The McKnight Foundation Pathway Schools Initiative
Phase I Extended Report

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Executive Summary

In 2009, The McKnight Foundation launched the Pathway Schools Initiative to increase the number of students in the Twin Cities who reach the critical milestone of third-grade reading proficiency, an indicator predictive of later academic outcomes and high school graduation. The Foundation partnered with a set of local districts and schools, all serving high-needs students,[1] to provide high-quality, aligned, and coherent educational experiences from PreK–3 to improve early literacy skills. The McKnight Foundation understood that improving outcomes for high-needs students is complex and multi-faceted work and would take significant time, so conceived of the initiative as a 10-year endeavor. This report focuses on findings from Phase I (2011–2015).

Overview

Initiative leadership. In 2010, the McKnight Foundation established an advisory panel, the Education & Learning National Advisory Committee (ELNAC), with extensive expertise in early childhood and elementary education, dual language learners (DLLs), and policy advocacy, to help inform decisions about the initiative. In 2011, the Foundation asked the ELNAC chairperson's organization, 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 to participating Pathway schools. In 2011, SRI International (SRI), and its subcontractor, the Center for Applied Research and Educational Improvement (CAREI) at the University of Minnesota, were contracted to conduct an independent evaluation of the initiative's implementation and outcomes.

Theory of action. During the planning year for the initiative (2011–12), the Foundation, UEI, and SRI staff developed a theory of action 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 envisioned successful implementation of district and school plans in several areas, including: coherent PreK–3 pathways, effective leadership teams, shared professional development between early education and elementary school educators, effective use of student formative assessment data, high-quality literacy instruction, extended and improved use of instructional time, access to tiered interventions, and family-school partnerships. Ultimately, the theory of action predicted that if successfully implemented, the initiative would result in an increase in the percentage of proficient third-

[1] The U.S. Department of Education 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." http://www.ed.gov/race-top/district-competition/definitions

grade readers and a narrowing of the achievement gap for historically underperforming groups of students.

Partner districts and schools. The Foundation sought to partner with districts and schools that serve a high percentage of children who are at risk for poor literacy outcomes and could serve as potential long-term partners in developing exemplary, sustainable, and replicable models of PreK–3 literacy. The Foundation awarded Phase I implementation grants to three traditional districts (including five schools)—Brooklyn Center Community Schools (BCCS), Minneapolis Public Schools (MPS), and Saint Paul Public Schools (SPPS)—and one charter school, Community of Peace Academy (CPA).[2]

Initiative supports. 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.

UEI provided Pathway districts and schools with professional development and technical support focused on literacy and leadership, including training and coaching on the use of a formative assessment, a cross-site literacy collaborative, one-on-one leadership coaching, a cross-site leadership collaborative focused on data from a school organization survey, and Executive Briefings of district administrators. 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 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 and the 5Essentials Survey.

Individual 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.

[2] Schools with Pathway Schools Initiative implementation grants included in this evaluation are Earle Brown Elementary School, BCCS; Wellstone Elementary School and Saint Paul Music Academy (SPMA), SPPS; Jefferson Community School and Andersen United Community School, MPS; and 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.

- **The Pathway schools made progress in creating a PreK–3 pipeline by increasing PreK enrollment and matriculation to kindergarten.** Over the first 3 years of the Initiative, the percentage of PreK children who continued on to kindergarten in the same Pathway schools increased from 65 percent before initiative implementation to 82 percent after initiative implementation.
- **Pathway schools were not able to reduce student mobility after kindergarten.** Pathway schools saw 49 percent of students exiting between kindergarten and third grade.
- **Participation in the Pathway Schools Initiative increased the connections between district-run PreK programs and K–3.** The inclusion of early childhood education in the initiative strengthened the voice of PreK leaders, helped align PreK human capital policies (e.g., salary, schedules) with K–3 to facilitate the inclusion of PreK teachers in the professional learning community of schools, and highlighted PreK practices that could be useful to early elementary classes.
- **The use of a common formative assessment, STEP, supported alignment across grades.** The use of STEP facilitated shared language, expectations, and understanding of the progression of literacy skills among teachers.

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

- **UEI leadership coaching and collaboratives helped principals manage the multi-faceted PreK–3 literacy initiative.** Principals' growth in leadership skills enabled them to better communicate a coherent vision about literacy efforts in the school, align literacy practices within and across the grades, prioritize and coordinate school and district initiatives, and provide instructional leadership and accountability.
- **Leaders struggled to balance the demands of the initiative with other needs and priorities.** Administrators in large districts had to consider the implications of implementing initiative strategies for the other schools in the district and the district as a whole. In addition, principals at all Pathway schools had to address many different areas of the PreK–3 literacy system while still meeting numerous other curricular expectations of the district.
- **District and school leadership turnover sometimes hindered progress.** When turnover happened frequently or when district administrators or principals 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.

