# Pathway Schools Initiative

*Fundamental Evaluation Summary*

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# Overview

The McKnight Foundation's Pathway Schools Initiative (PSI) aimed to improve the literacy achievement of students in the Twin Cities through pathways that integrate and enhance PreK–3 literacy education. The PSI was conceived as a long-term partnership (up to 10 years) with a set of local schools and districts serving high-needs students to provide high-quality, aligned, and coherent educational experiences from PreK–3. The Foundation funded the Urban Education Institute (UEI) at the University of Chicago to provide leadership and management for the initiative and to provide Pathway districts and schools with professional development and technical assistance focused on literacy and leadership. UEI anchored their support on two, validated diagnostic tools developed at the University of Chicago: the Strategic Teaching and Evaluation of Progress (STEP) developmental literacy assessment for grades PreK–3 and the 5Essentials survey.

This report examines the progress made by the four schools that participated in the initiative through the 2017–18 school year on a fundamental set of outcome indicators of continuity in the PreK–3 enrollment pipeline, good instructional practices and quality, effective school leadership, and student learning and achievement.

> **Key Findings**
>
> - **Preschool enrollment increased because of the initiative and new state funding.**
> - **Mobility remained high as students as progressed from kindergarten through third grade.**
> - **Literacy time, instructional formats, and activities remained fairly consistent since 2014–15.**
> - **Classroom organization and emotional support decreased while instructional support and language modeling practices improved as measured by CLASS.**
> - **More than half the teachers reported that the initiative greatly increased their knowledge, expectations, and practices about literacy instruction, and it had a great impact on their small group instruction and assessment practices.**
> - **Ratings of school leadership improved in some PSI schools but remained weak in others.**
> - **Overall, students' rate of reading growth on STEP did not improve.**
> - **Students who attended PSI PreK were almost twice as likely to meet STEP grade level goals in subsequent grade levels than peers who did not.**
> - **Students whose teachers had used STEP for 3 or more years made more growth on STEP than students whose teachers had fewer years of experience.**
> - **Rates of third-grade reading proficiency did not improve, but rates for dual language students were trending up in 2017–18.**

# Participating Districts and Schools

All the Pathway schools served a high percentage of children who are at risk of poor literacy outcomes. Across the initiative in 2017–18, the Pathway schools served 91 percent students of color and 87 percent low-income students (Exhibit 1). Approximately half of students in the Pathway schools were dual language learners (DLLs), with schools serving high numbers of children whose home languages are Spanish, Hmong, and Somali. This represents a larger concentration of DLL students than the Twin Cities metro area as a whole, where roughly 30 percent of students are DLL.

## Exhibit 1. Teacher and Student Counts in 2017–18, by School

|  | CPA | Earle Brown (BCCS) | SPMA (SPPS) | Wellstone (SPPS) | Overall |
|---|---|---|---|---|---|
| PreK–3 Teacher Counts | 13 | 35 | 18 | 19 | 85 |
| Student Enrollment Counts |  |  |  |  |  |
| N PreK | 36 | 99 | 38 | 59 | 237 |
| N K–3 | 200 | 688 | 379 | 347 | 1,614 |
| K–3 Student Demographics |  |  |  |  |  |
| Native American | 0% | 1% | 0% | 1% | 0% |
| Asian/Pacific Islander | 51% | 16% | 60% | 18% | 31% |
| Hispanic | 23% | 21% | 10% | 49% | 25% |
| Black | 17% | 45% | 20% | 19% | 30% |
| White | 9% | 12% | 4% | 6% | 9% |
| Multiracial | 1% | 6% | 6% | 7% | 5% |
| Dual language learner (DLL) | 41% | 31% | 65% | 66% | 48% |
| Special education | 12% | 11% | 12% | 13% | 12% |
| Free or reduced-price meals | 85% | 86% | 93% | 85% | 87% |

Source: District administrative data provided to SRI

# Fundamental Evaluation Questions

The fundamental evaluation was guided by a set of evaluation questions developed in partnership with the PSI's national advisory board.

- Is continuity in the enrollment pipeline from PreK through 3rd grade improving?

- To what extent do PreK–3rd grade teachers use effective literacy instructional practices? How do these practices change over time?

- To what extent has school leadership improved over time?

- Is the growth rate for literacy achievement increasing over time? Are more students reaching proficiency over time? Are there differences in growth or proficiency rates among student subgroups (e.g., DLL students)?

