Improving Early Literacy in PreK–3: Lessons Learned

The McKnight Foundation Pathway Schools Initiative
Phase I Report
2016

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Shari Golan
Lauren Cassidy
Katrina Woodworth

Foreword

Over sixty years ago, William and Maude McKnight endowed The McKnight Foundation to improve the quality of life for present and future generations. We live this mission by taking on enormous challenges in areas where we must make progress in order to support a healthy planet, an equitable society, and an economically vibrant future for our cities, our state, and our world.

Accordingly, we see closing educational opportunity gaps from children's earliest years as a critical part of our work. McKnight's early literacy efforts, embedded within our Education & Learning program, aim to support children from PreK–3rd grade, with the goal of developing proficient readers. This work is an outgrowth of McKnight's long-term commitment to early childhood education.

For decades, McKnight invested broadly and deeply in improving access to high-quality early education across Minnesota. We remain committed to a vision of a Minnesota where every child who needs high-quality preschool supports receives them. At the same time, we recognize that getting a child ready for kindergarten is only the first step in preparing her for success in and beyond school. Ample research demonstrates that reading successfully at third grade is a powerful predictor of later academic success. Sadly, too many children in Minnesota fail to meet this critical milestone. To support our children in meeting their full potential, we must sustain and strengthen early learning gains throughout kindergarten, first, second and third grades.

Kate Wolford
President, The McKnight Foundation

Five years ago, McKnight and several partners undertook an ambitious effort that aims to do just that—align and improve the quality of school leadership and literacy instruction from PreK through third grade, especially in schools serving students most impacted by educational disparities across our community. The reasons for doing so were compelling:

- **Our community is becoming increasingly diverse, but educational outcomes are not more equitable.** Young children represent the most culturally, linguistically, and racially diverse segment of Minnesota's population. These children, however, are also most likely to live in poverty and to experience opportunity and achievement gaps—among children living in low-income households and children of color, roughly half do not meet kindergarten readiness standards and approximately two-thirds fail to read successfully at third grade. Yet, we increasingly recognize the significant cognitive benefits that come from speaking multiple languages, and that increased diversity supports children's learning. Imagine, then, how vibrant our social and economic future could be if these young children experience high educational achievement.

- **Evidence shows that seamless, coordinated learning experiences from PreK–3rd grade make a difference.** Researchers from the University of Minnesota and elsewhere have demonstrated the long-term academic and social impact of early childhood experiences characterized by aligned standards, curriculum, and professional development from PreK–3rd grade; high-quality, developmentally appropriate learning environments; effective teachers and leaders; and engaged families.

Since the inception of the Pathway Schools Initiative, the participating schools and districts and our intermediary, the Urban Education Institute at the University of Chicago, have worked aggressively to implement it. As a result of their efforts, children in Pathway schools participate in full-day PreK, teachers have developed a shared understanding of literacy development, and robust formative assessment data provides rapid feedback loops for planning and refining instruction.

At the same time, the last several years have also taught us much about what it takes to create and sustain change in complex, and often challenging, contexts. The lessons articulated in this case study reinforce that complexity, and provide insights into the roles that funders, external partners, and system-leaders play in supporting success.

Over the course of the initiative, McKnight has confronted hard truths about the limits of our influence over the day-to-day realities in schools across our community. We knew from the beginning that meeting such challenges would be a tremendous undertaking. But, McKnight fundamentally believes that every child in our community—no matter her language, culture, race, or economic condition—has the capacity to thrive. And we do see bright spots in the case study that follows. Preschoolers in the Pathway schools are entering kindergarten with increased literacy skills. Teachers are using data in new and sophisticated ways—and are working to adapt their instruction. Leaders are paying attention to the role of early learning across their systems. Admittedly, challenges remain. As we move forward, we'll take the lessons gleaned from the initiative's first five years to inform our future work. We hope our colleagues at peer foundations, in nonprofit organizations, and schools and districts will find useful information and insights in this report. By being transparent with our own experiences we can spark much-needed conversation about what successful investments in school improvement entail.

Contents

Acknowledgements v
Executive Summary vii
Key Findings: Progress and Challenges viii
Lessons Learned x
Introduction 1
Key Findings: Progress and Challenges 8
Coherent PreK–3 Pathways 8
Effective Leadership 10
Shared Professional Development/Strong Professional Community 13
Effective Use of Data to Support Student Learning 17
High-Quality Instruction 20
Student Progress 23
Lessons Learned 28
Lessons for Funders and Other Initiative Leaders 28
Lessons for District and School Leaders 33
References 37

Exhibits

Exhibit 1. PreK–3 Student Demographics in 2014–15, by Race/Ethnicity and Home Language 4
Exhibit 2. Initiative Timeline 6
Exhibit 3. Student Enrollment Pipeline: Sustained Enrollment of Kindergarten Cohorts 9
Exhibit 4. Teacher-Perceived Impact of UEI-Led Professional Development 13
Exhibit 5. CLASS Instructional Support Scores 22
Exhibit 6. Pathway and Matched Comparison Schools Mean Student Achievement on Third-Grade Reading Assessment, 2014–15 23
Exhibit 7. Students Meeting English STEP Grade-Level Year-End Proficiency Goals 24
Exhibit 8. Average Number of Steps Progressed on the English STEP for K–3 Students in 2014–15, by Years of Teacher Experience with STEP 25
Exhibit 9. Stable and Mobile Students (K–Grade 2) Meeting STEP Grade-Level Year-End Proficiency Goals 25
Exhibit 10. Expected and Average Actual End-of-Year STEP, by Grade 26

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We are grateful to leaders from the Urban Education Institute at the University of Chicago who worked closely with us as we developed our understanding of their work with the Pathway schools. And, we deeply appreciate The McKnight Foundation staff for supporting us to design and execute this independent evaluation and providing us with insights into the vision for the Pathway Schools Initiative.

Finally, many research colleagues contributed to this report. We are grateful to our colleagues Kyla Wahlstrom and Delia Kundin at the Center for Applied Research and Educational Improvement at the University of Minnesota, and to current and former members of the SRI Education team, including Marjorie Wechsler, Rebecca Schmidt, Cyndi Williamson, Wei-Bing Chen, Daniela Torre, Stephanie Nunn, Erin Harless, Janelle Sands, Nicole Arshan, Tejaswini Tiruke, Nicole Fabrikant, Jessica Gonzales, and Crystal Garcia.

Executive Summary

Executive Summary

In 2011, The McKnight Foundation partnered with a set of districts and schools in the Twin Cities area, all serving high-needs students, on a PreK–3 literacy initiative. The Pathway Schools Initiative aims to dramatically increase the number of students who reach the critical milestone of third-grade reading proficiency, an indicator predictive of later academic outcomes and high school graduation. This report focuses on findings from Phase I of the Pathway Schools Initiative (2011–2015).

The McKnight Foundation selected the Urban Education Institute (UEI) at the University of Chicago to serve as the initiative's intermediary. UEI was tasked with providing the intellectual, conceptual, and managerial leadership for the initiative as well as professional development and technical assistance focused on literacy and leadership to the Pathway districts and schools. UEI anchored this support on two, validated diagnostic tools developed at the University of Chicago: the Strategic Teaching and Evaluation of Progress (STEP) developmental literacy assessment and the 5Essentials Survey.

Participating Pathway schools and districts carried out the day-to-day work of the initiative. They used grant funds to expand or refine their PreK programs; hire additional staff such as program managers, literacy coaches, classroom aides, and family engagement liaisons; and purchase high-quality instructional materials, such as classroom libraries or tablets.

An advisory group, the Education and Learning National Advisory Committee (ELNAC), was established in 2010 to help inform decisions about the initiative. SRI International has served as the initiative's evaluator since 2010.

Schools with Pathway Schools Initiative implementation grants included in this evaluation are:

- **Brooklyn Center Community Schools (BCCS)**
  - Earle Brown Elementary School
- **Minneapolis Public Schools (MPS)**
  - Andersen United Community School
  - Jefferson Community School
- **Saint Paul Public Schools (SPPS)**
  - Saint Paul Music Academy
  - Paul & Sheila Wellstone Elementary
- **Community of Peace Academy, PreK–12 Charter School (CPA)**

Key Findings: Progress and Challenges

Coherent PreK–3 Pathways. A primary goal of the Pathway Schools Initiative was to create coherent pathways between PreK and third grade, with sustained enrollment and aligned literacy programs such that students enter each successive grade with the requisite foundation and skills.

- Pathway schools made progress in creating a PreK–3 pipeline by increasing PreK enrollment and matriculation to kindergarten, but they were not able to reduce student mobility after kindergarten.
- Participation in the initiative increased the connections between district-run PreK programs and K–3.
- Use of a common formative assessment, STEP, supported alignment across grades.

Effective Leadership. The Pathway Schools Initiative sought to create effective district and school leadership teams that could support improvements in literacy teaching and learning.

- UEI leadership coaching and collaboratives helped principals manage the multi-faceted PreK–3 literacy initiative.
- Leaders struggled to balance the demands of the initiative with other needs and priorities.
- District and school leadership turnover sometimes hindered progress.
- Despite positive changes in principals' practice, principal leadership ratings remained weak according to 5Essentials survey data.

Shared Professional Development/Strong Professional Community. To facilitate alignment of expectations and practices from PreK to third grade, UEI provided teachers with professional development and support to use student data to inform their literacy instruction. School literacy coaches helped teachers implement the tools and practices they learned from UEI.

- Teachers reported that UEI-led professional development improved their ability to analyze and use student data to inform their literacy instruction.
- School-based literacy coaches reinforced alignment and consistency of literacy practices across teachers, but their influence was limited by access to teachers and time constraints.
- Dedicated common planning and collaboration time facilitated alignment, but the amount of time available was not sufficient in many of the Pathway schools.
- Teachers reported needing more support with developing data-informed lessons for students overall and for dual language learner (DLL) students specifically.
- Turnover among school literacy coaches and teachers made building capacity difficult.

Effective Use of Data to Support Student Learning. The initiative aimed to help teachers more effectively use STEP data to guide and differentiate their literacy instruction and improve student learning.

- STEP helped teachers determine students' needs, individualize instruction, and form small guided reading groups.
- STEP data helped teachers communicate with parents about student progress.
- Teachers often lacked sufficient time and instructional resources to maximize the value of STEP results.
- Teachers had difficulty integrating STEP data with data from other state and district assessments to make instructional decisions.
- Teachers encountered challenges with using STEP with DLL students.

High-Quality Instruction. The initiative was designed to align and improve literacy instruction in all PreK–3 classrooms.

- A substantial amount of class time was dedicated to literacy.
- Teachers learned and increased the use of some general literacy instructional strategies.
- Teachers in some districts lacked curricula, curriculum maps, materials, and other resources to support high-quality instruction.
- *Classroom Assessment Scoring System* (CLASS®) observations suggest that the quality of classroom instruction remained low, but was comparable to national averages.

Student Progress. The initiative's ultimate goal is to dramatically increase the number of students who become proficient readers by the end of third grade.

- Pathway schools did not outperform similar schools not participating in the initiative on the state assessment of third-grade literacy.
- The percentage of students reaching grade-level STEP goals did not improve over time for students overall, for DLL students, or for most students who took the Spanish STEP.
- Progress on STEP was better for stable teachers and students.
- Students not making the expected progress on STEP each year resulted in the average third grade student being more than 1.5 grade levels behind.

Lessons Learned

Lessons drawn from the Pathway Schools Initiative evaluation have implications for the Foundation and its partners and are informing current Phase II efforts. They also can inform the work of other actors in the field.

Lessons with implications for funders and other initiative leaders

- **Chart a clear course.** A more detailed theory of action that included specific inputs may have supported a more shared understanding of what stakeholders needed to do to produce the intended outcomes.
- **Clarify roles and decision-making processes.** Some confusion may have been avoided if there had been clearer guidance from the Foundation about what types of decisions should be made by districts and schools, the Foundation, the ELNAC, UEI, and SRI.
- **Know your students.** If Pathway leaders had recognized earlier in the planning process the high percentage of DLL students in the participating schools and the specific needs of PreK children, they may have funded a second intermediary or specific professional development aimed at supporting those populations in particular.
- **Take time to till the soil.** While many of the schools and districts had a planning year, they did not understand fully what the work would look like, anticipate what potential conflicts or challenges might exist, or consistently put in place the structures and supports they would need to accomplish initiative goals.
- **Pay attention to the school's eco-system.** Initiative leaders expected Pathway districts and schools would address conflicts that arose around policies (e.g., hiring of qualified teachers, funding and space for full-day PreK, the ability to abstain from certain district initiatives or assessments, and the use of professional development time), but found these issues might have benefitted from explicit discussions and agreements during the planning year.
- **Phase in changes and coordinate supports.** Given the numerous fronts on which teachers and principals were working, it may have been useful to develop a road map that laid out all of the pieces that would eventually be addressed in a manageable, sequential order.
- **Keep curriculum and instruction central.** To improve instructional quality, teachers may have benefitted from more explicit professional development on instructional strategies and teacher-child interaction, in addition to training on the implementation and use of formative assessments.