- **Despite positive changes in principals' practice, principal leadership ratings remained weak according to 5Essentials survey data.** The low ratings may have stemmed from teachers continuing to feel overwhelmed by the many demands placed on them, their increased accountability for student performance, and in some cases principal turnover.

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 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 literacy instruction.** Teachers reported becoming more planful about learning goals for their lessons, narrowing the focus of lessons to the skills identified in the data as needing attention, and becoming more adept at using data to differentiate lessons.
- **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.** School literacy coaches worked with teachers individually and in professional learning communities on strategies and skills introduced by UEI and communicated schoolwide literacy expectations and learning goals. However, school literacy coaches' work with teachers was inhibited by the competing responsibilities that took coaches' time, teachers' feeling like coaching was evaluative or top-down, and coach turnover.
- **Dedicated common planning and collaboration time facilitated alignment but the amount of time available was not sufficient in many of the Pathway schools.** Common planning time enabled teachers to collaborate and calibrate their instruction, discuss assessment data, align expectations and understanding of literacy goals, and plan together. However, some districts decreased collaboration time over the course of the initiative, reducing the ability of teachers to co-plan and review data and share initiative learnings with their peers.
- **Teachers reported needing more support with developing data-informed lessons for students overall and for DLL students specifically.** While STEP helped teachers understand that needs of individual and groups of students and UEI helped expand teachers' toolbox of instructional strategies in literacy, there was less attention on how to tie STEP results to developing specific lessons.
- **Turnover among school literacy coaches and teachers made building capacity difficult.** New coaches had to learn the initiative's strategies and forge new relationships with teachers. 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.

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

- **STEP helped teachers determine students' needs, individualize instruction, and form small guided reading groups.** On the spring 2015 teacher survey, teachers reported that STEP assessment results were useful "to a great extent" for determining instructional groups, individualizing instruction for students, and informing literacy curricular and lesson planning.
- **STEP data helped teachers communicate with parents about student progress.** Teachers reported that the clarity and specificity of information that STEP provides was useful for communicating with parents.
- **Teachers often lacked sufficient time and instructional resources to maximize the value of STEP results**. Teachers reported that they spent a considerable amount of time gathering STEP data and did not have enough time to plan lessons for the number of guided reading groups that emerged.
- **Teachers had difficulty integrating the STEP data with data from other state and district assessments to make instructional decisions.** Teachers' difficulty stemmed from redundancy of assessments, misalignment across assessments, and lack of a comprehensive data warehouse that stored all assessment data.
- **Teachers encountered challenges with using STEP with DLL students.** Teachers encountered difficulties in using English STEP with DLL students and questioned the strategies embedded in the Spanish STEP for teaching literacy to Spanish-speaking students.

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 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 (an average of 115 minutes per day), and teachers shifted from engaging in whole group instruction to spending more time instructing small groups.
- **Teachers learned and increased the use of some general literacy instructional strategies**. For example, teachers learned to use turn and talk, in which students reflect, evaluate, and share ideas with a partner; 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.
- **Teachers in some districts lacked curricula, curriculum maps, materials, and other resources to support high-quality instruction.** Although BCCS adopted a balanced literacy approach and MPS developed a Common Core-aligned instructional framework (Focused Instruction) with online curriculum guides and benchmark assessments, Pathway teachers in these districts lacked early literacy curricula for much of the initiative.
- ***Classroom Assessment Scoring System*** **(CLASS®) observations suggest that the quality of classroom instruction remained low, but was comparable to national averages.** 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.

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.** On average, Pathway school students did not perform better on the MCA-III third-grade reading assessment than similar students in matched comparison schools and did not reach proficient levels.
- **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 English STEP decreased with each subsequent grade-level. 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. This pattern held for DLL students taking the English STEP and for students in the dual language (DL) programs taking the Spanish STEP.
- **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. Similarly, 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.
- **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.** Additionally, the range of students' reading levels widened with each increasing grade level, making it challenging for teachers to plan appropriate lessons for so many levels in a classroom.

Lessons Learned

Lessons drawn from the Pathway Schools Initiative evaluation have implications for initiative leaders (i.e., Foundation staff, national advisers, and intermediaries) and district and school leaders and are informing current Phase II efforts.

