

What Happens When Teachers Have Choice in Their Professional Learning?

Preliminary Findings From a Randomized Field Trial of the MiPLAN Voucher Program

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Agenda

1. Study Background
2. Program Overview
3. Study Design
4. Preliminary Findings
5. Discussion and Next Steps

Study Background

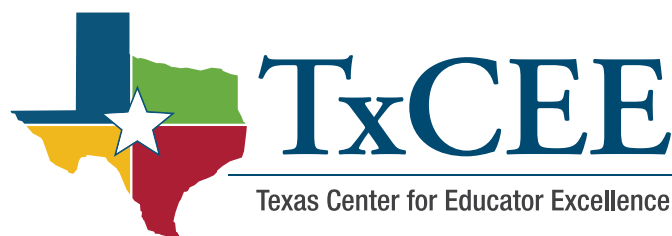
Motivation

- Teacher professional learning (PL) is traditionally driven by state mandates or district priorities rather than by the individual needs of teachers (Gates Foundation, 2014; Guskey, 2009; Kennedy, 2016; McCarthy & James, 2017; Mushayikwa & Lubben, 2009).
- However, effective PL should be responsive to the more individualized needs of educators and the learners they serve (Darling-Hammond et al., 2017).

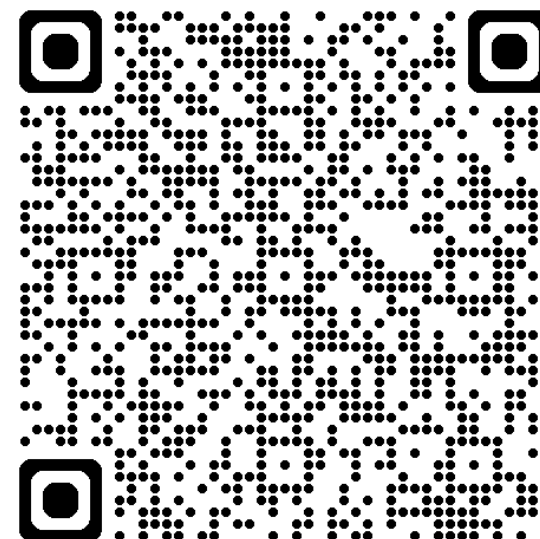


Study Hypothesis

- The American Institutes for Research® (AIR®) partnered with the Texas Center for Educator Excellence (TxCEE), housed at Region 18 Education Service Center, to test the hypothesis that teachers and students could benefit when teachers are able to select PL based on their needs and the needs of the students they serve, in place of state- or district-mandated PL.



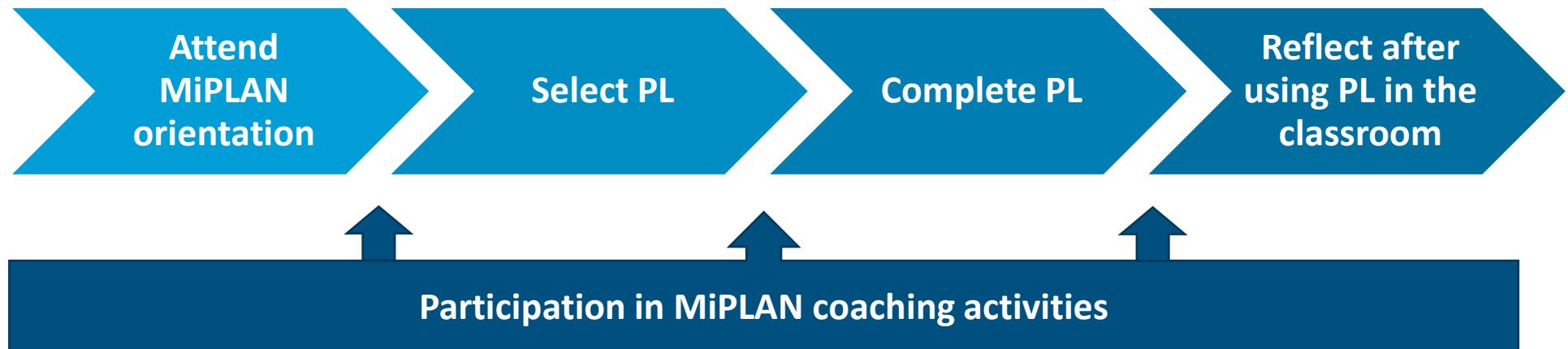
Study Website



Program Overview

What Is MiPLAN?