Lessons with implications for district and school leaders

- **Focus on priorities.** Districts may have missed an opportunity to more closely reflect on how the initiative supports aligned with their strategic plans and fit into their existing literacy supports and areas of needs. Had this reflection occurred, conflicts and needed supports may have been identified and addressed earlier.
- **Prioritize collaborative planning time *and how it is used.*** Teachers did not have the time they needed to analyze data with their peers and use data to plan differentiated lessons for guided reading groups, students' independent work, and whole group instruction. Even when they had the time, teachers may not have had the facilitation skills and protocols needed to effectively review data, develop lessons, and monitor progress.
- **Minimize teacher turnover.** It is important for districts or schools to develop long-term hiring and retention strategies to reduce staff turnover to enable schools to build professional capacity.
- **Ensure coaching happens.** District and school leaders must ensure that school literacy coaches have the capacity, dedicated time, and a non-evaluative role to consistently support teachers and differentiate according to individual teacher needs.
- **Plan for sustainability.** From the beginning of any grant-funded work, district and school leaders should make plans for how they will sustain staff and activities beyond grant funding if the program is effective.

Introduction

Introduction

In 2009, The McKnight Foundation adopted a goal to dramatically increase the number of students who reach the critical milestone of third-grade reading proficiency, an indicator predictive of later academic outcomes and high school graduation (Snow, Burns, & Griffin, 1998). Research suggests that ensuring third-grade reading proficiency requires starting early—before children even get to kindergarten—and then providing high-quality early elementary instruction to sustain and strengthen those gains (The Annie E. Casey Foundation, 2010; Camilli, Ryan, Vargas, & Barnett, 2010).

The McKnight Foundation understood that improving outcomes for high-needs students[1] is complex and multi-faceted work, and would take significant time. The Foundation sought a long-term partnership (up to 10 years) with a set of local schools and districts, all serving high-needs students, to put research into practice by providing high-quality, aligned, and coherent literacy experiences from PreK–3. The Pathway Schools Initiative emerged from this vision. This report focuses on findings from Phase I (2011–2015) of this endeavor.[2]

In 2010, the Foundation established an advisory panel, the Education & Learning National Advisory Committee (ELNAC) to help inform decisions about the initiative. The ELNAC conceptualized how to operationalize the Pathway Schools Initiative and set the initiative's goals. In 2011, the Foundation

asked the Urban Education Institute (UEI) at the University of Chicago to serve as its intermediary because of its similar work with high-needs schools in Chicago. UEI was tasked with providing the intellectual, conceptual, and managerial leadership for the initiative. However, the primary focus of UEI's responsibilities was providing ongoing professional development and technical assistance in literacy and leadership to participating Pathway schools. In 2011, the Foundation also hired SRI International (SRI), and its subcontractor, the Center for Applied Research and Educational Improvement (CAREI) at the University of Minnesota, to conduct an external evaluation of the initiative. In 2013, the Foundation hired a program officer who began to play a key role in managing relationships between the Foundation, ELNAC, intermediary, and evaluator.

[1] The U.S. Department of Education (2012) defines high-needs students as "students at risk of educational failure or otherwise in need of special assistance and support, such as students who are living in poverty, who attend high-minority schools..., who are far below grade level, who have left school before receiving a regular high school diploma, who are at risk of not graduating with a diploma on time, who are homeless, who are in foster care, who have been incarcerated, who have disabilities, or who are English learners."

[2] Phase II of the initiative began in fall 2015 and goes through 2018. The Foundation will decide whether to fund Phase III closer to the end of Phase II.

The Foundation, UEI, and SRI staff developed a theory of action in 2011 that articulated a comprehensive set of actions that Pathway districts and schools were expected to take to produce an effective PreK–3 literacy model and improve outcomes for students. The theory of action envisioned successful implementation of district and school plans in several areas:

- **Coherent PreK–3 pathways** with aligned learning standards, curriculum and instruction, assessments and data systems, professional development, and targeted interventions; and continuity of PreK–3 student enrollment.
- **Effective leadership** teams comprised of both PreK and K–3 leaders at the school and district levels who are committed to the initiative's goals and strategies.
- **Shared professional development** of early childhood education and elementary school teachers and dedicated time for teachers to collaborate and receive coaching on the use of formative assessments, curriculum, instruction, and intervention strategies.
- **Effective use of student formative assessment data** by giving teachers access to formative assessment tools and building their capacity to accurately collect and use progress monitoring data to diagnose students' strengths and needs, plan and differentiate literacy instruction, and determine when students need higher levels of intervention.
- **High-quality literacy instruction** characterized by use of research-based instructional strategies; student-centered and culturally-responsive learning climates; ambitious instruction for all students; and effective approaches for dual language learner (DLL) students.
- **Extended and improved use of instructional time** by offering full-day PreK, extending and reorganizing literacy instructional time, and extending aligned literacy support to after-school and summer programs.
- **Access to tiered interventions** for struggling readers and research-based literacy programs for DLL students and children with special needs.
- **Family-school partnerships** around supporting children's development of literacy skills at home.

Ultimately, the theory of action predicted that if successfully implemented, the initiative would result in an increase in the percentage of proficient third-grade readers and a narrowing of the achievement gap for historically underperforming groups of students.

Independent evaluation. The Foundation invested in an independent evaluation to show that the effective implementation of this comprehensive set of actions leads to improved literacy outcomes. As the independent evaluator, SRI, with support from CAREI, used the theory of action to guide its formative evaluation, which tracked progress on implementation, and its summative evaluation, which measured the initiative's impact on teacher and student outcomes. Over the course of the initiative, the evaluation team collected and analyzed qualitative and quantitative data from a range of sources: site visits and interviews with district and school staff; interviews with UEI and Foundation staff and ELNAC members; parent focus groups; observations of UEI professional development; student enrollment and demographic data; teacher turnover data; teacher logs and survey; classroom observations; STEP data; and student MCA-III achievement data (see the **extended version** of this report for more information on research methods).

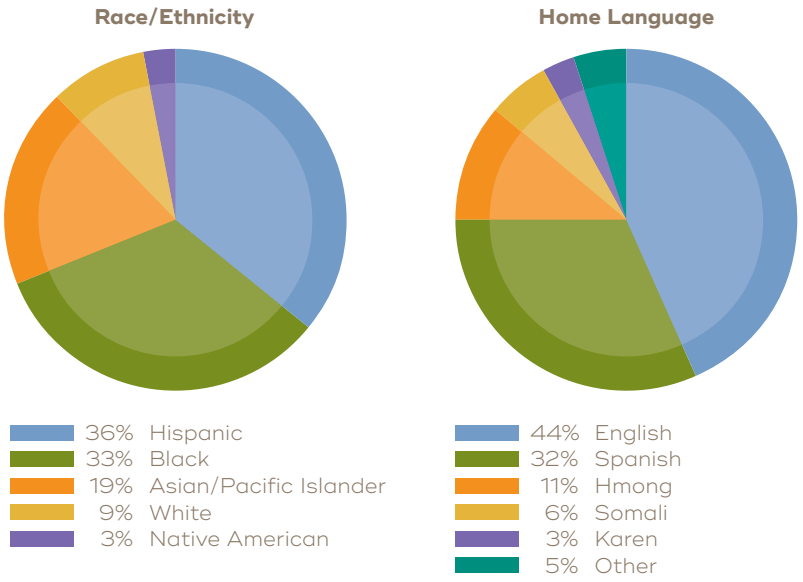
Partner districts and schools. The Foundation sought to identify districts and schools that could serve as potential long-term partners in developing exemplary, sustainable, and replicable models for PreK–3 literacy. In spring 2011, several traditional districts were invited to participate in a competitive process that required applicants to engage in a self-assessment and provide initial plans for strengthening areas of need. In 2012, several charter schools had an opportunity to apply. In particular, district and school applicants assessed their current capacity according to the implementation areas of the theory of action.

Applicants also provided initial plans for establishing a PreK–3 literacy model during Phase I that would increase students' reading skills. The Foundation awarded 12-month planning grants to support districts and schools in continuing to assess their strengths and weaknesses in PreK–3 literacy development and developing implementation plans aligned to the initiative's goals and theory of action. Ultimately, the Foundation awarded Phase I implementation grants to three traditional districts (which encompassed five participating schools) and two charter schools, one of which participated in the evaluation:

School	PreK–3 Students
Brooklyn Center Community Schools (BCCS)	
Earle Brown Elementary School	837
Minneapolis Public Schools (MPS)	
Andersen United Community School	558
Jefferson Community School	371
Saint Paul Public Schools (SPPS)	
Saint Paul Music Academy	382
Paul & Sheila Wellstone Elementary	404
Community of Peace Academy, PreK-12 Charter School (CPA)	
Community of Peace Academy, PreK-12 Charter School (CPA)	243

The Foundation sought to support schools that serve a high percentage of children who are at risk for poor literacy outcomes. Across the initiative, in 2014–15, participating schools served approximately 91 percent students of color (Exhibit 1) and 89 percent low-income students. Approximately 51 percent of students in the Pathway schools were 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. PreK–3 Student Demographics in 2014–15, by Race/Ethnicity and Home Language



n = 2,795

The Pathway districts and schools varied in their planning and implementation timelines and approaches. BCCS and MPS both had a planning year in 2011–12 and began implementation in 2012–13 with all of their PreK–3 teachers. SPPS joined the initiative during the first implementation year, without the benefit of a planning year, and used a phased-in approach to bring the Pathway Schools Initiative to their two school sites (i.e., PreK and kindergarten teachers participated in the first year, first grade teachers joined in the second year, and second and third grade teachers joined in the third year). In addition, SPPS used its district assessment, Mondo Bookshop Reading Program, rather than STEP for the first 2 years of implementation. Finally, CPA joined the initiative later than the other districts; it used the 2012–13 school year as a planning year and began full implementation in fall 2013. Exhibit 2 presents more detail on the initiative timeline.

Participating Pathway schools and districts carried out the day-to-day work of the initiative. They used grant funds to expand or refine their PreK programs; hire additional staff such as program managers, literacy coaches, classroom aides, and family engagement coordinators; and purchase high-quality instructional materials, such as classroom libraries or tablets. Districts and schools were expected to address some components of the theory of action on their own, such as engaging families, supporting DLL students, extending instructional time and leveraging out of school time, and ensuring use of developmentally appropriate practices in the early grades. Districts and schools received little concrete support through the initiative for how to operationalize these components.

Initiative intermediary. The Foundation funded UEI to manage the initiative and to provide Pathway districts and schools with professional development and technical support focused on literacy and leadership. While the nature and focus of UEI supports evolved over the course of the initiative, the primary supports districts and schools received addressed the use of formative assessments to inform classroom literacy instruction and district and school leadership of PreK–3 literacy work. UEI anchored this professional development and technical assistance 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.

