Subject-specific instructional practices and training in curricula and other materials were not mentioned as frequently as expected.

In District A, the most common activities within PL were student work or assessment analysis, inquiry cycles, co-planning, and coaching. In District B, Professional Learning Communities (PLCs), assessment analysis, and coaching were the most commonly named activities, but respondents rarely mentioned co-planning and student work analysis.

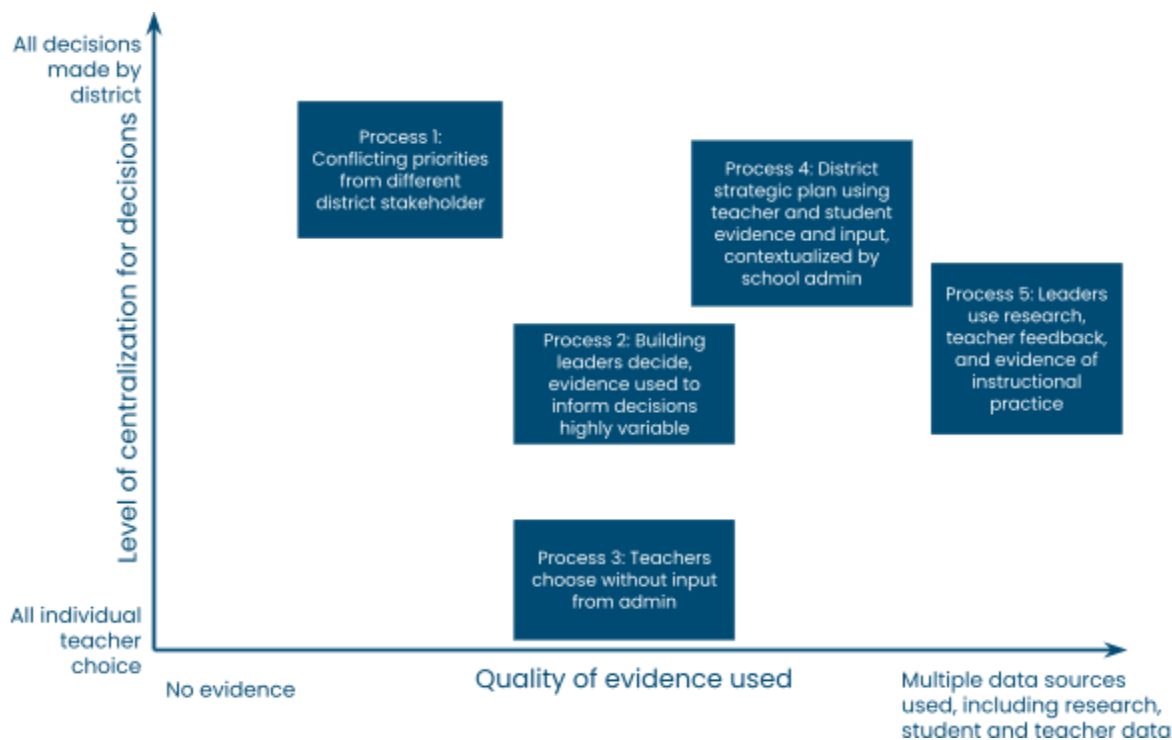
During the current school year, how often did you participate in...	District	Not this year	Once or twice a quarter	About once a month	Two or three times a month	Once a week or more
District-wide PD sessions	A	13.6%	36.4%	18.2%	27.3%	4.5%
	B	0.7%	58.5%	25.4%	14.1%	1.4%
Network-wide PD sessions	A	36.4%	31.8%	18.2%	9.1%	4.5%
	B	19.7%	40.8%	21.8%	12.7%	4.9%
Whole-school PD sessions	A	0.0%	31.8%	31.8%	27.3%	9.1%
	B	1.4%	13.4%	28.2%	48.6%	8.5%

School-based PD sessions for my grade level	A	8.7%	17.4%	4.3%	21.7%	47.8%
	B	23.9%	28.2%	29.6%	16.2%	2.1%
School-based PD sessions for my subject area(s)	A	8.7%	21.7%	13.0%	26.1%	30.4%
	B	28.2%	30.3%	29.6%	10.6%	1.4%
PD sessions or trainings that I selected or sought out	A	40.9%	22.7%	9.1%	18.2%	9.1%
	B	20.4%	59.9%	10.6%	6.3%	2.8%

When asked to describe the process for determining and contextualizing the goals, foci, and activities of PL, interviewees described a range of approaches. Some of these processes were identified as currently or formerly in place, and others were aspirational.