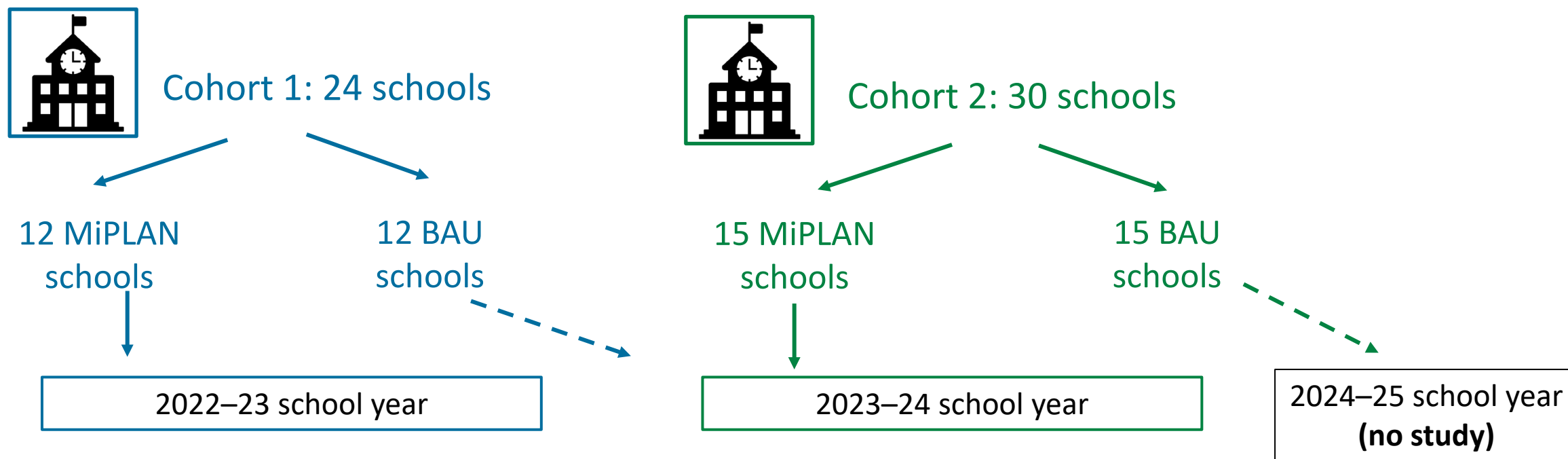
- Led and developed by TxCEE, the **Math Instructor Professional Learning Autonomous Network (MiPLAN)** was developed to allow teachers providing math instruction in Grades 3–8 to select, participate in, and reflect on PL opportunities of their own choice, with the goal of improving math achievement for students in high-need schools.
- MiPLAN reimbursed districts up to \$8,000 per teacher for their selected PL opportunities, and teachers were expected to participate in at least 24 hours of PL throughout the course of the year (or 80% of state-mandated PL).



Study Design

School-Level Randomization

- The study included two cohorts of schools with 1 year of program participation.
- Schools were randomized within cohort to treatment (MiPLAN; first implementers) or business-as-usual (BAU; delayed implementers) using re-randomization (Morgan & Rubin, 2012; 2015).



Research Questions

Research question	Data sources
(RQ1) What is the impact of MiPLAN on teachers' attitudes and beliefs?	• Teacher surveys
(RQ2) To what degree are key components of MiPLAN implemented with fidelity?	• Attendance data • Program platform usage data
(RQ3) What are teachers' and district leaders' perceptions of and experiences with MiPLAN (including barriers and facilitators of MiPLAN implementation)?	• Teacher interviews • Teacher surveys