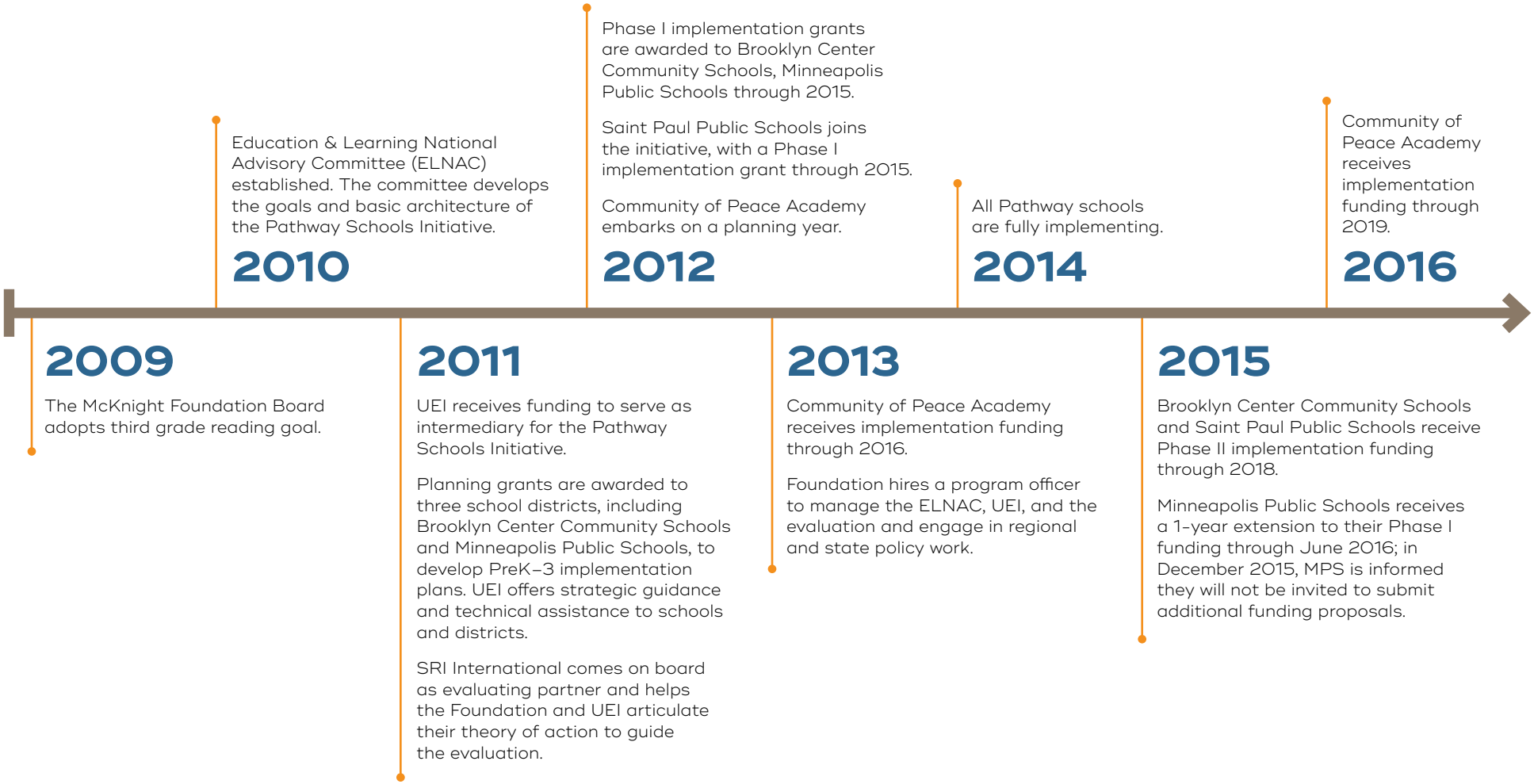
The STEP Assessment System

A major strategy of the Pathway Schools Initiative was to inform instruction through the collection of high-quality formative assessment data using the STEP (Strategic Teaching and Evaluation of Progress) assessment system developed by UEI. The STEP system includes tools to assess and track 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. UEI provides schools using the assessment with STEP trainers who offer ongoing support with the system and with data-driven literacy instruction. STEP is offered in both English and Spanish. For additional information on the STEP tool visit: https://uchicagoimpact.org/step

The 5Essentials Survey

5Essentials is a research-based system designed to drive improvement in schools. The 5Essentials survey was based on a 10-year study (Bryk et al., 2010) that used multiple years of survey data to show how a combination of essential supports were related to improvements in elementary schools in Chicago. The 5Essentials system measures strengths, weaknesses, and changes in a school's organization on five essential components: effective leaders, collaborative teachers, involved families, supportive environment, and ambitious instruction. Districts and schools receive 5Essentials reports that indicate levels of strength from very weak to very strong for each essential component and subscale and training on the use of those reports to inform school planning. For additional information on the 5Essentials survey visit: https://uchicagoimpact.org/5essentials

Exhibit 2. Initiative Timeline



Key Findings: Progress and Challenges

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Given the scope and breadth of the initiative, schools were only able to address deeply some components of the initiative's theory of action. Here, we present findings related to those components the Pathway districts and schools did address in their effort to improve literacy outcomes: coherent PreK–3 pathways, effective leadership, shared professional development, effective use of data, and high-quality instruction. We then describe Pathway students' progress in literacy achievement during Phase I.

Coherent PreK–3 Pathways

A primary goal of the Pathway Schools Initiative was to create coherent pathways between PreK and third grade, with sustained enrollment and aligned literacy programs such that students enter each successive grade with the requisite foundation and skills. For students to receive the cumulative benefits of aligned practices across years and successfully transition from one grade to the next, the Pathway districts and schools had to both substantially reduce student mobility and create programmatic coherence from PreK to third grade.

The Pathway schools made progress in creating a PreK–3 pipeline by increasing PreK enrollment and matriculation to kindergarten, but they were not able to reduce student mobility after kindergarten.

To create a strong PreK–3 enrollment pipeline, Pathway districts and schools focused on PreK, the beginning of the pipeline. Pathway schools tried to increase their enrollment in PreK programs located within each Pathway school and the percentage of PreK children who stayed for kindergarten. BCCS and SPPS transitioned to a full-day PreK model during the first year of their implementation grants and expanded their PreK programs substantially. CPA changed its PreK offerings to include two 5-day full-day classrooms. However, MPS continued to offer half-day PreK, expressing concerns about space and ensuring consistent program offerings across the district.

To increase the proportion of PreK students at the Pathway schools who stay for kindergarten, districts and schools changed enrollment policies and practices. Prior to the Initiative, a large percentage of the PreK students in BCCS, MPS, and SPPS came from outside the schools' local attendance area and did not continue on for kindergarten. These districts began prioritizing enrolling students into PreK from the local catchment area and making enrollment processes from PreK to kindergarten easier and in some cases automatic. As a result of these efforts, in three districts (CPA, BCCS, and SPPS), the size of the PreK cohorts that continued on to kindergarten in the same Pathway schools increased from 65 percent before initiative implementation to 82 percent after initiative implementation.

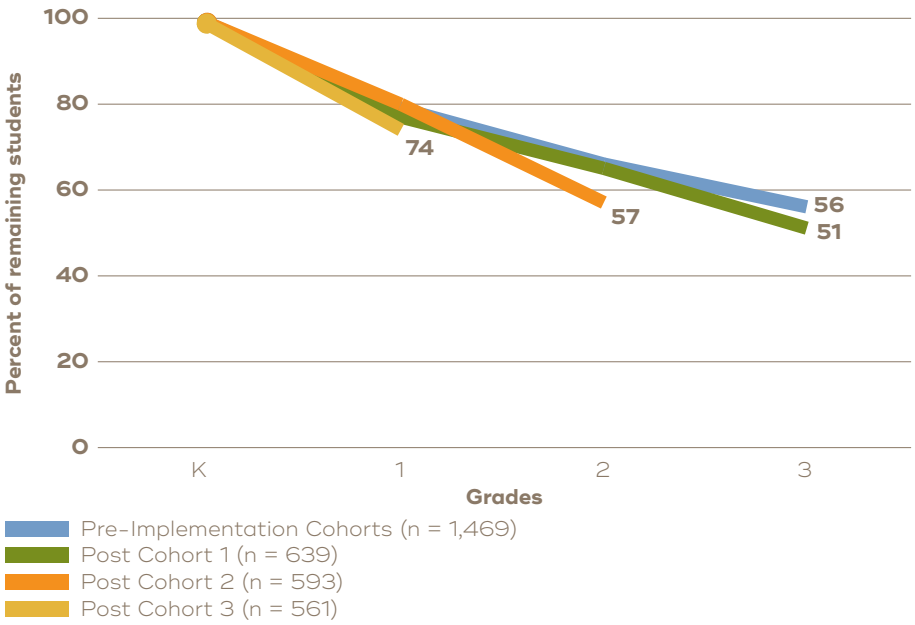
Despite improvements in the PreK to kindergarten pipeline, however, Pathway schools still saw 49 percent of students exiting between kindergarten and third grade (Exhibit 3).[3] The Pathway schools served highly-mobile populations, and the many factors contributing to mobility could not be overcome by school or

[3] SRI analyzed sustained enrollment for the kindergarten cohorts starting in 2012, 2013, and 2014, with pre-implementation kindergarten cohorts that started in 2009, 2010, and 2011.

district policies alone. An initiative leader noted the challenges of creating a pipeline with mobile populations:

> **"Looking back, I think [student mobility] was under-estimated in relation to what it is that we're doing in the schools in which we're working."**

Exhibit 3. Student Enrollment Pipeline: Sustained Enrollment of Kindergarten Cohorts



Note: CPA Cohort 1 and 2 were measured differently and CPA is not included in Cohort 3; SPPS is not included in the pre-implementation total; n for pre-implementation is the total cohort size across 3 years, and n for cohort 1 and cohort 2 is the sum of kindergarten cohorts in each district.

Exhibit reads: Of the 1,469 students who started kindergarten in the 3 years preceding initiative implementation, 56 percent remained enrolled at the Pathway schools in third grade.

Participation in the Pathway Schools Initiative increased the connections between district-run PreK programs and K–3 in the Pathway districts and schools.

The Pathway Schools Initiative placed more focus on the integration of PreK with K–3. PreK historically operated in a separate sphere from K–3, with its own leadership, professional development, schedule, budget, and instructional programming. The inclusion of early childhood education in this initiative strengthened the voice of PreK leaders and helped align PreK human capital policies with K–3 to facilitate the inclusion of PreK teachers in the professional community. One leader described the effect of including early childhood education leadership in the governance of the literacy work. Referring to PreK, she said, "What has traditionally been an afterthought is [at the] forefront… Now I feel like [the PreK] input is valuable and needed." To make it possible for PreK teachers to participate in initiative and alignment activities, the Pathway districts and schools had to address PreK teachers' schedules, calendars, and salaries. Once PreK and K–3 began collaborating, some Pathway districts and schools realized that some PreK practices such as social and behavioral curricula and early literacy environmental rating systems could be beneficial for kindergarten students.

The use of a common formative assessment supported alignment across grades by facilitating shared language, expectations, and understanding of the progression of literacy skills.

With the adoption of STEP in each Pathway school, all grades PreK–3 came to use the same literacy assessment. STEP replaced or augmented the various assessments that schools had been using and, for several of the schools, it was the first time the schools had a common assessment across all grade levels and programs.[4,5] Staff at all Pathway schools noted that the use of STEP and the accompanying training by UEI provided teachers with a common language, expectations for students, and understanding of literacy skills development and progression. For example, a BCCS teacher described how STEP promoted cross-teacher discussions of students' literacy development:

> **"The best lever for our school has been the implementation of the STEP assessment. We truly had as a building no understanding of how readers develop on a continuum. The STEP assessment has created a common language around milestones for readers."**

Effective Leadership

The Pathway Schools Initiative sought to create effective district and school leadership teams led by school principals who could support improvements in literacy teaching and learning. To support Pathway district and school leaders, UEI provided them with coaching support, delivered targeted professional development, kept them informed about initiative activities, and increased their access to data.

UEI leadership coaching and collaboratives helped principals manage the multi-faceted PreK–3 literacy initiative.

Building the capacity of principals to support the literacy work was a major focus of UEI's support. In interviews, principals reported that UEI support helped them manage the change effort, prioritize and coordinate school and district initiatives, develop as instructional leaders, provide difficult feedback to teachers, and more clearly communicate a coherent vision about literacy efforts in the school.

Through the leadership collaborative, principals, together with other school leaders, visited districts with successful PreK–3 models and reviewed 5Essentials survey data to set school-level goals and plan targeted supports on areas deemed weaker by the survey data. One principal noted the value of "networking with people and collaborating with people outside of our building and seeing what works." The 5Essentials survey data provided further information on areas that needed to improve for successful alignment, such as leadership practices and structures. One principal's goal, for example, was to develop more shared leadership with teachers.

[4] The dual language programs in the MPS Pathway schools used the Spanish STEP in PreK–3 and English STEP in grades 2 and 3.

[5] SPPS chose not to adopt STEP in the first 2 years of implementation. The district eventually shifted to using STEP in its two Pathway schools in 2014–15. The dual language program in one of the SPPS Pathway schools used the Spanish STEP.

One-on-one principal coaching from UEI helped principals bolster their instructional leadership by using data to guide instructional goals and practices and hold teachers more accountable for their instructional practices. Some principals, with support from UEI principal coaches, used STEP data to set instructional priorities aligned with their school's goals. Principal coaching also helped principals to become more adept at encouraging teachers to accept coaching and holding teachers more accountable for their instructional practices and student growth. One principal said that through monthly phone conversations and visits, the UEI principal coach helped her hold teachers accountable for their performance:

"[My coach] has pushed me to look at the data and look at teacher performance and, for those who aren't performing, to push the envelope and have serious conversations with them. They have to do better."