To answer the fundamental evaluation questions, the study team collected and analyzed student enrollment and demographic data, teacher surveys (an SRI-developed survey and the 5Essentials school organization survey), classroom observations using the Classroom Assessment Scoring System (CLASS®), STEP formative assessment data, and Minnesota Comprehensive Assessment (MCA-III) data. Appendix A describes the data sources and evaluation methods.
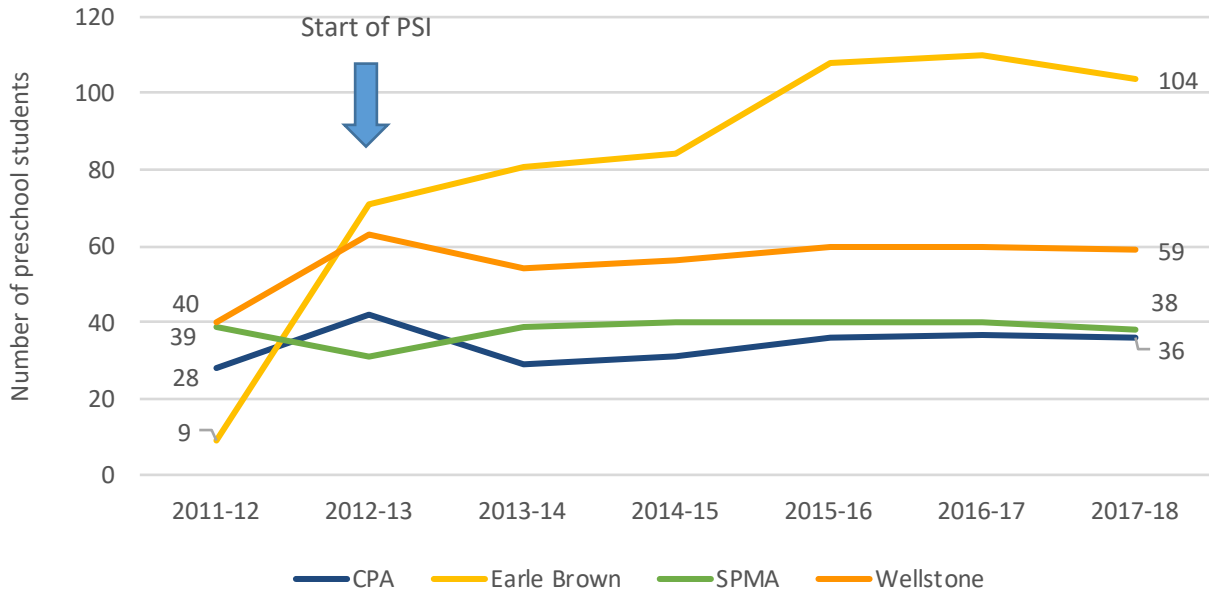
# Student Enrollment

The PSI emphasized the development of coherent pathways to ensure that, from year to year, students entered each grade with the skills they needed to continue to accrue knowledge. A critical piece of building coherent pathways was developing a pipeline of students who stayed at the school from PreK to third grade.

## PreK Enrollment

The number of children enrolled in the PSI preschool programs increased from 116 to 237 over the length of the initiative, a 200 percent increase, because of PSI support and new state funding (Exhibit 2). In the earlier years of the initiative, about 76 percent of children who attended PreK in PSI schools remained at the school in kindergarten. Overtime, that percentage decreased to 73 percent. By first grade, about 60 percent of students who attended PSI PreK remained at the same school.

## Exhibit 2. Enrollment of PreK by School



Start of PSI

Number of preschool students

120
100
80
60
40
20
0

40
39
28
9

104
59
38
36

2011-12    2012-13    2013-14    2014-15    2015-16    2016-17    2017-18

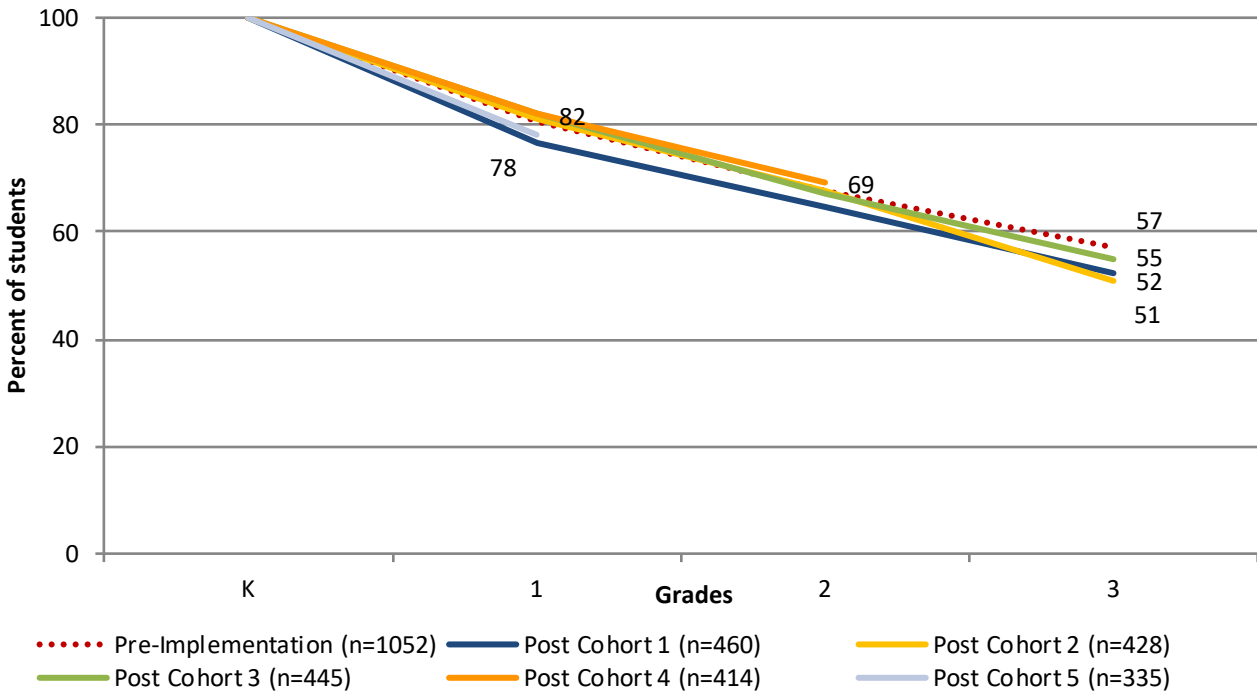— CPA    — Earle Brown    — SPMA    — Wellstone