Lessons with implications 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. 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.** The McKnight Foundation created a distributed leadership model that led to stakeholder confusion in roles and responsibilities. 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 and its Board, the ELNAC, UEI, and SRI.

- **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. If initiative 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. Additionally, given the external factors that create high student mobility, initiative leaders may have considered partnering with schools with more stable student populations to test the theory of action.
- **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, enrollment requirements and processes for kindergarten, the ability to abstain from certain district initiatives or assessments, and the use of professional development time). However, 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. For example, schools may have needed an aligned curriculum and practices for supporting DLL students in place first to be better positioned to use STEP to increase student progress. Coordination across the various UEI supports (e.g., principal coaching, leadership collaboratives, literacy collaboratives, 5Essential data analysis support, and STEP training) improved over time, helping reduce some of the stress school leaders and teachers were feeling.
- **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. Although teachers received training on some instructional strategies to promote word solving, fluency, and comprehension, they also desired training and curricular resources to help them develop appropriate lessons and materials. Initiative leaders may have needed to ensure use of a comprehensive early literacy curriculum or substantial support for teachers to develop lessons, in addition to using assessment data.

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. 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.
- **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. These strategies may include working with teacher unions to prioritize teacher stability, working with districts on hiring policies, and making schools more desirable to teachers by offering special professional development opportunities and substantial time to collaborate and plan with colleagues.
- **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 to 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.

* * *

A final lesson that applies to all stakeholders—funders, other initiative leaders, and district and school leaders—is to **continue learning and improving**. 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 gaps in their curricular needs, 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.

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 (National Research Council, 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 (Annie E. Casey, 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), with extensive expertise in early childhood and elementary education, dual language learners (DLLs), and policy advocacy, to help inform decisions about the initiative, and selected the Director of the Urban Education Institute (UEI) at the University of Chicago to serve as the ELNAC chairperson. The ELNAC set the Initiative's goals and provided guidance on the development and operationalization of the theory of action, the evaluation, and implementation, including participating in site visits to the partner districts and schools.

In 2011, acknowledging that Foundation staff did not have experience with managing an initiative of this size and scope, the Foundation asked UEI 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 new program officer who began to play a key role in managing relationships between the Foundation, ELNAC, intermediary, and

[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.

evaluator, and she took responsibility for overseeing the evaluation. UEI remained, however, the initiative's primary leader with districts and schools.

Theory of action. 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, teaching practices, 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 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 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 a range of 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. Data collection sources and methods are described in the appendix.

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.[3] 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:

- 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)

The Foundation sought to support schools that serve a high percentage of children who are at risk for poor literacy outcomes. The Pathway schools' demographics mirrored those of many urban schools. Across the initiative, in 2014–15, participating schools served approximately 91 percent students of color and 89 percent low-income students (Exhibit 1). 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.

[3] Two of the three districts and the charter school that ultimately received implementation grants were awarded planning grants.

Exhibit 1. PreK–3 Student Demographics in 2014–15, by School

	CPA	Earle Brown (BCCS)	Andersen (MPS)	Jefferson (MPS)	SPMA (SPPS)	Wellstone (SPPS)	Overall
PreK–3 enrollment	243	837	558	371	382	404	2,795
Home languages							
English	62%	65%	22%	39%	38%	28%	44%
Spanish	10%	19%	60%	40%	8%	47%	32%
Hmong	25%	11%	0%	0%	27%	10%	11%
Somali	1%	1%	16%	13%	<1%	6%	6%
Karen	0%	0%	0%	0%	20%	3%	3%
Other	2%	5%	2%	7%	7%	5%	5%
Demographics							
Hispanic	19%	23%	59%	43%	13%	53%	36%
Black	24%	44%	29%	41%	23%	24%	33%
Asian/Pacific Islander	47%	16%	2%	4%	53%	16%	19%
White	9%	15%	5%	8%	9%	5%	9%
Native American	1%	1%	6%	4%	2%	2%	3%
Free or reduced-price meals	79%	81%	96%	98%	95%	93%	89%
Dual language learner	36%	25%	76%	56%	58%	71%	51%
Special education	5%	10%	12%	15%	12%	13%	11%

Source: District administrative data provided to SRI

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

During the planning grant year (2011–12), UEI staff worked with each district separately to conduct the needs assessment, bring in a consultant to advise districts on DLL instruction, and help leaders determine what systems and structures needed to be changed to support the establishment of PreK–3 pathways. BCCS also received training on the STEP assessment in order to pilot the use of STEP during the planning year.