Similarly, another Pathway school principal described a leadership strategy she learned from her UEI principal coach: "He's taught me a really good strategy: if the teacher is saying, 'Nope, I don't want coaching, I already know how to do all those strategies,' then as administrators, we say 'Yep, we're going to check to see how well you're doing.' Then I suggest, 'I'll follow up in another week [and in the meantime] I want you to observe a certain teacher or I want you to get coaching in this,' and I don't really give them an option [to decline]."

Leaders struggled to balance the demands of the initiative with other needs and priorities.

Both district and school leaders had to balance the demands of the initiative with other district and school needs and priorities. In MPS and SPPS, the Pathway schools were just 2 among approximately 40 elementary schools each district had to support. District leaders were challenged with how to support the Pathway schools in implementing the unique strategies supported by the initiative while still considering the implications those efforts would have for the other schools in the district and the district as a whole. For example, district leaders in MPS were reluctant to add full-day PreK programs at the two Pathway schools because it would create inconsistencies across PreK programs districtwide and because of space constraints.

At the school level, Pathway principals needed to address many different areas of the PreK–3 literacy system, in addition to meeting numerous other districtwide and curricular expectations. School leaders recognized that they did not have the bandwidth to do everything at the same time or to the same degree, as described by one principal:

"Because we're a needy school, the district gives us many opportunities for many new things, which is great, but how do we fit all of that in? ...Since we're doing the [Pathway Schools Initiative] and we have UEI here, can we put a hold on everything else? No, everything keeps moving, all of the moving parts go as fast as ever."

UEI staff and 5Essentials survey results helped district and school leaders see that incoherence was stemming from districts and schools having too many initiatives. UEI advised principals to inventory their programs and discontinue or minimize effort on those that did not align with their school's goals.

District and school leadership turnover sometimes hindered progress.

All of the Pathway districts and schools experienced turnover among key personnel (e.g., principals, Pathway program managers, school literacy coaches, and district leaders). In some cases, the turnover was unavoidable, part of the natural progression of careers, or part of larger district plans beyond the initiative. In others, staffing changes were intended to better support implementation of the initiative. However, when turnover happened frequently or when leaders were replaced by individuals who had not been part of the initiative previously, it had the unintended effect of diminishing trust and creating confusion about the roles of key personnel and the priorities and goals of their work.

During Phase I, BCCS experienced turnover of its leadership, including having three different principals, two superintendents, and three Pathway program managers, and the addition of a new Executive Director of Teaching and Learning. Even though changes in personnel allowed the district to build a leadership team with stronger backgrounds in literacy development, teachers expressed confusion about the roles of the various leaders and frustration at not receiving more communication about the changes. In MPS and SPPS, district reorganization sometimes unintentionally hampered the progress of the initiative. For example, in MPS and SPPS, the associate superintendents originally assigned to supervise the Pathway schools were reassigned in the second year of the initiative. The newly assigned associate superintendents for the Pathway schools had to learn the history, goals, and implementation of the initiative, form relationships with school leadership, and understand why the schools needed flexibility to meet initiative goals.

Despite positive changes in principals' practice, principal leadership ratings remained weak according to 5Essentials survey data.

Although UEI principal coaches and principals themselves reported that principals' leadership skills grew as a result of the initiative, most Pathway principals received low ratings on the effective leaders domain of the 5Essentials survey that was completed by all school staff. Despite principal progress on streamlining and focusing school efforts, in 2015–16 only one principal of the six Pathway schools received a rating higher than weak.

The weak leadership ratings may have stemmed from teachers continuing to feel overwhelmed by the many demands placed on them, increased accountability for student performance, and confusion and distrust amidst leadership turnover. For example, in one school, leaders reported that the initiative shifted the mindset and culture by holding teachers more accountable for their performance, which in turn affected teacher morale and trust. A leader described the evolution over the course of the initiative: "In Year 1, we weren't able to tease out where we had achievement problems, teasing out whether it was a systems issue or a teachers issue. By Year 2, we know where teachers are shining and where they are struggling… [The] McKnight [grant] has started to peel away the onion and allowed us to have honest conservations about, 'Well, this can't just be the kids.'"

Shared Professional Development/ Strong Professional Community

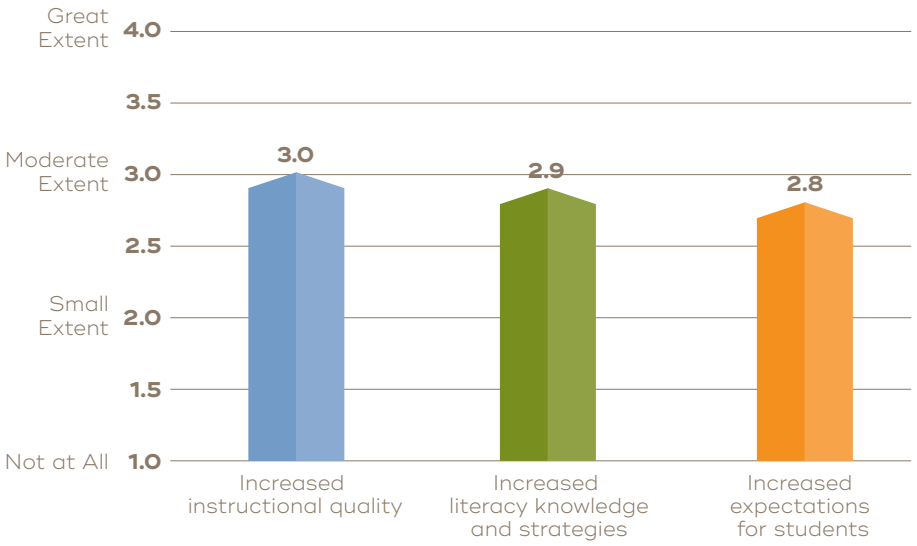
To facilitate alignment of expectations and practices from PreK to third grade, UEI provided teachers with professional development and support in reviewing and using student data to inform their literacy instruction, as well as content trainings related to a range of instructional practices. School literacy coaches were intended to help teachers use the tools and practices they learned from UEI. To assimilate new information and plan aligned lessons, the Pathway teachers also needed time dedicated to collaboration and shared learning.

Teachers reported that UEI-led professional development improved their ability to analyze and use student data to inform their literacy instruction.

UEI provided support to teachers through school-based workshops, lesson modeling, data review days following each STEP administration, individual classroom observations and coaching, and cross-district professional development. UEI trainers helped teachers learn to administer the STEP assessment and use its data and later to improve their reliability with STEP administration through data review meetings.[6] The UEI STEP trainers also helped teachers analyze data to create and inform guided reading groups and worked with teachers on using the data to inform other literacy activities, such as shared reading, literacy centers, and independent reading. Before SPPS adopted STEP, UEI provided SPPS teachers with professional development on how to break down Mondo oral language and Concepts About Print (CAP) assessment data in ways that helped teachers identify students' specific instructional needs.

The majority of interviewed teachers said that the greatest takeaway from the UEI professional development was gaining the ability to analyze data and tailor teaching based on those data. Teachers reported becoming more adept at using data to identify learning goals, narrow the focus of lessons, select texts and develop guiding questions about the texts, and use data to differentiate lessons for guided reading groups and small group instruction. On average, teachers surveyed in spring 2015 reported that UEI-led professional development in 2014–15 helped increase their literacy instructional quality, literacy knowledge, and expectations of students to a moderate extent (Exhibit 4).

Exhibit 4. Teacher-Perceived Impact of UEI-Led Professional Development



n=74

Source: 2015 Teacher Survey

[6] SPPS did not adopt STEP until 2014–15. In the first 2 years, UEI helped SPPS Pathway teachers analyze and interpret Mondo data.

School literacy coaches reinforced alignment and consistency of literacy practices across teachers, but their influence was limited by access to teachers and time constraints.

UEI trainers focused on developing the capacity of school literacy coaches with the expectation that the coaches would eventually take over most of the direct training of teachers as related to STEP assessment data analysis and instructional planning. The intent of this approach was for schools to be able to sustain the changes and learning that came from participating in the initiative after the grant ended and because some district and school leaders thought that some teachers would be more receptive to coaches who were more familiar with the school and classroom context. To build coach capacity, UEI STEP trainers provided support to school literacy coaches through professional development meetings, co-observing classrooms with coaches, debriefs with coaches after the observations, and literacy collaborative meetings. One school literacy coach said the UEI STEP trainers helped increase her capacity as a coach through modeling:

> **"I would say the support from the [UEI] coaches [was the most useful] because they were able to teach me how to observe classrooms and look-fors for improving reading instruction [and] how to look through the data. If we had to do that on our own I wouldn't be using the assessments as effectively as I do now."**

School literacy coaches then worked with teachers individually, during common planning time, and in professional learning community (PLC) meetings on strategies and skills introduced by UEI, which facilitated coherence. School literacy coaches conducted observations and debriefs to promote consistent strategies, such as habits of discussion, accountable talk, and word solving strategies, and provided feedback during teachers' PLC meetings. Teachers who received this coaching valued the support they received. One SPPS teacher said, "I go to [my literacy coach] all the time. She observes me teaching guided reading and then we have discussions about it. I feel like being able to use her as a resource has increased my knowledge as a literacy teacher."

Despite the reported benefits of coaching by those teachers who received it, Pathway schools experienced challenges in using coaching to its full potential. Spring 2015 teacher survey results showed that the average teacher met with their coach once or twice a month and that one-fifth of teachers did not meet with a coach at all. In interviews, some teachers reported that coaches were often too busy working with new teachers or handling other duties to meet with them. Several coaches reported not being able to achieve the breadth and volume of their responsibilities, which included training new teachers on the initiative, helping teachers administer STEP, analyzing data, facilitating meetings, and observing teachers. Moreover, some teachers were reluctant to work with coaches because the coaches were reporting directly to school administrators, and therefore, coaching felt "evaluative." Finally, coach turnover meant that coaches had to build new relationships and trust with teachers in order for teachers to be comfortable working with them.

Dedicated common planning and collaboration time facilitated alignment, but the amount of time available was not sufficient in many of the Pathway schools.

In districts with common planning time, respondents cited it as one of the primary facilitators of grade-level coherence. It enabled teachers to collaborate and calibrate their instruction, discuss assessment data, align expectations and understanding of literacy goals, and plan together. According to the spring 2015 teacher survey, 78 percent of teachers in Pathway schools participated in a PLC focused on literacy. They reported most frequently collaborating with other teachers to review student assessment data to make instructional decisions, create literacy lesson plans, and develop materials or activities for literacy instruction (all 1-2 times per month) as part of a PLC or grade-level team.

Conversely, teachers reported a lack of collaboration time as a key barrier to PreK–3 coherence. Unlike CPA, which adjusted its master schedule to provide teachers with 70 minutes of common planning time with their grade-level peers, other districts decreased the amount of collaboration time during the initiative because of changes in schedules, contracts, and professional development structures. Lack of shared collaboration time also impeded the ability of teachers who participated in the UEI Literacy Collaborative to share their new learning with other teachers.

Across districts, teachers also expressed a need for time to collaborate across grade levels, and with special education and English Language (EL) teachers, in order to ensure that instructional practices are similar and build on each other.

Teachers reported needing more support with developing data-informed lessons for students overall and for DLL students specifically.

By fall 2015, most interviewed teachers felt they had a good understanding of how to use STEP data and were interested in receiving help from UEI and school literacy coaches with instructional strategies and example lessons to better address the specific literacy skills students need to develop. For example, one teacher stated her readiness to move beyond data analysis:

> **"I feel like I'm pretty good at data analysis and knowing what my kids need, so I don't really enjoy when people come in and pick apart the data... A better way to go about it would be to say, 'We've looked through your data, too. We know you know what's important. Let's think about instructional strategies.'"**

Interviewed teachers mentioned desiring modeling of instructional strategies and model lessons. Teachers also noted that it would be helpful to have suggested texts for working on certain STEP Bottom Line skills and accompanying discussion questions or activities to promote those skills. In fall 2015, interviewed teachers reported wanting more support with developing independent work (55 percent were highly interested) and teaching comprehension strategies (53 percent).