# Kindergarten through Third Grade Enrollment

Patterns of sustained enrollment from kindergarten to third grade did not improve over time. Exhibit 3 shows the percentage of students who remained enrolled in their school for 1–3 years after kindergarten. While there were marginal differences in the percentage of students remaining enrolled each year for each cohort,[1] the general pattern was unchanged. On average across all cohorts, about 80 percent of students remained enrolled in their Pathway school 1 year after kindergarten, 68 percent remained enrolled 2 years after kindergarten, and 53 percent remained enrolled 3 years after kindergarten. School leaders identified several root causes to student mobility that were beyond their control, including inter- and intra- district school choice, transportation challenges, and lack of affordable housing.

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[1] SRI analyzed sustained enrollment for the kindergarten cohorts starting in 2011–12, 2012–13, 2013–14, and 2014–15, with pre-implementation kindergarten cohorts that started in 2009–10, 2010–11, and 2011–12.

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## Exhibit 3. Sustained Enrollment of Kindergarten Cohorts



Percent of students

Grades

- • • • • • Pre-Implementation (n=1052)
- —— Post Cohort 1 (n=460)
- —— Post Cohort 2 (n=428)
- —— Post Cohort 3 (n=445)
- —— Post Cohort 4 (n=414)
- —— Post Cohort 5 (n=335)

# Instructional Practices

The PSI aims to improve and align literacy instruction in all PreK–3 classrooms through the implementation of regular assessment and progress monitoring using the STEP, as well as a variety of professional development opportunities including coaching, collaboratives, and trainings. To study the focus and quality of teachers' instruction, the evaluation team collected data through a teacher survey and classroom observations using the Classroom Assessment Scoring System (CLASS®).

## Literacy Practices

Literacy instructional practices remained fairly consistent between spring 2015 and spring 2018. The average amount of time spent on literacy instruction continued to be close to 2 hours. The distribution of teacher time spent on various instructional formats remained relatively consistent for the past 4 years, with about 43 percent of teacher time being spent on facilitating small group instruction, 25 percent on whole group instruction, 10 percent on monitoring students' independent work, and 12 percent on other tasks. One practice that changed over the four

years was to more frequently provide instruction on word work (from 1–2 times a week to 3–4 times a week).

Teachers reported almost always using STEP results to inform and evaluate instruction, with no changes over time. About two-thirds of teachers reported that using STEP had a great impact on their teaching practices. They reported using STEP often to communicate progress to parents, with a small increase in this practice over the past 4 years. The use of other family engagement activities remained fairly consistent over the past 4 years.

Teachers reported having moderate alignment of expectations, language about literacy, and pedagogy for literacy with other teachers at their school. The levels of alignment reported did not change over the past 4 years. However, in 2018, half the teachers reported that the initiative has greatly increased their knowledge, expectations, and practices about literacy instruction (Exhibit 4). More than half of teachers reported the initiative had a great impact on their small group instruction (59%) and assessment and progress monitoring practices (54%). About one-third of teachers reported the initiative had a great impact on their whole group (39%) and independent work instruction (33%).