Methods

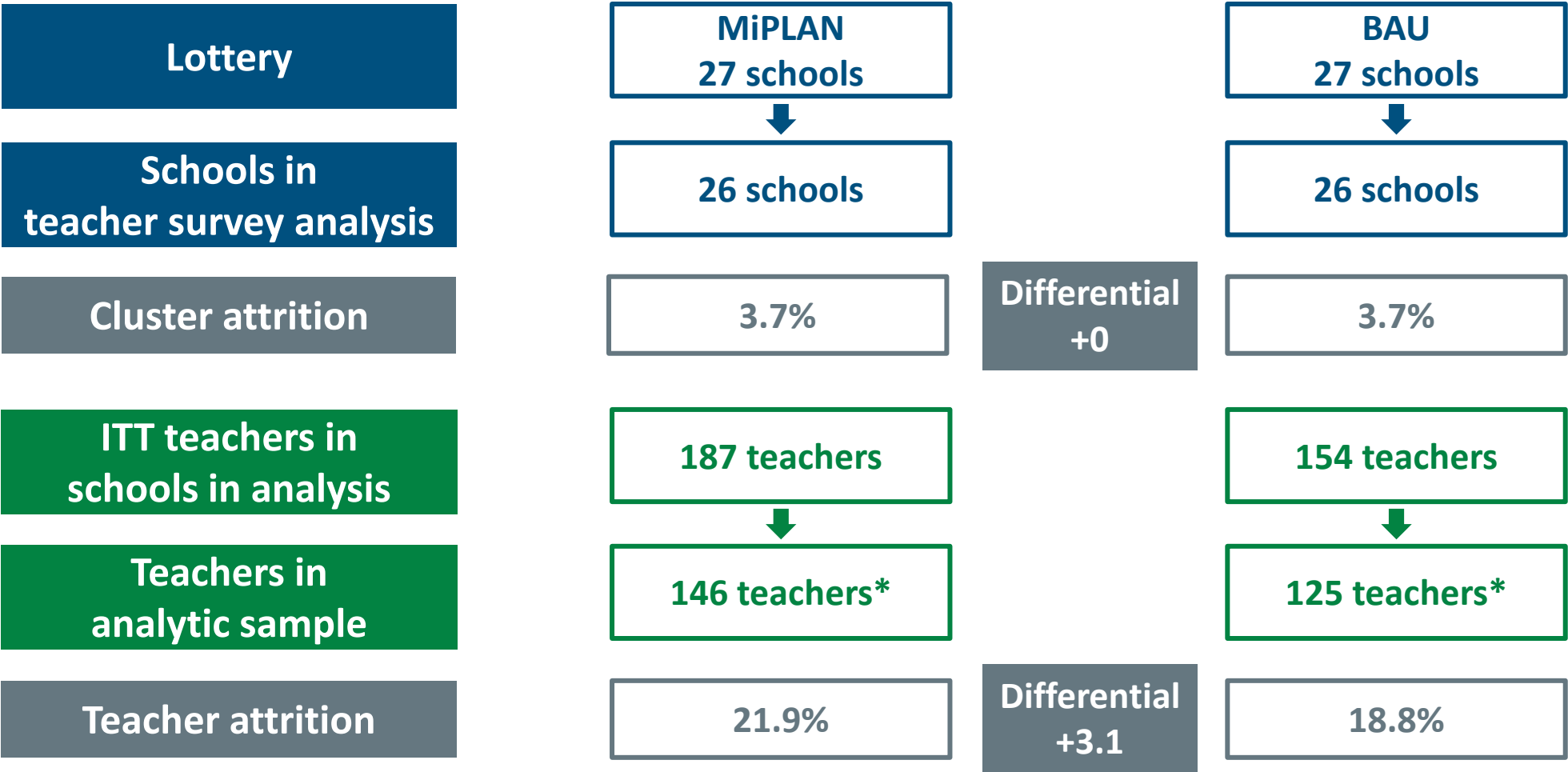
- (RQ1) What is the impact of MiPLAN on teachers' attitudes and beliefs?
 - Administered a pre- and post-survey to teachers in first and delayed implementing schools
 - Intent-to-treat (ITT) analysis using two-level model with teachers nested in schools
- (RQ2) To what degree are key components of MiPLAN implemented with fidelity?
 - Descriptive analysis of program records (attendance and usage) based on predetermined measures and thresholds

Methods (cont.)