Teachers also reported wanting more assistance with implementing effective instructional strategies for DLL students in particular. Thirty-seven percent of interviewed teachers in fall 2015 were highly interested in receiving more support for working with DLL students. Teachers received little guidance in how to support DLL students with their literacy development, even though accelerating English language acquisition for DLL students was a major goal and expressed need of most of the Pathway schools, as they all faced large achievement gaps for their DLL students. The need for professional development around supporting DLL students increased as the MPS Pathway schools saw a dramatic increase in the enrollment of Somali students. Three years into implementation, MPS teachers still felt like they did not have the right support for DLL students. One MPS teacher said:

> **"We don't understand, nor do we have the right supports financially or on the professional development side, for doing the best by dual language learners, especially those in early grades. It requires such a level of expertise in practitioner understanding."**

Trying to fill this gap, some districts used initiative funds to provide professional development opportunities for teachers.

Turnover among school literacy coaches and teachers made building capacity difficult.

The initiative invested considerable resources into building the capacity of coaches to support teachers in implementing new literacy practices and of teachers to learn and use assessment data to drive their literacy instruction. Although some turnover may have been intended to enhance coach or teacher capacity by replacing low-capacity staff, high coach and teacher turnover at some Pathway schools made it difficult for the schools to build on gains made in the previous years.

All Pathway schools experienced some turnover among their literacy coaches. In all, the six schools had nine coach positions funded by the McKnight Foundation and made 13 coach replacements between 2012–13 and 2014–15. New coaches had to learn the initiative's strategies and forge new relationships with teachers. In some cases, teachers did not want to work with school literacy coaches they did not know and trust.

The extent of teacher turnover varied considerably across the six Pathway schools from 2012–13 to 2014–15, ranging from only 26 percent of the PreK–3 faculty in 2012–13 remaining at one Pathway school in 2014–15 to 66% remaining at another Pathway school. With new teachers, coaches had to focus much of their time on bringing new staff up to speed on STEP administration, the use of STEP results, and certain literacy instructional practices. As one teacher explained:

> **"We've had so much turnover among the staff that we're reinventing the wheel every year. And that first year [implementing STEP] is rough, because it's unwieldy at first."**

Despite its profound effect on the initiative's progress, principals had limited control over staff turnover and replacements for outgoing teachers.

Effective Use of Data to Support Student Learning

The Pathway Schools Initiative aimed to help teachers more effectively use data to guide and differentiate their literacy instruction and improve student learning. Pathway districts and schools adopted the English STEP to monitor students' literacy progress and formatively assess student learning at regular intervals throughout the school year. The dual language programs in the MPS Pathway schools used the Spanish STEP in grades PreK–3, and the English STEP in grades 2 and 3. SPPS used Mondo's formative literacy assessment until it adopted the English STEP in 2014–15. In one of the SPPS Pathway schools, the dual language program used the Spanish STEP.

STEP helped teachers determine students' needs, individualize instruction, and form small guided reading groups.

Teachers reported that the STEP system improved their use of data to inform and individualize literacy instruction and form guided reading groups, their ability to diagnose gaps in literacy skills, and their knowledge of how to support students' literacy needs. On the spring 2015 teacher survey, on average teachers found STEP assessment results most useful for determining instructional groups (3.85), individualizing instruction for students (3.70), and informing literacy curricular and lesson planning (3.57).[7] In interviews, teachers also reported that the detailed assessment data, coupled with professional development on how to use those data to inform instruction, helped them develop learning goals for their lessons and narrow the focus of lessons to the skills they identified in the data as needing attention. Teachers also reported becoming more adept at using data to individualize lessons for guided reading groups and small group instruction. Teachers in all Pathway schools reported using STEP data to inform both text selection and the questions they asked students about the text. One teacher described how STEP influenced her instruction:

> **"I'm far more aware of the exact areas that I need to work on with the students rather than a generalized feeling of what they need to proceed... It has made me more concentrated in my effort and deliberate in my guided reading groups."**

[7] On a scale of 1 to 4, where 1 is "not at all," 2 is "to a small extent," 3 is "to a moderate extent," and 4 is "to a great extent."

STEP data helped teachers communicate with parents about student progress.

STEP gave teachers across grades a common language and a communication tool for working with parents and discussing their children's literacy achievement. Teachers reported that the clarity and specificity of the information STEP provides was useful for communicating with parents. A program manager said:

> **"Parents are aware of their child's STEP levels and they have never had these types of conversations before."**

Teachers were able to explain to parents where children were in their literacy development and how they were doing on specific skills. A year into using STEP, one teacher explained, "Parents enjoy knowing where their kids are for STEP… They know a six is this, a nine is that. And they're pushing them [children] along and seeing those markers go up."

Teachers primarily communicated STEP scores with parents during biannual parent-teacher conferences and a few Pathway schools also offered informational sessions on the assessment system. During conferences, teachers presented parents with children's literacy goals and communicated how parents could best support their children in achieving them. In BCCS and MPS, teachers provided parents with their children's STEP levels and gave them information about books and concrete activities to use at home based on those levels.

In focus groups, several parents reported appreciating receiving STEP results from teachers because it gave them concrete information about where their children are in the literacy progression and what areas they need to work on at home and in school. However, some parents remained confused by the STEP results. Some had limited knowledge of STEP in general, and others questioned why their children were not progressing on STEP, despite teachers' attempts to explain it to them at conferences and opportunities to learn about it at school events.

Teachers often lacked sufficient time and instructional resources to maximize the value of STEP results.

STEP provided a wealth of information, but teachers reported needing more time or tools to support the use of the formative assessment data. During fall 2015 interviews, teachers noted that they spent a considerable amount of time gathering STEP data and did not have enough time to make use of it. Overall, teachers were expected to administer the STEP four times a year, per UEI's guidelines, though some schools administered the STEP less often at different points in time. During each assessment window, teachers pulled students out individually to read through increasingly difficult texts to determine their STEP level. The majority of interviewed teachers reported that administration averaged approximately 15 hours total per assessment window, with more time needed in the first year, with older students, and larger class sizes. Some teachers felt that they were spending too much time away from instruction, while others felt the time spent was worth it for the information STEP provided. Pathway schools tried to support teachers by providing substitutes so teachers could administer STEP or having other school staff lead small group instruction while teachers assessed other students.

In addition to administration time, teachers reported that planning lessons based on the STEP data required a significant time investment. Teachers had to develop a plan for each guided reading group, and many classrooms could have as many as five or six different groups. To support their use of STEP results and help limit their planning time, teachers sought model lessons and exemplar texts tied to STEP skills to help them more efficiently develop multiple differentiated lessons. For example, one teacher described the challenge of planning for differentiated instruction:

> **"I am working with each group two to three times a week, the lower levels more often... To plan and implement things for every group based on STEP, which is the goal in our school, is very challenging. Just finding different activities when I don't have the time to plan is a challenge."**

Teachers had difficulty integrating STEP data with data from state and district assessments to make instructional decisions.

STEP was one assessment in addition to many others that schools administered, and teachers encountered challenges with integrating the data. In some cases, assessments were duplicative—assessing the same skills or serving similar purposes. In BCCS, CPA, and MPS, intervention teachers used different assessments than classroom teachers to identify students for support and monitor progress, and staff noted that this duplication of assessments was repetitive and reduced coherence.

In other cases, teachers were concerned about misalignment across assessments. For instance, teachers and school leaders questioned how well STEP could inform student preparation for the MCA-III achievement test, and the districts came up with conflicting results when they looked at the correlation between the two. Additionally, MPS teachers reported a lack of alignment between STEP and the district's Focused Instruction benchmark tests, with STEP focusing on literacy development and the benchmark assessments focusing on grade-level standards. School staff in several districts also reported the challenge of integrating English language proficiency assessments (WIDA/Access) with STEP because they measure different skills. Finally, in BCCS and SPPS, STEP was not in the districts' data systems, making it difficult for teachers to pull out data in order to compare and group students.

Teachers encountered challenges in using STEP with DLL students.

Teachers encountered difficulties in using English STEP with DLL students and questioned some of the strategies embedded in the Spanish STEP for teaching literacy to Spanish-speaking students. All Pathway schools used English STEP with their DLL students in their English-only programs, and the MPS and SPPS Pathway schools adopted the Spanish STEP for their dual language programs. Although STEP was intended to be a tool to support the literacy growth of all students, some teachers questioned the validity of the English STEP assessment for DLL students. Teachers were concerned that DLL students often stalled at particular STEP levels for reasons that teachers perceived to be related to language (e.g., rhyming) and not literacy. For example, one teacher described her experience using the English STEP with DLL students:

"I'd say a major stumbling block of the STEP testing is that it can hold a [DLL] student back. It doesn't take into account second language learners well ... things like rhyming or segmentation... I've had kids where they could read really well, but they kept staying in STEP 2 because they couldn't do the segmentation."

Also, SPPS teachers noted that STEP does not have an oral language component or focus on vocabulary development, which, given their high DLL populations, had been a particular focus at the SPPS Pathway schools. Therefore, they continued to use another assessment along with the STEP to capture this information.

The Spanish STEP was intended to broker alignment between the English-language and dual language programs in MPS and SPPS. However, dual language program teachers in MPS disagreed with some aspects of the strategies embedded in STEP for teaching literacy to Spanish-speaking students, such as focusing on phonemes rather than syllables. Finally, dual language program teachers in both MPS and SPPS voiced frustration with errors they found in the Spanish STEP materials. Taken together, these issues undermined some teachers' confidence in the STEP system.

High-Quality Instruction

The initiative was designed to align and improve literacy instruction in all PreK–3 classrooms. The evaluation team learned about the focus of teachers' instruction through an instructional log and a teacher survey,[8] and measured the quality of teachers' instruction through observations using the *Classroom Assessment Scoring System* (CLASS®).

A substantial amount of class time was dedicated to literacy.

Throughout the initiative, the amount of time teachers spent on literacy instruction remained high, and teachers shifted from engaging in whole group instruction to spending more time instructing small groups. Both instructional log data and survey data indicated that teachers spent a large amount of time instructing students in literacy. Instructional log data showed that teachers in BCCS, MPS, and SPPS[9] all spent more than 90 minutes on literacy instruction. On the teacher survey in spring 2015, on average teachers reported spending 115 minutes per day on literacy instruction. This amount of time could be interpreted as a significant and sufficient amount of time.[10]

Regarding the instructional formats in which they spent this time, from fall 2012 to spring 2015 teachers moved to spending more instructional time leading small reading groups (35 to 43 percent of literacy time), and less instructional time providing whole-class instruction (33 to 27 percent) and monitoring independent work (17 to 10 percent). On the survey, teachers reported that the most frequently occurring literacy instruction activities in their classrooms were independent reading, guided reading with leveled texts, and read-alouds; on average, they engaged in these

[8] In 2012–13 and 2013–14, the evaluation team gathered information about teachers' literacy instruction through an instructional log that teachers completed for one week each in the spring and fall. However, low participation rates hindered generalization across the teacher sample. In 2014–15, the evaluation team replaced the log with an annual teacher survey and was able to achieve greater teacher representation.

[9] Instructional log data from SPPS in 2012–13 included only PreK and kindergarten teachers. The evaluation team did not collect instructional log data from CPA teachers, as CPA did not join the evaluation until 2014–15. CPA teachers were included in the 2015 survey.

[10] For example, a study of first-grade literacy instruction found that the most effective classrooms dedicated 45 minutes or more to an English language arts block (Pressley, et al., 1998).

almost daily. Teacher-led writing (teacher controlling the pen writes and thinks aloud but may ask students for ideas) and guided writing (students create and write in small groups while the teacher guides the process) activities occurred, on average, once or twice a week.

Teachers learned and increased the use of some general literacy instructional strategies.

Teachers described learning some strategies through the professional development from UEI, including the use of turn and talk and sentence starters and sentence stems to foster oral language development; the use of inference and critical thinking questions and visualization tools (e.g., anchor charts) to promote comprehension; a focus on word solving skills to improve vocabulary; and the use of dots under words to support reading. On the spring 2015 survey, teachers reported using certain literacy strategies (e.g., turn and talk, sentence starters, visualization tools, think-pair-share) promoted by STEP trainers on average between 3–4 times a week and daily.

SPPS teachers more explicitly taught oral language skills; for example, the teachers reported talking less and encouraging students to talk more. A SPPS PreK teacher described strategies UEI coaches encouraged her to use with her DLL students:

> **"Instead of saying 'Flower' say, 'You are making a flower, can you say "I am making a flower?"' It has made such a difference on their language skills. … Taking the time to get them to recognize not only the vocabulary but also the structure of conversations."**

Teachers in some districts lacked curricula, curriculum maps, materials, and other resources to support high-quality instruction.