## Exhibit 4. Perceived Big Impacts on Teachers from PSI Participation
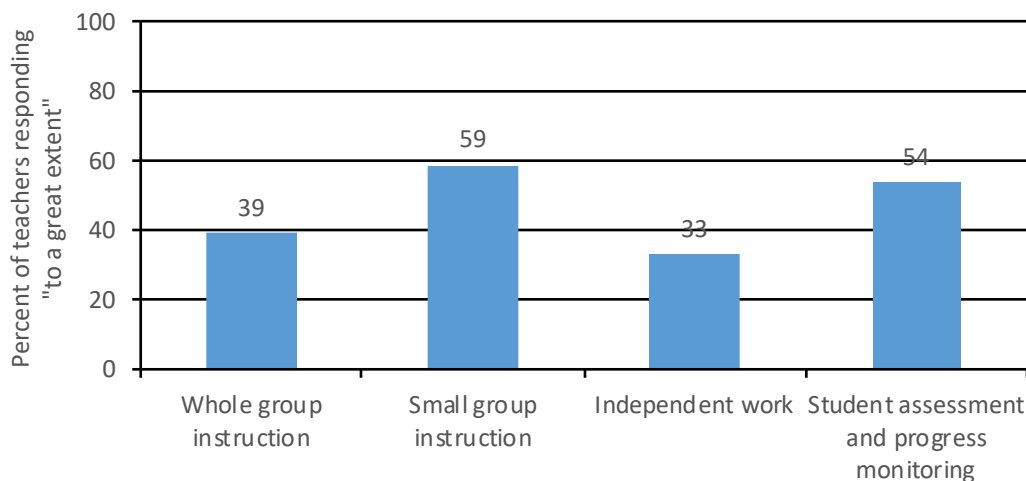


## Teaching Quality

CLASS includes ratings for three domains: Classroom Organization, Emotional Support, and Instructional Support. Ratings for Classroom Organization and Emotional Support decreased over the past 4 years while ratings of Instructional Support marginally increased (Exhibit 5).
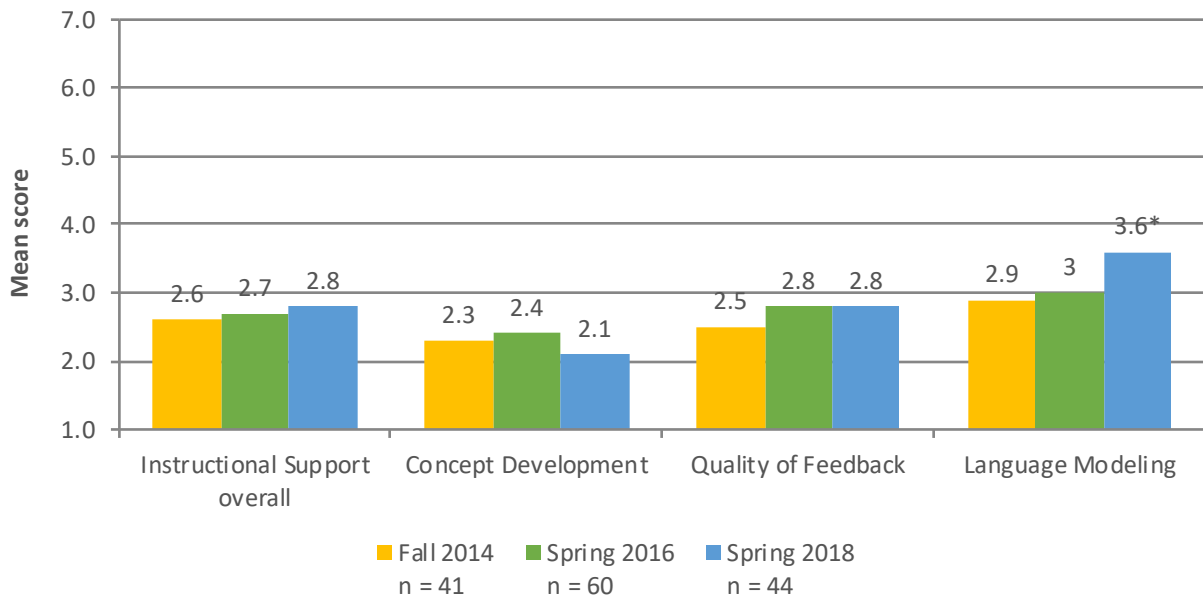
Within the domain of Instructional Support, the dimension of Language Modeling increased significantly over the past 4 years (Exhibit 6).