In 2012–13, the first implementation year in most schools, UEI supports focused on (1) building teacher capacity through on-site training on the collection and use of STEP or other assessment data (i.e., Mondo Bookshop Reading Program and Concepts of Print data in SPPS) and cross-district learning institutes, (2) supporting principals through individual coaching based on each principal's leadership needs (e.g., becoming an instructional leader), and (3) administration and analysis of the schoolwide 5Essentials survey.[4,5] UEI kept district leaders informed of the initiative's progress through quarterly breakfasts.

In 2013–14, UEI maintained its teacher training on the use of STEP or other assessment data but shifted the focus of its principal coaching from personal leadership goals to using 5Essentials survey results to drive school goals. Leadership trainings increasingly focused on building the capacity of leadership teams at each site, rather than focusing exclusively on principals. UEI also replaced the learning institutes with separate literacy and leadership collaboratives. The literacy collaborative included only coaches and select teachers who were expected to bring literacy strategies learned through the collaborative back to their colleagues at the Pathway schools. The leadership collaborative included school leaders (including principals, school literacy coaches, and initiative program managers) and used 5Essentials survey data to drive discussions of school improvement. Finally, UEI engaged central office district administrators through two other forums—quarterly Superintendent Check-Ins and Executive Breakfast Briefings.

By 2014–15, UEI began using a gradual release model in BCCS and MPS where their supports focused on developing the capacity of schools to sustain the work beyond the grant funding. Although UEI reduced the amount of on-site training for some teachers, it expanded the number of teachers participating in the literacy collaborative, started including teachers in the leadership collaborative, and increased its coaching of school-based literacy coaches so they could better support their teachers. UEI also became more intentional about leveraging the authority of central office leaders to support alignment. It shifted the focus of the Executive Briefings to ways the district leaders (e.g., principal supervisors) could work with principals around alignment issues, like preserving coaches' time in schools to support teachers.

Individual 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

[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.

practices in the early grades. Districts and schools received little concrete support through the initiative for how to operationalize these components.

Exhibit 2. Initiative Timeline

2009	• The McKnight Foundation Board adopts third grade reading goal.
2010	• Education & Learning National Advisory Committee (ELNAC) established. The committee develops the goals and basic architecture of the Pathway Schools Initiative.
2011	• UEI receives funding to serve as intermediary for the Pathway Schools Initiative. • Planning grants are awarded to three school districts, including Brooklyn Center Community Schools and Minneapolis Public Schools, to develop PreK–3 implementation plans. UEI offers strategic guidance and technical assistance to schools and districts. • SRI International comes on board as evaluating partner and helps the Foundation and UEI articulate their theory of action to guide the evaluation.
2012	• Phase I implementation grants are awarded to Brooklyn Center Community Schools, Minneapolis Public Schools through 2015. • Saint Paul Public Schools joins the initiative, with a Phase I implementation grant through 2015. • Community of Peace Academy embarks on a planning year.
2013	• Community of Peace Academy receives implementation funding through 2016. • Foundation hires a program officer to manage the ELNAC, UEI, and the evaluation and engage in regional and state policy work.
2014	• All Pathway schools are fully implementing
2015	• Brooklyn Center Community Schools and Saint Paul Public Schools receive Phase II implementation funding through 2018. • Minneapolis Public Schools receives a 1-year extension to their Phase I funding through June 2016; in December 2015, MPS is informed they will not be invited to submit additional funding proposals.
2016	• Community of Peace Academy receives implementation funding through 2019.

* * *

We turn next to key evaluation findings documenting progress made and ongoing challenges with the Pathway Schools Initiative in Phase I, from fall 2011 through spring 2015 (some data collected in fall 2015 referred to Phase I and is included in this report), and then present a set of lessons intended to inform the Pathway Schools Initiative's work in Phase II, as well as others interested in pursuing PreK–3 work in urban public schools.

Key Findings: Progress and Challenges

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 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 improving 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. Additionally, the Foundation strongly recommended that schools create full-day PreK programs based on research that these programs tend to result in better outcomes (Reynolds, et al, 2014). 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 consistent offerings across the district.

To increase the proportion of PreK students at the Pathway schools who stay for kindergarten, districts and schools 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. BCCS began automatically enrolling PreK students in kindergarten the following year, and families had to opt out (in contrast to the former process of requiring parents to complete a kindergarten enrollment packet). MPS extended its PreK enrollment deadline for the Pathway schools so school staff could do outreach and recruit students from the local community.