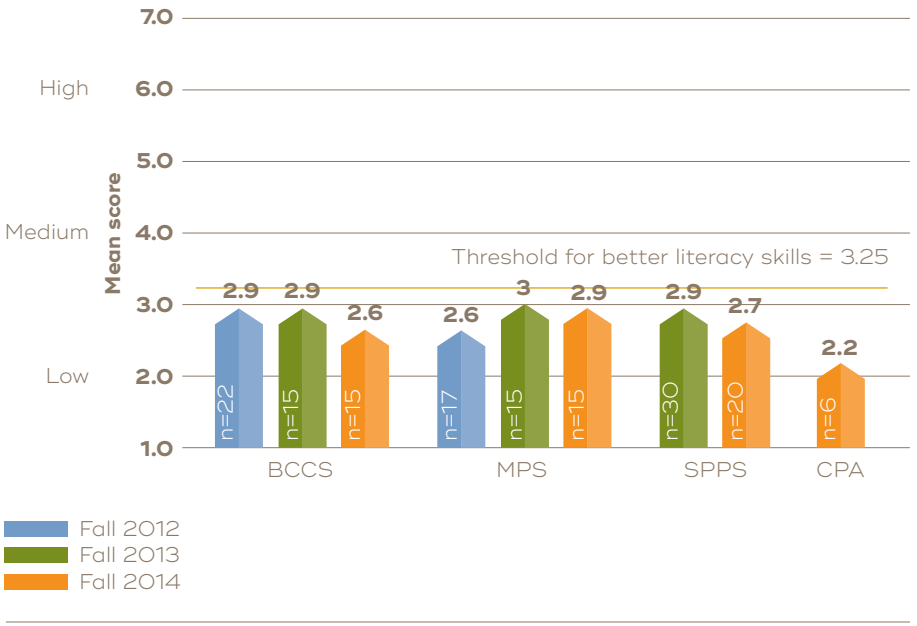
The initiative did not provide or recommend a curriculum for Pathway districts and schools to use in support of the literacy effort. Rather, the Foundation and UEI left the choice of literacy curriculum to the Pathway districts. In BCCS, teachers lacked curricular materials for early literacy for much (if not all) of Phase I of the initiative, and teachers struggled to implement the instructional strategies and assessment pieces without a curriculum. One teacher said, "Finding the time to plan and do it all, especially without a curriculum, and trying to fit it all into your day has been challenging." MPS discontinued their early literacy curriculum (a Reader's Workshop model) when the district adopted the Common Core standards but had not replaced it with another early literacy curriculum.

Compounding the curricular challenges was the lack of resources and strategies for DLL instruction. In particular, the dual language programs in MPS and SPPS lacked some of the common resources that existed in English-medium settings.[11] In SPPS, the dual language classrooms lacked Spanish instructional materials, and in MPS, Focused Instruction was not fully developed for Spanish classrooms. Some schools (BCCS and CPA) grappled with what instructional model would be most appropriate for their DLL students (e.g., push-in versus pull-out), and used several different approaches over the course of the initiative. BCCS switched between a pull-out and push-in approach over the years, and in fall 2015 CPA changed from having EL teachers pull out students for directed support to having a co-teaching model in which the EL teachers were in the regular classroom.

CLASS observation data suggest that the quality of classroom instruction remained low, but was comparable to national averages.

CLASS ratings of instructional support were low and remained low across the first 3 years of the initiative (Exhibit 5). None of the changes in scores was statistically significant. Instructional support scores reflect ratings of instructional practices focused on concept development, quality of feedback, and language modeling. Low scores for instructional support are common; in fact, Pathway schools were similar to or exceeded the average of 2.2 for the instructional support domain in K–3 classrooms found in a national study (Pianta, La Paro, & Hamre, 2008). Nevertheless, research studies have found that better reading skills in early childhood classrooms are associated with an instructional support score of 3.25 or higher (Burchinal, Vandergrift, Pianta, & Mashburn, 2010).

Exhibit 5. CLASS Instructional Support Scores



[11] SPPS offered two language instruction models in its Pathway schools. An English-only model was used in all classrooms in SPMA and some classrooms in Wellstone. EL teachers pushed-in during reading and writing lessons and pulled out the lowest-level DLLs for additional support. Wellstone also operated a dual immersion program that served both native English-speaking and native Spanish-speaking students.

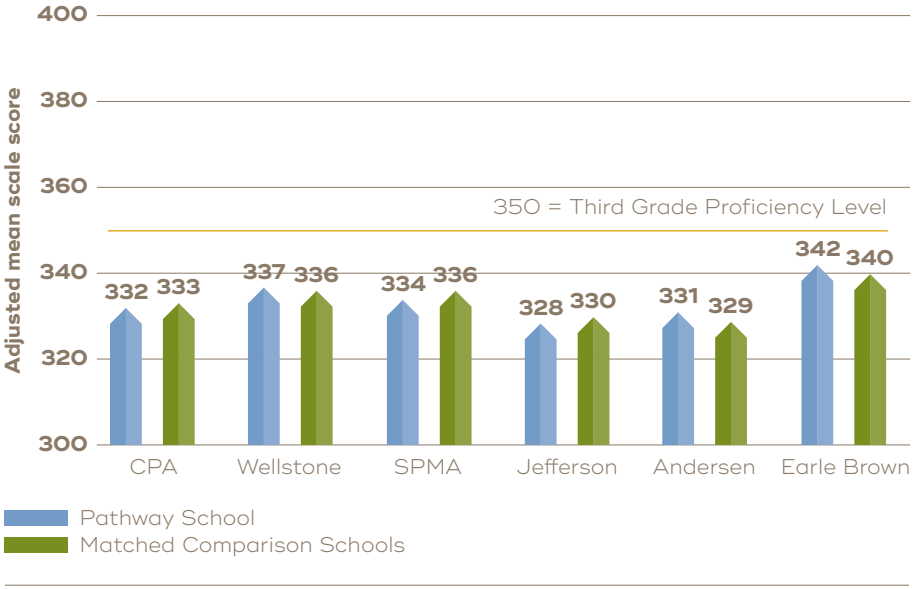
Student Progress

The initiative's ultimate goal is to dramatically increase the number of students who become proficient readers by the end of third grade. To gauge student progress, the evaluation compared students' performance in Pathway schools to similar students in matched schools on standardized third grade reading tests and analyzed the percentage of Pathway school students reaching year-end proficiency goals on the STEP.

Pathway schools did not outperform similar schools not participating in the initiative on the state assessment of third-grade literacy.

To better understand the difference the Pathway Schools Initiative may be having on students' literacy performance, the evaluation compared third-grade Minnesota Comprehensive Assessment (MCA-III) scores in Pathway schools to those in matched comparison schools in 2012–13, 2013–14, 2014–15, statistically adjusting for the individual students' race/ethnicity, English proficiency status, and free or reduced-price lunch eligibility. There was no significant difference between MCA-III reading scores at any of the Pathway schools and their matched comparison schools (Exhibit 6). This pattern held for DLL students, with no significant differences in scores between DLL students at Pathway schools and DLL students at non-Pathway schools. Across both Pathway schools and matched comparison schools, non-DLL students performed better than DLL students on the MCA-III. On average, none of the Pathway schools' students reached third-grade proficiency levels.

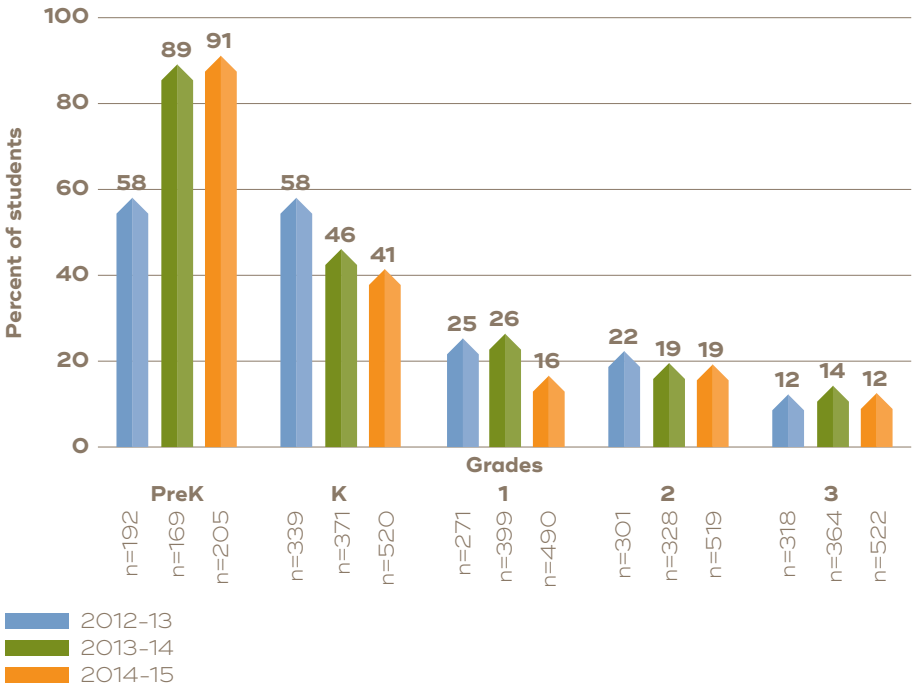
Exhibit 6. Pathway and Matched Comparison Schools Mean Student Achievement on Third-Grade Reading Assessment, 2014–15



The percentage of students reaching grade-level STEP goals did not improve over time for students overall, for DLL students, or for most students who took the Spanish STEP.

In each of the first 3 years of the Pathway Schools Initiative, the proportion of students that met their grade-level end-of-year goal on the English STEP decreased with each subsequent grade-level (Exhibit 7). In the third year of the initiative, only 13 percent of third-grade students met their grade-level goal of STEP 12. 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. Students in kindergarten, first, second, and third grade progressed an average of 2.1 to 2.8 steps, which was significantly lower than their expected progress of 3.0 steps in each grade. Further, with the exception of PreK, the number of steps progressed each year did not increase in later years of the initiative (i.e., in 2014–15 compared with 2012–13). This trend was also true for DLL students taking the English STEP. Additionally, three of the Pathway schools housed Spanish-English dual language programs that relied on the Spanish STEP to track progress on Spanish literacy skills. In general, the patterns of proficiency on the Spanish STEP were similar to the overall patterns on the English STEP: an improvement in PreK and no change in grades K–2. However, there was a larger improvement in grade 3 on the Spanish STEP than on the English STEP.

Exhibit 7. Students Meeting English STEP Grade-Level Year-End Proficiency Goals

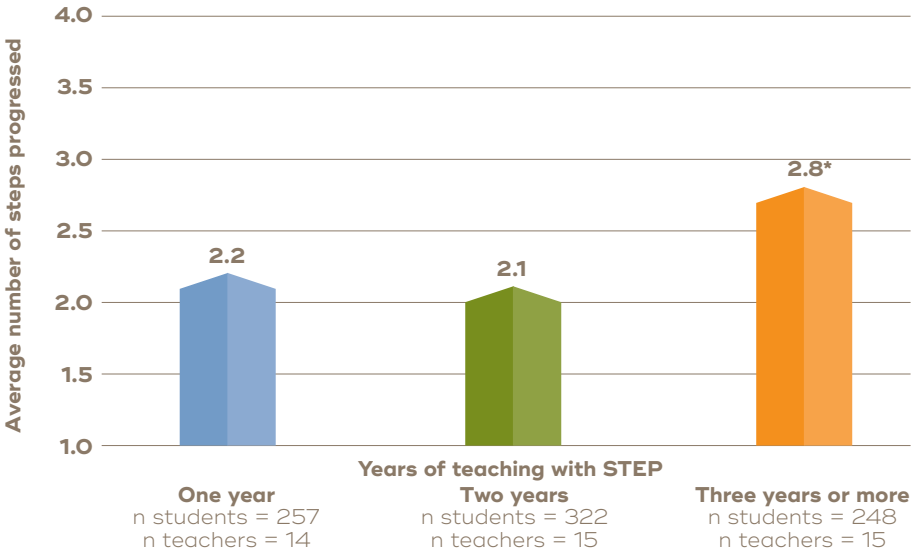


Notes: (1) 2012–13 data include BCCS and MPS, 2013–14 data include BCCS, MPS, and CPA, and 2014–15 data include BCCS, MPS, CPA, and SPPS. (2) Grade-level year-end proficiency goals: Pre-reading in PreK; STEP 3 in kindergarten; STEP 6 in first grade; STEP 9 in second grade; and STEP 12 in third grade.

Progress on STEP was better for stable teachers and students.