## Exhibit 5. Classroom Observation Scores: CLASS Domains
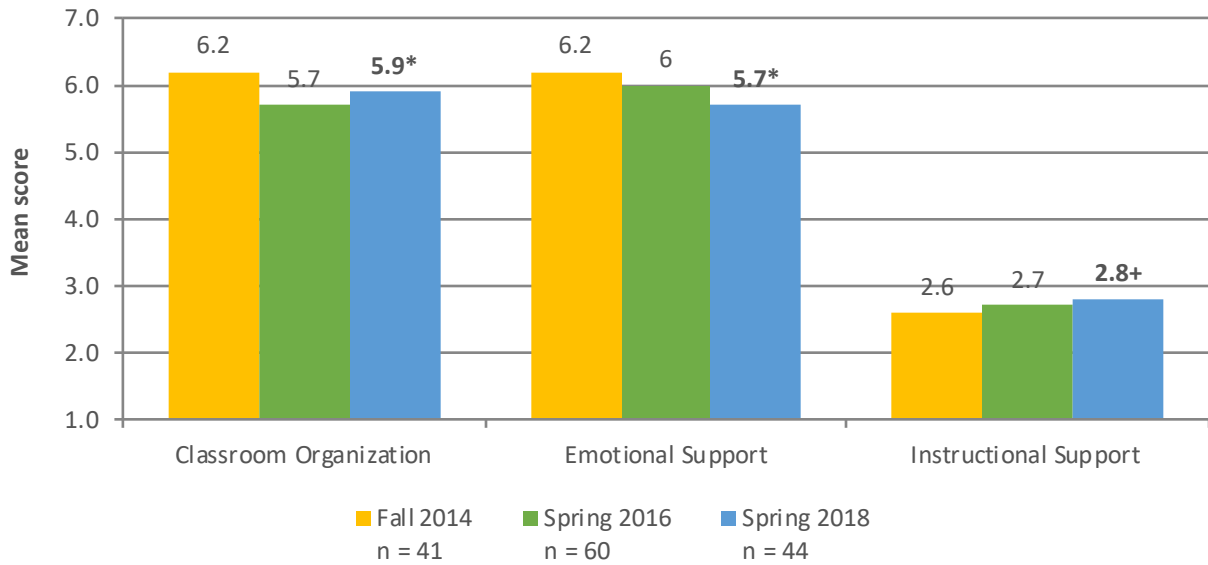


*Statistically significant difference between 2014 and 2018.
+Significant at $p < .10$

## Exhibit 6. Classroom Observation Scores: Instructional Support Dimensions
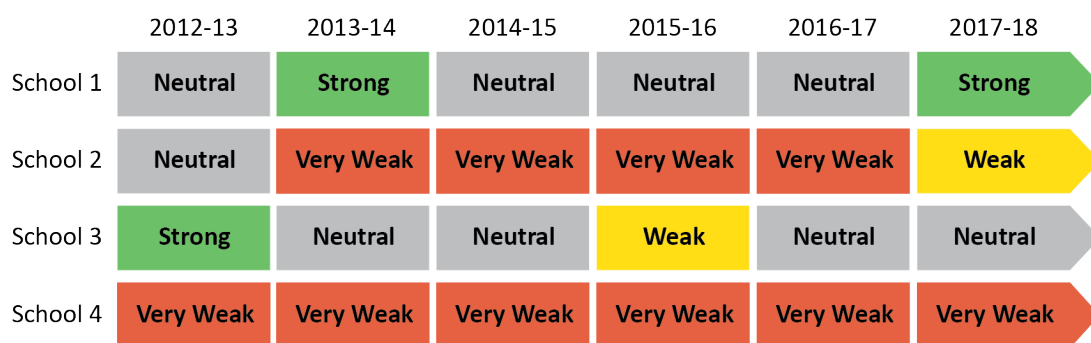


*Statistically significant difference between 2014 and 2018.

# School Leadership

The PSI provided leaders with a variety of supports to help them review STEP and 5Essentials survey data, identify areas for improvement, and facilitate implementation of PSI strategies for improving literacy instruction and student achievement. The 5Essentials survey measured staff ratings of the effectiveness of school leadership, defined as the extent to which "the principal works with teachers to implement a clear and strategic vision for school success."

5Essentials results for leadership improved in 2017–18 for two of the four schools (Exhibit 7). Most Pathway principals received low ratings on the effective leadership component by school staff for most of the years of the initiative.

## Exhibit 7. Effective School Leadership: Pattern and Trends from the 5Essentials Survey

| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|---|---|
| School 1 | Neutral | Strong | Neutral | Neutral | Neutral | Strong |
| School 2 | Neutral | Very Weak | Very Weak | Very Weak | Very Weak | Weak |
| School 3 | Strong | Neutral | Neutral | Weak | Neutral | Neutral |
| School 4 | Very Weak | Very Weak | Very Weak | Very Weak | Very Weak | Very Weak |

# Student Literacy Growth and Achievement

The initiative's ultimate goal is for all students to be proficient readers by the end of third grade. To measure whether more students were on track to being proficient third-grade readers, the evaluation analyzed the percentage of Pathway school students reaching year-end proficiency goals and their rates of progress on the STEP. The evaluation also examined trends in third-grade reading proficiency on standardized third-grade reading tests (the Minnesota Comprehensive Assessment–Series III, or MCA-III) across years.
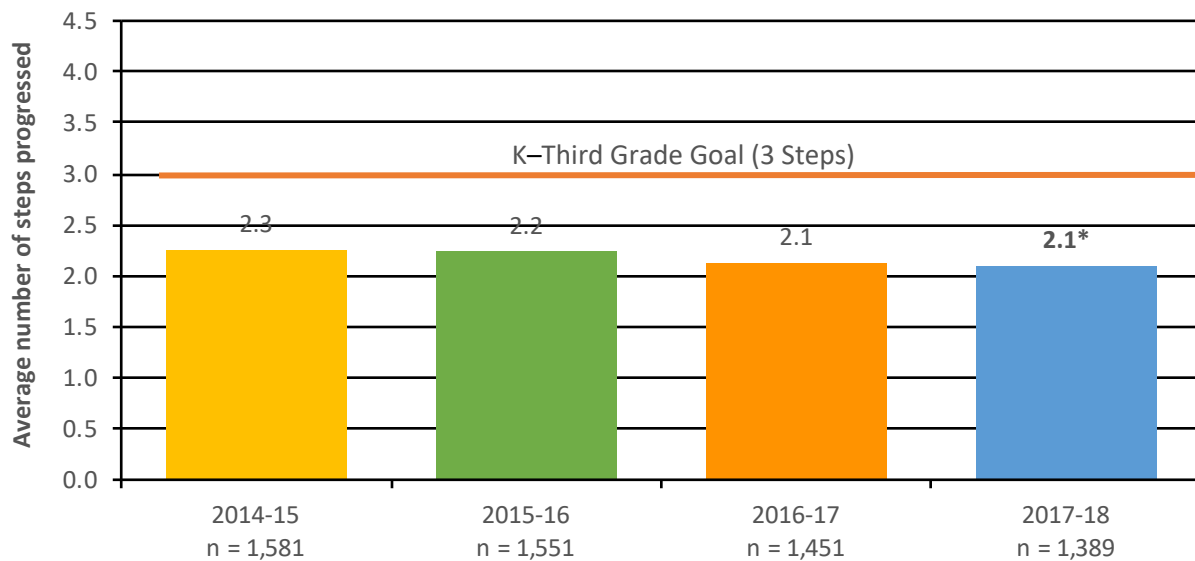
## STEP