Overall, interviewees described a process for making decisions about PL goals, priorities, and specific activities that can be thought of as varying on two separate axes: centralization of decision-making and the quality of evidence used. Both of these have important implications for the potential impact of PL activities.

- First, the centralization of decision-making could include both who the ultimate party responsible for decision-making was and how inclusive that decision-making process was.
- Second, the quality of evidence used to make decisions ranged from no or limited evidence (described by interviewees as largely the whims of an individual) to evidence that included multiple sources, research, and student and teacher data.



Across the interviews, five coherent examples of processes for making decisions emerged.

1. In process 1, decisions came from the district level but conflicted depending on the district leader. This phenomenon resulted in a sense of frustration and a lack of clarity and autonomy from interviewees that likely negatively impacted teacher engagement.
2. In process 2, building leaders, including principals, made decisions using a range of processes and evidence, and the interviewees' sense of satisfaction and quality varied, suggesting this strategy could result in more variability in the quality and impact of PL.
3. In process 3, teachers made decisions to seek out their own PL opportunities in the absence of support from their district or principal; one teacher interviewee, in particular, described a high level of investment and impact from this method, but other instructional coach interviewees expressed skepticism of the impact of this approach without coherence.
4. Process 4 describes District B's strategic planning process, which resulted in a high level of investment and confidence in impact for interviewees. However, the role of research in narrowing priorities and the ultimate effect of this approach were not yet clear.
5. Finally, process 5 emerged based on interviews with LE staff and their recommendations for an ideal process, which includes ensuring research-based

priorities were contextualized based on needs and feedback, resulting in stronger motivation to participate.

Teachers and leaders described processes 1 and 2 as the two most common in place in District A. In District B, interviewees identified processes 1, 2, and 3 as most common in the past and 4 as the new, current approach of the district.

Results

Overall satisfaction, motivation, and efficacy

Overall, teachers and leaders in both districts were not particularly satisfied with the PL they received. Survey respondents expressed relatively modest levels of satisfaction (2.19 on a 0–4 scale) with the PL within their districts and schools (2.37 in District A, 2.16 in District B). Only 34% of all survey respondents reported being either *Very Satisfied* or *Extremely Satisfied* with the PL in place. This figure is quite comparable to the 29% of teachers who reported being highly satisfied with their current PL offerings in a recent national survey (Bill & Melinda Gates Foundation, 2014).

Likewise, teachers and leaders reported relatively modest levels of motivation to participate in PL (2.09 on a 0–4 scale), with a slightly larger, but still small, difference across the two districts (2.43 in District A, 2.03 in District B). Similarities across districts notwithstanding, some differences were observed according to respondent role. For example, compared to teachers, school leaders demonstrated somewhat higher levels of satisfaction with (2.65 vs. 2.14) and motivation to participate in (2.59 vs. 2.03) the PL in place within their districts.

In contrast to the modest satisfaction ratings observed on the survey, the smaller sample of interviewees (predominantly leaders) were generally positive when speaking about the impact and their investment in the PL in their district. Regarding his school's new PL focus and activities for the year, one principal reported that he was "personally, all in 100, all in invested." He said, "I would argue that 95% of our staff feel the exact same way. 100% ready to go, excited, and looking forward to the work right now because we know it's what's best. What's going to be best for our kids, right? And our teachers are really enjoying it, because they see for them what they do is gonna be drastically different. And they're excited for it."

These positive sentiments contrast with the middling satisfaction and motivation ratings, but this may be explained by who is represented in each sample.

Because the interviewees were predominantly leaders, the more positive perceptions align with the somewhat higher satisfaction of leaders compared to teachers seen in the surveys.

This principal's perception of his teachers' satisfaction with PL does not align with overall satisfaction levels across the district. This discrepancy could point to the leader's need for a stronger understanding of teacher perspectives or to teachers' satisfaction with individual PL initiatives compared to PL as a whole in their district. Interviewees spoke very positively about some PL initiatives and discussed some initiatives that were less impactful. In the survey, respondents reflected across all PL in their district. Interviewees who participated in LE PL spoke positively about their experiences; for example, one interviewee reported, "I've been doing this for quite some time, [and I have] worked with a lot of different math consultant groups, and I feel like the logical way in which the [LE PL] was deployed with bite-size pieces made it really impactful and much more so than others that I've been involved in."

Looking beyond satisfaction and motivation, teachers in both districts also had generally similar ratings on the cost/value of PL and perceptions of their individual efficacy.