Students of teachers with 3 years of experience with the initiative made significantly more progress than students of teachers with 1 or 2 years of experience (Exhibit 8). Moreover, students who were in the Pathway schools for all 3 years were significantly more likely to meet their grade-level end-of-year proficiency goals than students who entered or left the schools during this time. For example, students who started at the school in kindergarten or first grade and stayed for 3 years outperformed their mobile peers by the third year of the initiative (Exhibit 9). "Stable" students may differ in other important ways from more mobile students, so one cannot conclude that consistent exposure to the Pathway Schools Initiative *caused* the group differences.

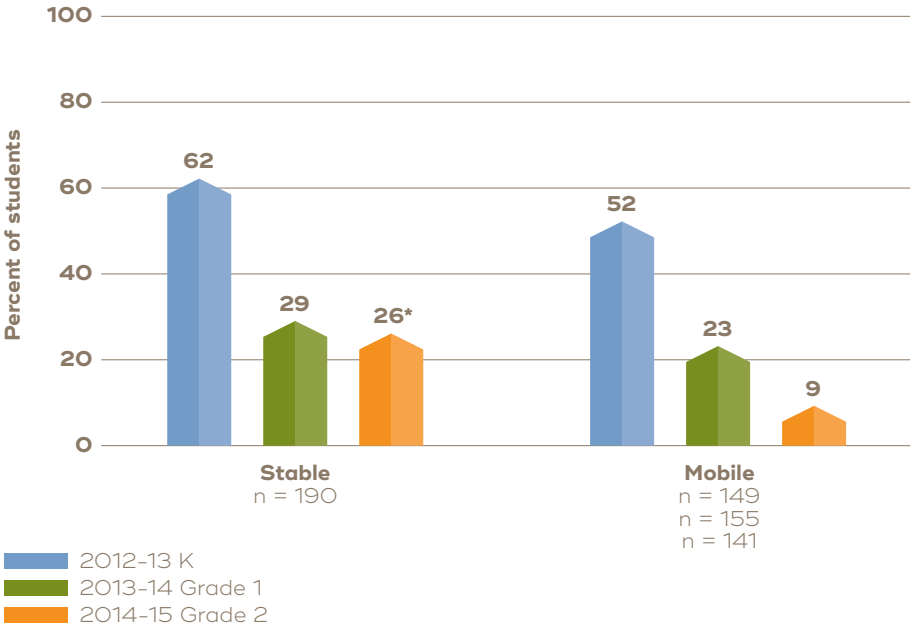
Exhibit 8. Average Number of Steps Progressed on the English STEP for K–3 Students in 2014–15, by Years of Teacher Experience with STEP



* p ≤ .05

Note: Includes only students from BCCS and MPS schools because only these schools used STEP for at least 3 years.

Exhibit 9. Stable and Mobile Students (K–Grade 2) Meeting STEP Grade-Level Year-End Proficiency Goals



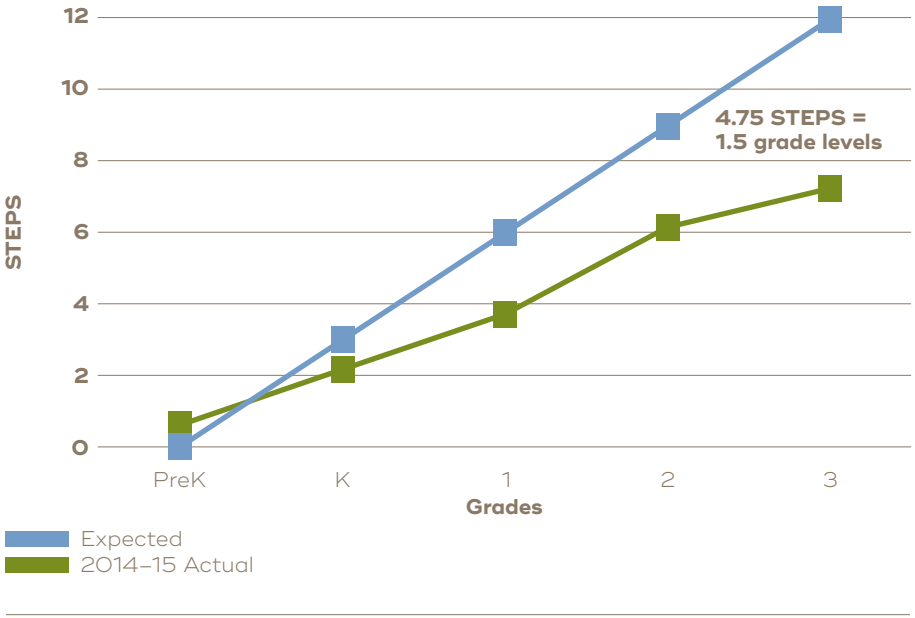
* p ≤ .05

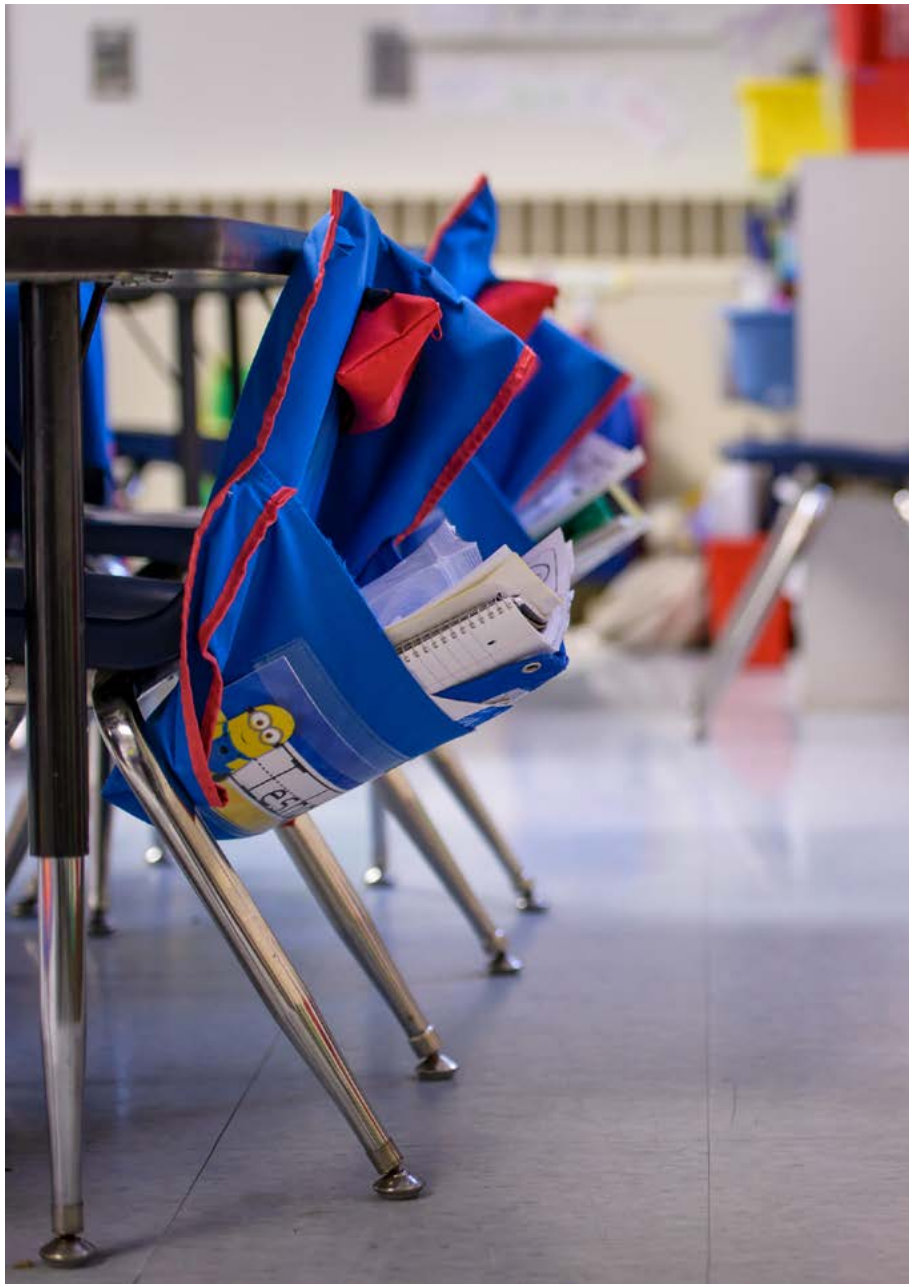
Note: Includes only students from BCCS and MPS schools because only these schools used STEP for at least 3 years.

Students not making the expected progress on STEP each year resulted in the average third-grade student being more than 1.5 grade levels behind.

Students' insufficient progress on STEP had a cumulative impact as students moved through the grades. While PreK students, on average, attained above the expected end-of-year STEP, by kindergarten students were behind expected attainment. (Exhibit 10) By third grade, students, on average, began the year a grade level behind (at STEP 6 instead of STEP 9), and they ended the year more than 1.5 grade levels behind (at STEP 7.25 rather than STEP 12). Moreover, students whose home language was Spanish ended third grade farther behind grade-level expectations on the English STEP than their peers whose home language was English (1.7 versus 1.3 grade levels behind).

Exhibit 10. Expected and Average Actual End-of-Year STEP, by Grade





Lessons Learned

Lessons Learned

This section presents lessons learned by the evaluation that can inform the Pathway Schools Initiative's Phase II work as well as others interested in building aligned PreK–3 literacy efforts to improve third grade reading in high-need communities. These lessons have implications for initiative leaders (i.e., Foundation staff, national advisers, and intermediaries) and district and school leaders.

Lessons for Funders and Other Initiative Leaders

Chart a clear course

Although the initial theory of action clearly articulated the desired outcomes, it did not specify in sufficient detail what inputs were needed to produce them. For example, the theory did not specify the mechanisms for strengthening student enrollment from PreK through grade 3, alignment across grades in instructional practices, family engagement, targeted supports for struggling readers, or increasing instructional time outside of school.

Rather, the supports offered reflected the tools and expertise of the intermediary (i.e., a strong formative literacy assessment system with training and a school leadership and organizational framework with data and coaching), and districts and schools were tasked with addressing the other components of the theory of action. A more detailed theory of action that included specific inputs and outlined which organization was responsible for which components may have supported a more shared understanding of what stakeholders (the funder, intermediary, and partner districts and schools) needed to do to produce the intended outcomes.

In addition, district leaders, Foundation staff, and national advisers noted that the initiative shifted from a primary focus on literacy to a greater focus on leadership development and school improvement over time. While this shift was made in response to initiative leaders' assessment that schools needed more support with alignment and leadership to be able to fully benefit from the formative literacy assessment, the focus may have shifted too far towards leadership at the expense of sufficient attention to literacy and instruction. One initiative leader shared:

> **"My impression of the initiative is that the organizational development work is paramount or has just taken on a larger part of the work than the focus on literacy."**

Other initiative leaders saw it as a systemic approach to supporting classroom and school improvement.