While data from STEP are primarily used to inform teacher instructional planning, the evaluation team used STEP data to examine student literacy progress and proficiency. The STEP system

tracks how students are developing as readers along a 13-step trajectory from PreK through third grade. Students are expected to progress one STEP level in PreK and three STEP levels per year in kindergarten through grade 3. Each STEP level denotes specific reading skills or strategies students have mastered and informs teachers of the skills and strategies students must learn to continue developing as readers.

The rate of literacy growth did not improve and actually decreased slightly over the past 4 years. The average number of STEPs that K–3 students made decreased from 2.3 in 2014–15 to 2.1 in 2017–18. In 2017–18, 35 percent of K–3 students made the recommended 3 or more STEPs, 25 percent made 2 STEPs, and 40 percent made 1 or zero STEPs of progress.

### Exhibit 8. Average Number of Steps Progressed on English STEP, K – 3 Combined



*Statistically significant difference between 2014–15 and 2017–18.

The percent of students making end-of-year STEP goals decreased with each subsequent grade level (Exhibit 9). The percentage of students meeting end-of-year goals decreased over time because K–3 students did not make the three steps per year of progress needed. The gap between the actual achieved and expected end-of-year grade-level goals did not close and grew slightly larger in PreK and grade 2. By spring 2018, the average third grader was 1.6 grades behind where they should be. Similarly, the rate of literacy growth did not improve for DLL students. By the end of third grade, DLL students were 1.9 grade levels behind where they should be.

## Exhibit 9. Expected and Actual End-of-Year English STEP Level
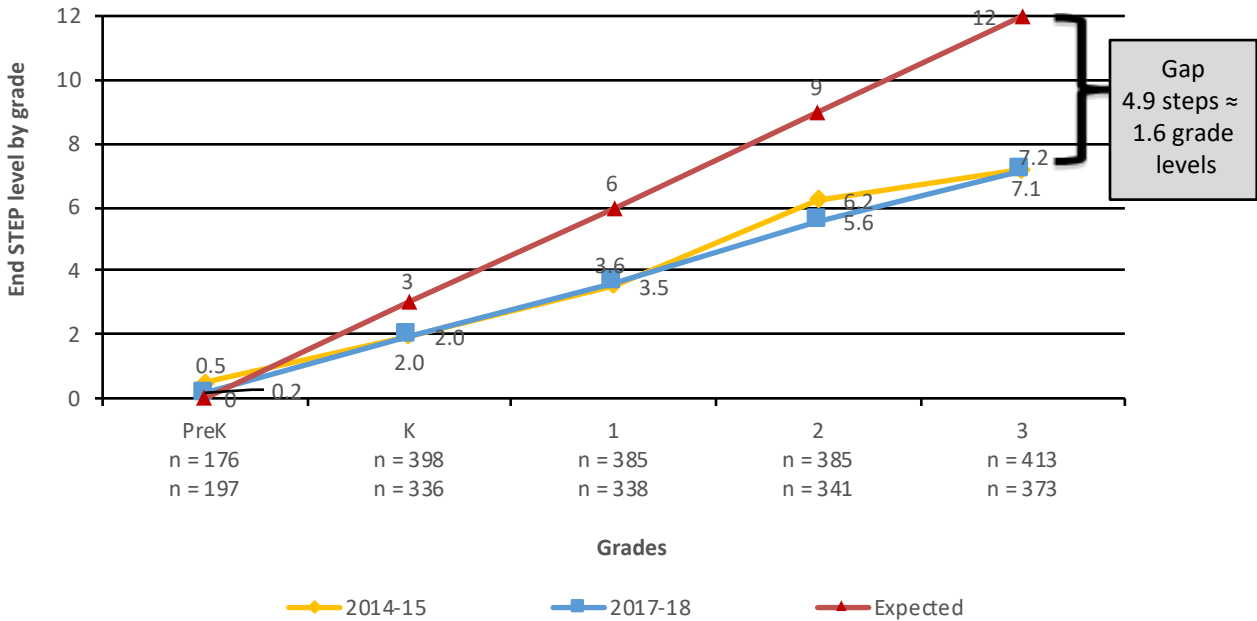


Students who attended PSI PreK were almost twice as likely to meet grade level goals in subsequent grade levels than peers who did not attend PSI PreK (Exhibit 10). The biggest difference was in kindergarten, though differences persisted through third grade. Students who attended PSI PreK had a 21 in 100 chance of meeting grade level goals across subsequent grades, whereas students who did not attend PSI PreK had a 12 in 100 chance.