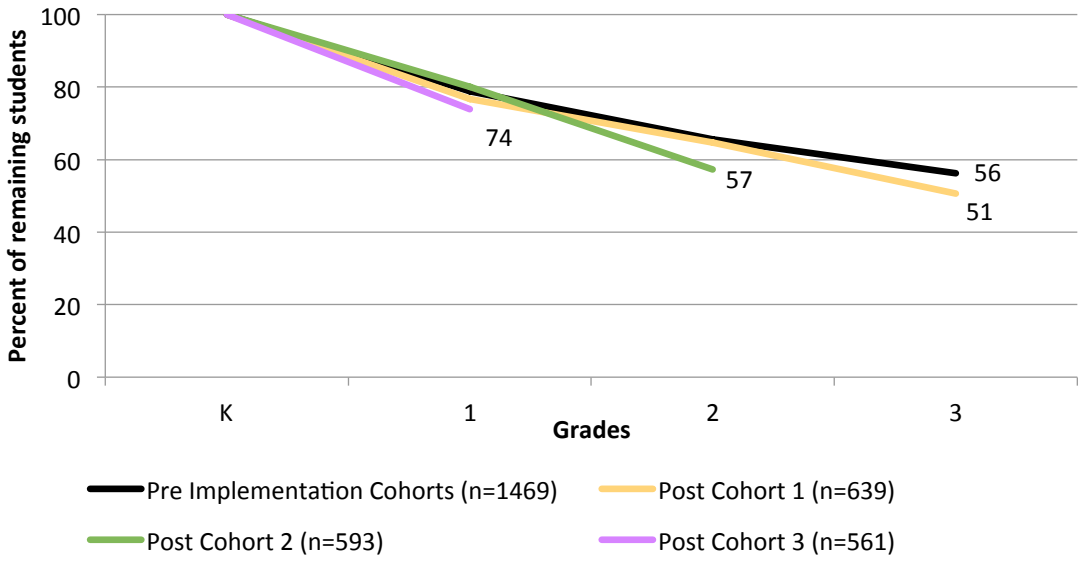
As a result of these efforts, in three districts (CPA, BCCS, and SPPS), the size of the PreK cohorts that continued on to kindergarten in the same Pathway schools increased from 65 percent before initiative implementation (average for the 2009–10, 2010–11, and 2011–12 cohorts for

BCCS and Wellstone; 2010–11, 2011–12, 2012–13 cohorts for CPA; and 2011–12 cohorts for SPMA) to 82 percent after initiative implementation (average for 2013–14 , 2013–14, and 2014–15 cohorts for BCCS and SPPS and 2013–14, 2014–15, 2015–16 cohorts for CPA).[6]

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).[7] The Pathway schools served highly-mobile populations, and the many factors contributing to mobility could not be overcome by school or 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 … the families with young children who may be just coming to this country, getting themselves stabilized economically, finding employment, figuring out what their next move is going to be from a housing point of view. I think all those things undermine the idea of having a stable student enrollment when it comes to the primary grades.*

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 1469 students who started kindergarten in the 3 years preceding initiative implementation, 56 percent remained enrolled at the Pathway schools in third grade.

[6] MPS did not report PreK data and so was not included in the PreK–K sustained enrollment analysis.
[7] 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.

Participation in the Pathway Schools Initiative increased the connections between PreK 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, helped align PreK human capital policies with K–3 to facilitate the inclusion of PreK teachers in the professional community, and illuminated PreK practices that could be useful to early elementary classes.

One significant change instilled by the initiative was the inclusion of early childhood leadership in the governance of the literacy work. At least one early childhood representative in each district played a role in initiative oversight. The BCCS Director of Early Learning and Community Education became a part of the leadership cabinet and was thereafter more involved in building-wide decision making. Referring to PreK, she stated, "What has traditionally been an afterthought is [at the] forefront… More so now I feel like [the PreK] input is valuable and needed." In SPPS, the Office of Early Learning (OEL) oversaw implementation of grant activities, and the Pathway leadership team included the assistant director of OEL, the Pathway program manager, the K–12 literacy supervisor, and a district reading instruction specialist. Even from the beginning of the initiative in fall 2012, the program manager said this structure increased communication and coordination across departments: "We've had some really great cross-departmental conversations that we haven't had in the past. So that, I can see that shifting and changing and the trust level building between department heads." In MPS, the Pathway Schools Initiative program manager brought early childhood expertise to the initiative.