- (RQ3) What are teachers' and district leaders' perceptions of and experiences with MiPLAN?
 - Semi-structured interviews with teachers (n=37), as well as interviews with school and district administrators (n=15)

Preliminary Findings

(RQ1) The study had low attrition based on What Works Clearinghouse standards.



* N of teachers in analytic sample varies slightly by outcome. The numbers shown represent those for the self-efficacy outcome, which had the highest differential attrition of any outcome.

(RQ1) Teachers were comparable across the MiPLAN and BAU groups.

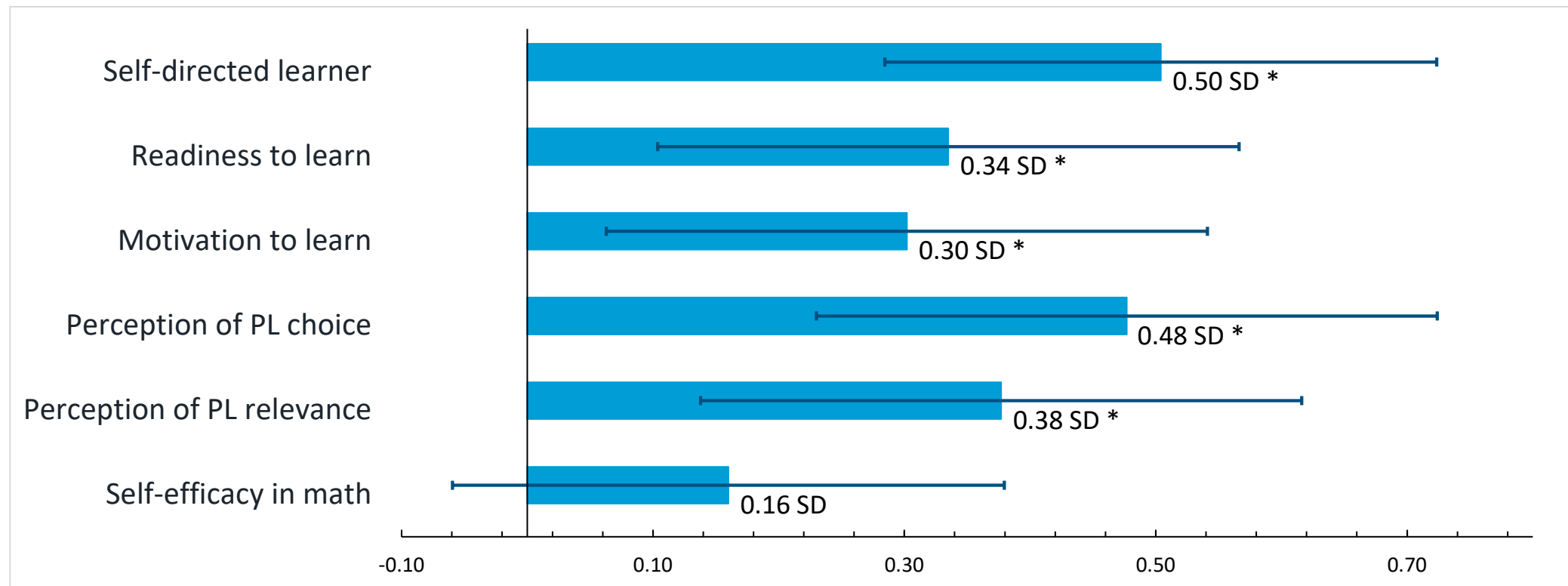
- The analysis included 271 math teachers in Grades 3–8 from 52 schools across 14 Texas districts.

Teacher characteristics		MiPLAN (n = 146)	BAU (n = 125)
Grade band served	Teaches Grades 3–5 only	49%	35%
	Teaches Grades 6–8 only	51%	62%
	Teaches Grades 3–8	0%	2%
Tenure teaching math	Math experience, average years	10.0	8.9
	Math experience < 3 years	23%	23%
	Math experience 3–10 years	42%	48%
	Math experience 11+ years	34%	29%
Gender and race/ethnicity	Female	70%	81%
	White	32%	35%
	Black	1%	6%
	Hispanic	66%	55%
	Other race/ethnicity groups	1%	3%

- Baseline standardized mean differences for teacher survey constructs were all < 0.25.