## Exhibit 10. Students Meeting Grade-Level STEP Goals, by PSI PreK Participation
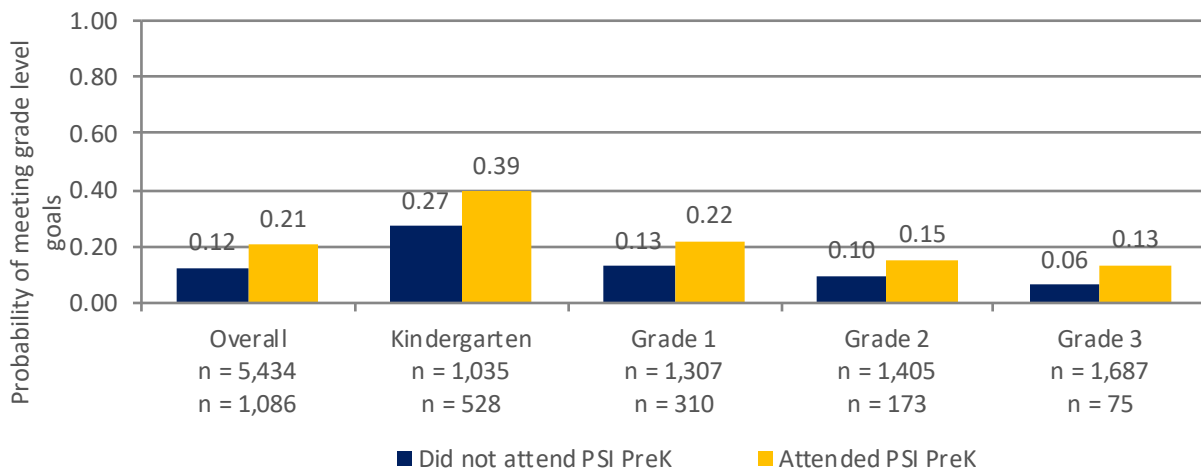
# MCA-III Reading Achievement

To better understand whether the PSI may be increasing students' literacy performance, the evaluation examined the trends in third-grade MCA-III scores across the past 5 years of the initiative. Since the beginning of the PSI, third-grade reading proficiency fluctuated, with no clear pattern of improvement (Exhibit 11). Less than a quarter of third-grade students in PSI schools were proficient in reading on the MCA-III in spring 2017.

## Exhibit 11. Overall Third-Grade MCA-III Reading Proficiency
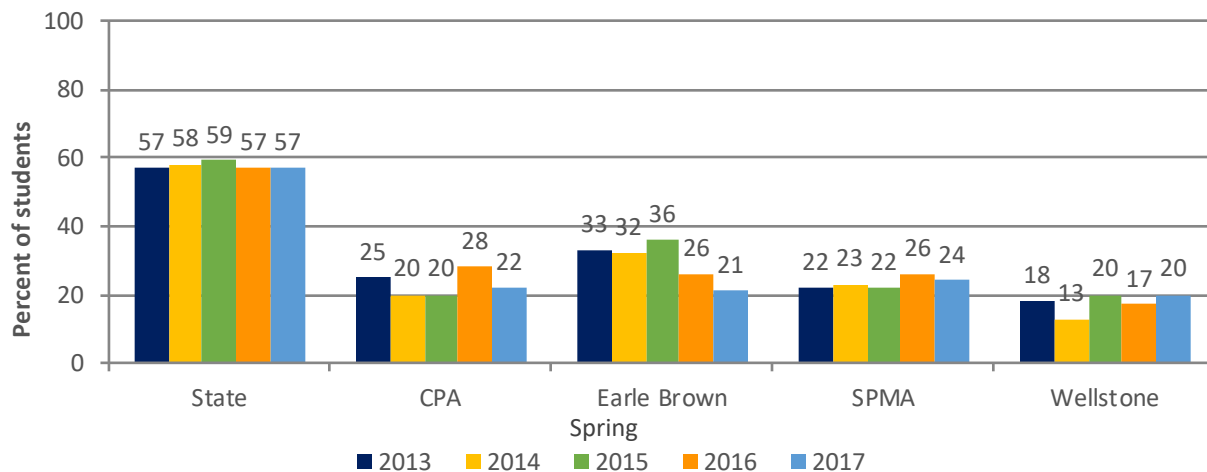


Three PSI schools saw increases in the percent of DLL students who achieved third-grade reading proficiency from spring of 2013 and 2017 (Exhibit 12). Given the volatility in rates by year, no conclusions should be drawn about the increases in DLLs' reading proficiency rates in a single year (e.g., 2017) until examining whether these trends continue in 2018 and 2019.