Teachers in District A and District B demonstrated very similar average ratings on the Expectancy-Value-Cost for PL scale (0.78 vs. 0.88 on a -2.0 to +2.0 scale), and they had strikingly similar ratings of their own efficacy on the three different domains of the teacher efficacy measure (all on a 0-16 scale): student engagement (11.53 vs. 11.56), instruction (13.42 vs. 12.90), and classroom management (13.58 vs. 12.61). In contrast, leaders' ratings on the first of these two measures were more discrepant across the two districts. District A leaders' ratings on the Expectancy-Value-Cost for PL scale were considerably lower than their colleagues' ratings in District B (1.00 vs. 1.54). Finally, teachers and leaders in District A evinced notably lower ratings of collective efficacy compared to their colleagues in District B (0.15 vs. 0.50 on a -2.0 to +2.0 scale), with District A leaders reporting the overall lowest levels of collective efficacy (-0.50) among the four groups.

Involvement in decision-making

Both teachers and school leaders would prefer greater involvement in the process of establishing the goals, priorities, and specific activities of PL. Survey results revealed that 61% of teachers and 41% of leaders would prefer to be more involved than they currently are in the process of establishing the goals for PL. Further, 64% of teachers and 31% of leaders across the two districts would like to be more involved in establishing the priority areas for PL. Lastly, 62% of teachers and 47% of leaders prefer greater involvement in the process of determining the specific activities for PL.

Consistent with our hypotheses, teachers' and school leaders' satisfaction with PL correlated significantly with the degree to which they were involved in the process of establishing the goals ($r = .39, p < .001$), priorities ($r = .32, p < .001$), and specific activities ($r = .44, p < .001$) for

the PL in place. In addition, perceptions of how aligned PL was to their own individual growth goals ($r = .44, p < .001$) as well as to the growth areas of their students ($r = .54, p < .001$) were significantly related to their overall satisfaction with it. In addition, we observed that a desire for more involvement in the process of determining these aspects of PL was significantly and negatively correlated with teachers' and leaders' motivation to participate in PL (r coefficients from $-.27$ to $-.32, p < .001$) as well as their overall satisfaction with PL (r coefficients from $-.37$ to $-.39, p < .001$).

Teachers' desire for greater involvement in PL decisions aligned with interview findings, where interviewees reported relatively little involvement of teachers in decision-making. Most decisions were made by school or district administrators. These interview findings were confirmed by results from the study's survey, which show that school leaders reported being significantly more involved than teachers in establishing the goals (2.47 vs. $1.21, t(147) = 4.32, p < .001$), priority areas (2.41 vs. $0.93, t(151) = 5.33, p < .001$), and specific activities (2.18 vs. $0.96, t(153) = 4.24, p < .001$) for PL. Interestingly, in the survey, both teachers and leaders in District A reported being more involved in establishing each of these three aspects of PL than their counterparts in District B. However, the interviews revealed the opposite trend; interviewees in District B reported teachers were heavily involved in determining the strategic plan and empowered to make decisions within it, while interviewees in District A reported decisions were primarily made by school and system leaders.

A lack of clarity on how decisions were made may have negatively impacted satisfaction in District A. In District A, interviewees expressed uncertainty and frustration with conflicting district decisions by different stakeholders. In contrast, in District B, every interviewee brought up a recent strategic planning process and spoke very positively about the range of data and perspectives gathered. Nevertheless, this clarity did not result in overall higher satisfaction as measured by the survey in District B, and teachers did not report greater involvement in decision-making, which may highlight a disconnect in communication between teachers and leaders.

The wide range of topics selected for PL could be another explanation for the lower satisfaction and desire for more control over decisions reported by both groups. The interviews suggested teachers' and leaders' attention may be pulled in many directions, some of which may not be instructionally focused or aligned with research.

RPPL's Building Better PL research brief points to a focus on subject-specific instructional practices, curricula, and other materials, and improving student-teacher relationships as the PL features that make instructional improvement efforts more effective (Hill and Papay, 2022). Within each district, interview participants mentioned a wide range of topic areas as current

priorities for PL (18 total topics in District A, 21 in District B), only some of which were aligned with topics supported by research. One interviewee reported, "I think in past years, it was kind of whatever was popular. Whatever was kind of trending seemed to be what was grasped onto. It wasn't cohesive...it would be, 'okay. We're gonna do this this year. Oh, this has come up. We're gonna do this this year.'"

The wide range of topics may be partly explained by the wide range of data sources interviewees reported using for decisions. Decision-makers in District B leaned heavily on student data and teacher feedback. Decision-makers in District A formed committees, conducted observations, and used the input of an outside partner. It is worth noting that research played a relatively minor role in both districts in guiding decision-making, only being mentioned by a few interviewees.