(RQ1) The study found positive impacts on five of the six intended teacher belief outcomes.

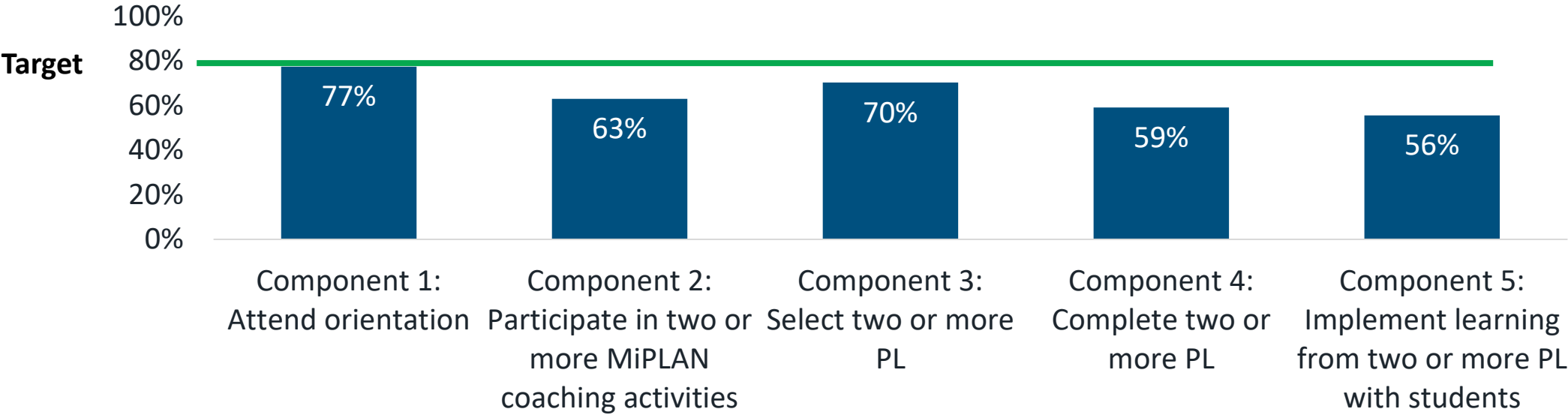
First Versus Delayed Implementers: Standardized Group Mean Differences and Confidence Intervals



Note. 95% confidence interval; * $p < 0.05$; SD = Standard Deviations.

(RQ2) School-level fidelity of implementation was shy of the intended level.

- Based on the ITT sample, implementation fell slightly short of the original target of 80% or more schools implementing each program component with adequate fidelity.
- For any given school, adequate fidelity was defined as 60% or more of teachers completing a program component.



(RQ3) Teachers valued the MiPLAN opportunities, despite limits to their choice and inability to supplant required PL.

- MiPLAN PL was perceived as high quality, engaging, and leading to instructional changes supporting student learning.
- Teachers were generally not released from other school- or district-mandated PL to participate in MiPLAN PL, so MiPLAN was considered an “add on” to other required PL.
- Teachers appreciated having autonomy to select PL aligned to their needs. However, teacher choice was more limited than intended.

“I wanted to choose things that I knew I needed as a new teacher to the campus and just a new teacher to fourth grade. **This is my first year teaching fourth grade, and I have never done small groups in guided math before, so I needed to choose something that would address that.**”

–MiPLAN teacher

(RQ3) Leaders liked the resources but wanted more control.

- The funding and curated set of MiPLAN PL opportunities were key selling points of MiPLAN to district and school leaders.
- Administrators liked the idea of providing some amount of PL choice to teachers but wanted more influence over teacher PL selections.

“I would like more influence [on the selected PL] . . . When [teachers] look at the list of available PDs [professional developments], **they might not even know what they need and our students need. . . . I was trying to respect [teacher-driven selections] but would love more influence.”**

—District administrator

Discussion and Next Steps

Discussion

- Our preliminary findings highlight the potential value of investments in teacher PL that goes beyond instruction.
- What do these findings suggest about reforming educational systems to distribute decision making and control?
- These impacts on teacher beliefs and attitudes may hold extra importance, given the state of teacher burnout and professional discouragement.
 - Impacts on teacher retention would be interesting to consider, although they were not a focus of this work.

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