## Exhibit 12. DLL Student Third-Grade MCA-III Reading Proficiency
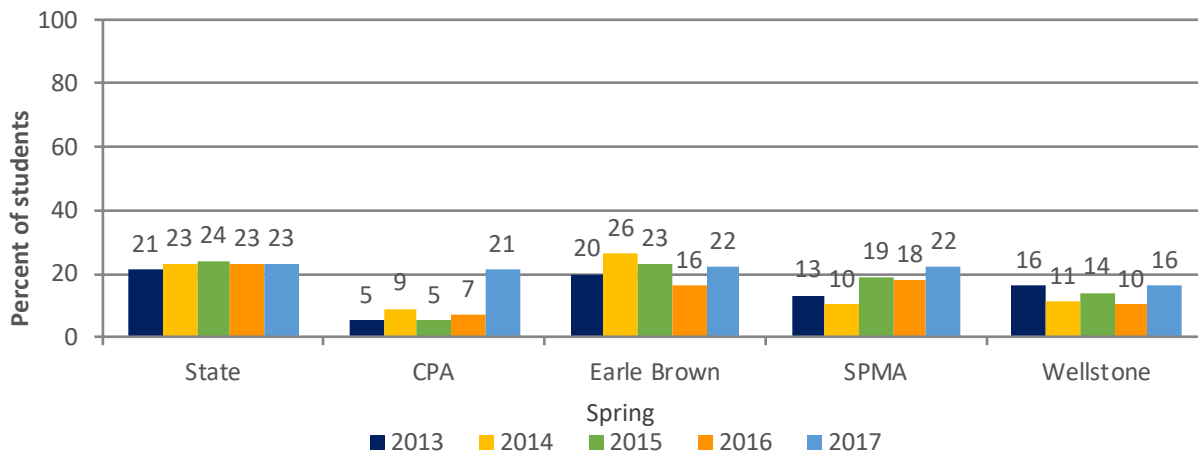
# Appendix: Evaluation Data Sources/Methods

The evaluation team employed multiple evaluation methods to gather fundamental evaluation data on the Pathway Schools Initiative.

**Student Enrollment Pipeline.** The evaluation team worked with each of the Pathway schools/districts to collect student enrollment and demographic data, including student race/ethnicity, gender, special education and dual language learner (DLL) status, participation in the free and reduced-price meal program, and grade. Using the student enrollment data provided by each district, the evaluation team identified several cohorts of students who either began at the Pathway schools in PreK or in kindergarten. The evaluation team then assessed the sustained enrollment patterns both before and after implementation of the initiative.

**Teacher Survey.** In springs 2015, 2016, 2017, and 2018, PreK–3 teachers completed a survey that captured information about teachers' instructional practices in literacy and their experiences with professional development, coaching, collaboration, the STEP assessment.

|           | Total PreK–3 teachers | N  | Response rate |
|-----------|-----------------------|----|---------------|
| 2014–15   | 82                    | 75 | 92%           |
| 2015–16   | 84                    | 74 | 88%           |
| 2016–17   | 83                    | 80 | 96%           |
| 2017–18   | 85                    | 83 | 98%           |

**Classroom Observations.** To measure teachers' classroom practices, trained observers conducted classroom observations using the Classroom Assessment Scoring System (CLASS) observation instrument. CLASS is an observational tool that focuses on developmentally appropriate classroom interactions. CLASS measures three domains of classroom quality that have been linked to student learning and achievement: Emotional Support, Classroom Organization, and Instructional Support. The evaluation used both the PreK and K–3 versions of the CLASS. Trained and certified observers observed all eligible, consenting PreK–3 grade teachers in fall 2012, fall 2013, fall 2014, spring 2016, and spring 2018. Not all schools were observed in fall 2012 and 2013, so this report does not include data from those years.

**STEP data.** Each of the Pathway districts began using the Strategic Teaching and Evaluation of Progress (STEP) literacy assessment with PreK–3 students in different years: Earle Brown in 2011–12, CPA in 2013–14, and the SPPS schools in 2014–15. While data from STEP are primarily used to inform teacher instructional planning, the evaluation team used STEP data to examine student literacy progress and proficiency over the course of the initiative. All Earle Brown and CPA students were assessed with the English STEP, as were SPPS PreK–3 students in English–based programs. Students in the SPPS dual language programs were assessed with the Spanish STEP, and some of them (mostly students in grades 2 and 3) were also given the English STEP.

**Student MCA-III Reading Achievement.** The percent of students meeting third-grade reading proficiency on the Minnesota Comprehensive Assessment (MCA-III) at each of the PSI schools over time was gathered from the Minnesota Department of Education website: http://rc.education.state.mn.us/#.

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