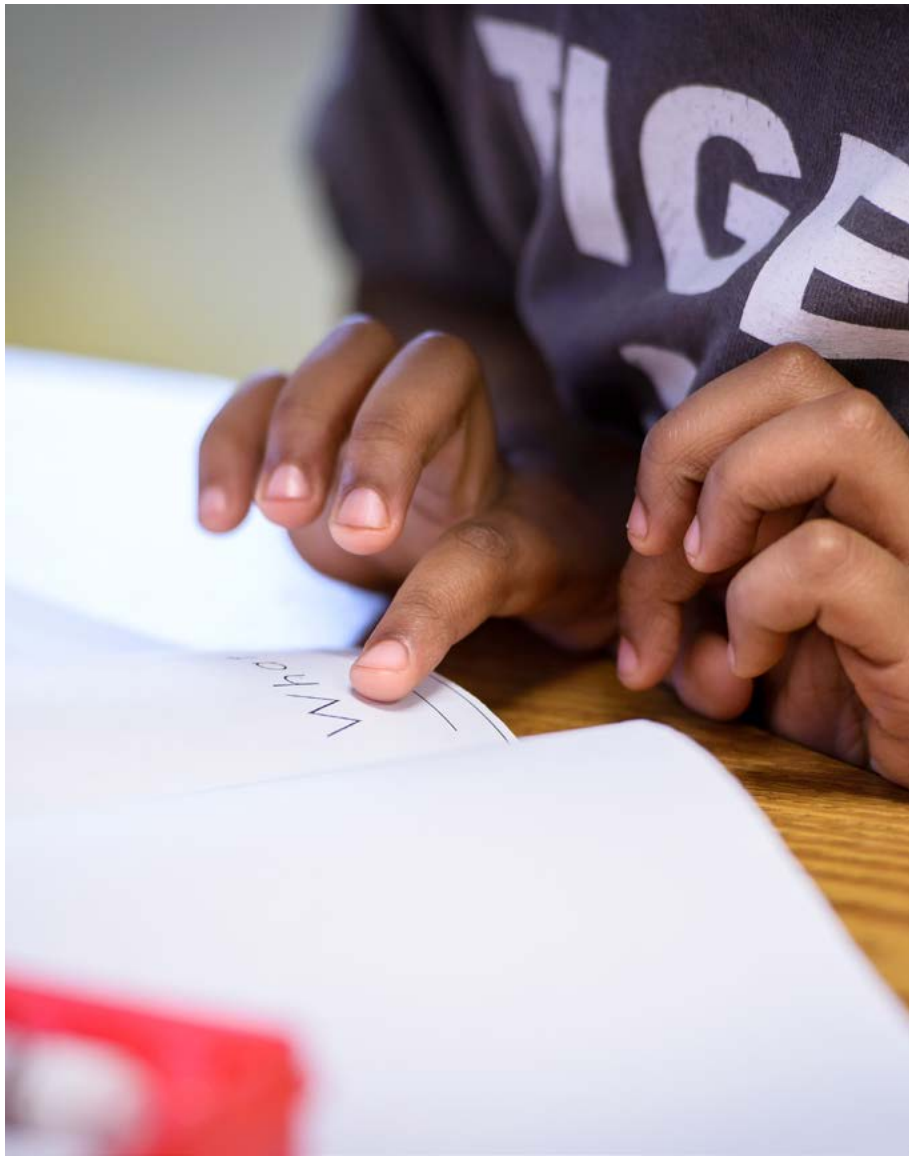
↘ Clarify roles and decision-making processes

As discrepancies were identified between the supports offered and the desired outcomes, there was not a clear process through which organizations could take corrective actions. To ensure the capacity to lead this complex initiative, the McKnight Foundation created a distributed leadership model, but the collaborative model led to stakeholder confusion in roles and responsibilities.

With multiple entities providing leadership, an adviser explained that it was unclear who was supposed to act or make decisions based on the ELNAC's advice:

> **"We were trying to be as strong advisers as possible but nobody was pulling the trigger to create change, and change was needed."**

Another adviser expressed how she thought McKnight could have more directly engaged with the district and school leadership teams to direct action based on ELNAC advice or evaluation findings: "There is a much stronger role that McKnight could play, although they do not see themselves in that way." Ultimately, some confusion may have been avoided if there had been clearer guidance from the Foundation about what types of decisions should have been made by districts and schools, by the Foundation and its Board, by the ELNAC, by UEI, and by SRI, and who was responsible for ensuring those decisions are carried out.



↘ Know your students

UEI helped the Foundation identify schools that met certain criteria (e.g., served a high-need population including DLLs and had or would adopt a PreK program). However, the initiative encountered challenges in serving DLL students, PreK students, and an overall highly-mobile student population. During the planning phase, the initiative leaders did not fully consider the implications of the large DLL student population for the amount and types of supports that would be needed to increase third-grade reading proficiency. As a result, there was a missed opportunity to assess the match between the supports available to the schools and their need for guidance, tools, and professional development to effectively support DLL students.

Although the initiative significantly improved the connections between PreK and K–3, it did not fully integrate PreK into the work or consider the implications of improved early childhood practices across PreK–3. A national adviser remarked that based on the small numbers of PreK students compared to kindergarten students in most of the Pathway schools and the minimal focus on the quality of the PreK programs, "[The initiative leaders are] just trying to change the relationship between K–3 teachers without deeply having them [the schools] embrace the value of that PreK education." The initiative supports reflected the lack of attention to PreK. The intermediary acknowledged that "early childhood isn't necessarily a primary expertise that UEI brings," and a national adviser speculated that the STEP tool is not as precise in PreK to help teachers monitor progress. If initiative leaders had recognized during the planning year the high percentage of DLL students in the participating schools and the specific needs of PreK children, they may have considered funding a second intermediary or specific professional development aimed at supporting those populations in particular.

Finally, the initiative did not take into account the high rates of student mobility experienced by the participating schools. Given the external factors that cause student mobility, initiative leaders may have needed to design or select an intervention model or approach that works even when there is high student mobility (e.g., a model that provides high dosage and focuses on a highly defined set of skills or use of a model across all district schools so mobility between schools is not as disruptive). Alternatively, initiative leaders could have considered partnering with schools with more stable student populations to test the theory of action.

↘ Take time to till the soil

Individuals at all levels of the initiative, from national advisers, to the intermediary, to staff at the districts and schools, felt that the planning process should have been longer and more rigorous. An adviser said, "It was clear the superintendents didn't know what they were getting into, didn't understand what they were trying to do, so there was a lot of ground work that needed to be laid. The implementation was premature."

The need for more effective planning was also felt by the intermediary, who reported that a better needs assessment and time with teachers to prepare them for STEP during the planning year might have helped them better anticipate the level of support needed during implementation. School leaders also wished they could have received a roadmap from UEI for what to expect with the launching of STEP.

Thus, while many of the schools and districts had a planning year and had discussions with the Foundation, ELNAC, and intermediary about strengths and needs, the schools and districts did not understand fully what the work would look like, what potential conflicts or challenges might exist, and what specific structures and supports they would need to accomplish initiative goals.

↘ Pay attention to the school's ecosystem

Initiative leaders knew they could not ignore that schools exist within a larger, complex system of state and district policies and priorities, but underestimated how challenging it was going to be to make headway with systemic issues. The intermediary was often in a position to see the tensions between schools' needs or desires and those of their districts. Reflecting on this tension, a UEI leader said:

> **"I think there is a takeaway here about operating an initiative that is school based without trying to account for the relationship of that school in the system in which it lives, the district. I think our principals live on the bleeding edge of that, because they are caught between both."**

The initiative leaders may have benefitted from agreements with districts about certain policies—for example, around hiring of qualified teachers, funding and space for full-day PreK, enrollment requirements and processes for kindergarten, the ability to abstain from certain district initiatives or assessments, and the use of professional development time—before the initiative work began. Alternatively, initiative leaders may have needed to think more about what the initiative could realistically accomplish in the face of systemic challenges.

Phase in changes and coordinate supports

School leaders and teachers found it highly difficult to attend to all of the components of the initiative at once, especially given the amount of time they were spending on the integration of STEP and on using their 5Essentials data to improve school organization. Given the numerous fronts on which teachers and principals were working, it may have been useful to develop a road map that laid out all of the pieces that would eventually be addressed in a manageable, sequential order.

Similarly, the schools and districts received supports from different entities at UEI. In the second year of the initiative, UEI began aligning its supports to streamline the various initiative activities for leaders and teachers and coordinated the numerous UEI staff working with the districts and schools to ensure consistent messaging. The coordination of the UEI supports helped the districts and schools to better manage the multiple demands the initiative placed on time and staff.

Keep curriculum and instruction central

To improve instructional quality, the initiative may have needed to focus more explicitly on instructional strategies and teacher–child interaction. While the initiative did provide some professional development on general instructional strategies and expand teachers' toolbox of instructional strategies in literacy, its primary focus was on collecting and using formative assessment data. Formative assessment had significant impacts on teachers' understanding of literacy development and awareness of gaps in student skills, but teachers who had participated in the initiative for multiple years were eager for a greater focus on improving literacy instruction and identifying curricular resources to help teachers develop appropriate lessons and materials.

An initiative leader recognized that an early hypothesis of the initiative may have been that improving the assessment piece first would drive change in other practices, like instruction. She said, "The assessment piece probably activated the Trojan Horse in terms of revealing glaring needs, but doesn't necessarily provide the guidance and the direction that I think our teachers and our coaches and even our principals need at this point." A national adviser echoed the importance of linking assessment to curriculum and instruction:

> **"What will teachers do once they have this assessment data? What are the instructional strategies that will improve student learning? I mean, that seems to be a missing link."**

Lessons for District and School Leaders

Focus on priorities

All of the Pathway districts and schools were asked by the Foundation to consider the fit of the initiative for their local priorities before signing on to the initiative. Although the goal of improving third-grade reading proficiency rates was shared deeply by all districts and schools, the strategies by which to improve student outcomes were not always aligned to districts' strategic plans. One district official said:

> **"We need to lead with students' purpose in mind. An investment has to align with what we think our students need, and not just the opportunity to receive resources."**

For example, the rollout of instructional frameworks (e.g., Focused Instruction in MPS and Mondo in SPPS) was not aligned with the strategy of using STEP. The lack of an early literacy curriculum in MPS and BCCS did not align with the notion that STEP would help teachers use curricula more effectively. Thus, districts may have missed an opportunity to more closely reflect on how the initiative supports would fit into their existing supports and areas of needs. Had increased reflection occurred in the beginning and at various checkpoints, conflicts and gaps may have been identified and addressed earlier.

In addition, a continuous improvement strategy like STEP required schoolwide buy-in to be successful. Reflecting back, Foundation staff, the intermediary, and even districts all had questions about how well they had assessed the readiness of districts and schools for change before implementation began, including the readiness of administrators, teachers, and unions.

Prioritize collaborative planning time *and how it is used*

Teachers noted they did not have the time they needed to analyze data with their peers and use data to plan differentiated lessons for guided reading groups, students' independent work, and whole group instruction.

Even when teachers had collaborative planning time, school administrators and coaches reported that teachers may not have had the facilitation skills and protocols needed to effectively review data, develop lessons, and monitor progress. Thus, when introducing a formative assessment, district and school leaders need to build in the time, structures, and supports teachers will need to use the data to inform instruction. Leaders also need to work with teacher unions to negotiate time for teachers to regularly collaborate on shared professional development and instructional planning.

Minimize teacher turnover

Although teacher turnover in a large, urban district is not uncommon, it can detract from reform efforts underway. Some of the Pathway schools experienced a high degree of staff turnover from year to year, which presented a number of challenges. New teachers required extensive professional development resources, as they had to be trained on school procedures, curriculum, and the STEP assessment tool. Principals experienced difficulty building a strong culture of data-driven instruction and collaboration when they lost staff each year. Schools will have trouble benefitting from any external professional development if they cannot improve the stability of teacher workforce.

Ensure coaching happens

Coaching can support teachers' implementation of new instructional practices when it is provided on a consistent basis, the coaches and teachers have a positive and trusting relationship, and expectations for teachers' work with coaches are clear. However, in the Pathway schools, coaches were not able to work with all of the teachers who needed or wanted their support. Yet, according to the intermediary and the coaches, for many teachers it was their first time engaging in data-informed and differentiated instruction, and helping them required much more support and time than was expected.

When coaching is a key strategy to help teachers adopt new instructional practices in their classrooms, district and school leaders must ensure that coaches have the capacity and dedicated time to consistently support teachers and to differentiate according to individual teacher needs. They also should clarify the parameters of the coaches' role to support them in building trust with teachers.

Plan for sustainability

Pathway district and school staff questioned the feasibility of sustaining staff and activities supported by the Pathway Schools Initiative once the grant funding ends. Administrators and teachers stressed the importance of the positions funded by the grant, such as literacy coaches and teaching assistants, who were integral to the success of program implementation. Relatedly, district staff wondered if they could sustain the current level of PreK programs, professional development, and frequency of staff meetings without Pathway Schools Initiative grant funding. Further, district administrators noted that districts should consider how to sustain investments from the beginning: "If there is going to be an investment on the part of the school, we need to recognize that we will still need that after the grant. We need to ask, 'Do you think that this training adds enough value that you are willing to set aside dollars for that? What will be the challenges and opportunities for sustainability?' We sometimes haven't prepared ourselves for independence and sustainability."

***

A final lesson that applies to all stakeholders—funders, other initiative leaders, and district and school leaders—is to **continue learning and improving.** Initiative stakeholders agreed that the Pathway Schools Initiative has moved their knowledge and thinking forward. Principals and teachers have expanded their understanding of data-informed instruction and the literacy development continuum. Schools leaders and teachers appreciated the learning they have gained from UEI and working together with other districts and schools in an intensive way on such an important and complex problem. The Foundation, ELNAC, intermediary, and school leaders have also embraced the evaluation and used the evaluation briefs and presentations to refine their work and try to better support the schools, teachers, and students.

The lessons learned from the first phase of the initiative have informed current efforts. For example, as a result of the lessons learned, the initiative has engaged in more professional development focused on supporting DLL students, districts have been filling curricular gaps, and schools are focusing on improving the quality of instruction. Further, the initiative has adopted a developmental evaluation in which the evaluation team is working collaboratively with district and school leaders, the intermediary, and Foundation staff to study high-priority questions of practical interest that support continuous improvement.

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