Discussion

Despite clear differences between these two districts in how involved teachers and leaders were in making decisions about PL, satisfaction and motivation were remarkably similar across them. The fact that these two districts have such different characteristics and degrees of involving teachers and leaders in making these decisions and yet demonstrate such remarkably similar, middling satisfaction scores and engagement ratings runs contrary to our study hypotheses. Our initial study hypotheses suggested that District A respondents would have demonstrated significantly higher satisfaction with and engagement in PL because teachers and leaders there reported significantly greater involvement in making decisions about the goals, priorities, and specific activities that comprise PL. The average satisfaction and engagement ratings, however, for both of these districts were, once again, remarkably similar.

A number of potential explanations may account for this unexpected set of results. First, it might be the case that some factors not accounted for in our study could be suppressing PL perceptions in District A or, alternatively, boosting them in District B, causing these districts' ratings to look more similar than we might expect. Second, it is also possible that involvement in decisions could serve as a proxy indicator for the overall quality of the PL on offer in these districts. In other words, schools with higher quality PL may coincidentally take a more inclusive approach to making those decisions, even though it is ultimately the underlying quality of the PL that drives educators' perceptions of it. Unfortunately, we did not collect an independent rating of the quality of PL in these two districts, which would have allowed us to explore this possibility further. Therefore, future research in this area should evaluate quality after establishing clear criteria for doing so.

Another possibility may lie in the difference between educators' perceptions of individual PL initiatives and compared to the total number of PL initiatives in place within a district. It may be that educators are invested in the initiatives in which they had input but simultaneously disinvested in PL as a whole. Leading Educators' PL emphasizes building a coherent system of school-based and system-wide PL opportunities for ongoing learning so that educators are not overwhelmed by competing priorities. We also identified a potential disconnect between teacher and school leader perspectives.

While school leaders believe they broadly incorporate teacher input into PL decisions, teachers want much more input. Could interventions to target *how* school leaders incorporate teacher input improve teacher engagement in PL? The strong correlation between satisfaction and perceived alignment to student needs may point to a valuable direction to test; perhaps teacher input focusing on their understanding of their students' needs could improve teachers' satisfaction.

A final possibility that could explain the association between involvement and perception is that educators who have been more involved in decisions are predisposed to offer a more positive assessment, given that it is likely to reflect their views and preferences more closely. Teachers and leaders may not want to be more directly involved in all aspects of making decisions about PL, but rather, they want to be involved in a subset of decisions or input opportunities that are most important to them. In other words, teachers and leaders may desire more significant input in the process without wanting to be responsible for making all of the decisions related to PL within their schools.

High-quality PL must also draw on design features and best practices established by research. It is worth noting, however, that interview participants did not discuss much the role that research and best practices play in their district's decisions about PL. In contrast, members of the Leading Educators teams who support these specific partnerships raised research-based best practices as a critical factor for making decisions about the design of PL. Although these team members felt that districts needed to make decisions reflecting the latest insights gained from research, they noted that the extent to which they have seen districts incorporate this key input into their decision-making process varied considerably.

Implications and Future Directions

These results highlight an important area of need for school systems to address. Given the time and funds spent on PL, leaders must improve the current satisfaction and motivation levels. The findings from this study point to several important implications for PL designers and researchers to test and explore.

First, the survey results provide support for the hypothesis that input into PL decision-making influences teacher motivation and suggest that currently, teachers and leaders believe teachers do not have enough input. Overall, these results suggest that testing strategies to increase teachers' sense of investment and involvement in decision-making about PL could increase the impact of PL investments in the future.

Second, this study also illustrates that simply increasing input is insufficient to address this need. District A survey respondents did not report higher satisfaction despite higher reported involvement in PL decisions.

This raises several questions worth considering. Could increasing coherence by narrowing the number of PL offerings make a difference? Are different strategies for involvement in PL decision-making needed in large versus small districts?

Another set of implications arises from the discrepant perceptions of teachers and leaders, especially interviewees and survey participants. Could routines for using evidence within PL decision-making increase transparency and contextualization in accordance with teacher and student needs? How would messages around how the different sources of evidence, especially student needs, were used to make decisions before engaging in PL influence teacher investment and motivation?

Finally, it is noteworthy that across all of the PL that teachers and leaders reported engaging in over the year, many PL activities were not focused on instruction or aligned with research. These findings suggest that teachers, administrators, and district leaders could benefit from more information about what content is most supported by strong evidence from research to better guide decision-making. Increasing the research alignment of PL activities in which teachers are engaged could also increase investment as teachers would come to see the impact on their students. Prioritizing both involvement and guiding priorities using research could better address gaps in satisfaction and motivation and, ultimately, the impact of PL.

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