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. Except for MPS, PreK teachers typically did not have the same schedules, calendars, or salaries as K–3 and were not paid to attend professional development, thereby limiting their ability to collaborate with K–3 teachers. In fall 2012, BCCS aligned the PreK teacher schedules, calendars, and salaries with those of the K–3 teachers. These changes allowed PreK and kindergarten teachers to hold joint professional learning community meetings, to participate in joint professional development activities, and to discuss students' transitions to kindergarten. In fall 2012, SPPS PreK teachers signed an agreement to engage in monthly meetings with kindergarten teachers, for which PreK teachers were paid. In MPS, salaries and calendars were already aligned, and starting in fall 2012, PreK–1 teachers began collaborating around data and instruction.

Once PreK and K–3 began collaborating, some Pathway districts and schools realized that some PreK practices could be beneficial for kindergarten students. For example, SPPS initially used the Discovering Our World curriculum only in PreK. In the second year of implementation (2013–14), SPPS extended Discovering Our World and the PreK social and behavioral program to kindergarten, which it deemed to be more developmentally appropriate for kindergarten students. MPS planned to have all Pathway kindergarten classes use the same early literacy environmental rating scale (the Early Language and Literacy Classroom Observation [ELLCO]) that all PreK High Five classes in the district used.

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. Before the Pathway Schools Initiative, BCCS used several different assessments in PreK, grades K–3, and grades 4–6. In 2011–12, most PreK–3 teachers piloted STEP, and the following year BCCS expanded the use of STEP to grades 4–6 and used the pre-existing grade 4–6 assessment only with students who tested out of STEP. The MPS Pathway schools also shifted from using one assessment in K–3 classrooms, another at the PreK level, and another in their developmental dual language classrooms, to using STEP in all of these classrooms, as well as some grade specific assessments.[8] The SPPS Pathway schools did not adopt STEP until their third year of implementation (2014–15) because the district had only recently begun using a new districtwide curriculum (Mondo Bookshop Reading Program) and its assessment before the start of the initiative. Further, district leaders were reluctant for the two Pathway schools to switch to STEP for grades PreK–3 as it would mean the upper grades in those schools and the rest of the district schools would not be aligned.[9]

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.*

For many of the Pathway schools, implementing STEP was the first stage in aligning teachers' practices. Schools used STEP to drive the rest of the literacy work, such as guided reading groups, interventions, and goal setting. In fall 2014, an MPS school staff member said that STEP helped align the literacy program and drive instruction by "giving us clear long-term and short-term goals." Some schools instituted STEP beyond grade 3, which facilitated consistency and common language more broadly across the grades. At CPA and BCCS, all grades PreK–6 used STEP, and the MPS schools used it in grades PreK–5.

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. The theory of action envisioned that effective teams would include PreK and K–3 school leaders

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

[9] When the district adopted STEP, the dual language program in one of the SPPS Pathway schools adopted the Spanish STEP.

(i.e., principals and PreK directors) who effectively hire and retain teachers, provide their staff with a vision of a PreK–3 literacy model, help set instructional priorities for staff, raise teachers' expectations for student performance, and manage the change effort. District leaders would demonstrate a high level of commitment to the initiative goals and strategies and ensure that schools had the resources and flexibility needed to accomplish them. 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. For example, in fall 2014 leaders visited a district successful in aligning its practices across all grades and learned about effective systemwide alignment strategies and the conditions necessary for successful PreK–3 alignment (e.g., broad stakeholder input, shared expectations). 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.

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. Principals used STEP and Mondo data (in SPPS for the first 2 implementation years) to set schoolwide instructional goals, on which they based professional development, professional learning communities (PLCs), coaching plans, and teacher performance goals. Some principals, with support from UEI principal coaches, used STEP data to set instructional priorities aligned with their school's goals, communicated those priorities to teachers, helped teachers link those priorities to observable behaviors and practices, and held teachers accountable for implementing those practices. For example, according to a district administrator, the Pathway school principals in his district set instructional priorities to guide teachers' practice:

> *Both principals created key instructional priorities for the school year last spring, and they have stuck to them and it's really helping their staff know that here's the focus, here's what we're supporting, and here's what we're learning. They are able to come back to those priorities in any conversations that come up around the table about professional development and PLCs.*

In another district, interviews indicated that principal coaching helped the principals align schoolwide expectations for leadership, curriculum, and school culture and become better instructional leaders. One Pathway school principal reported that through monthly phone conversations and visits, the UEI principal coach helped her transition into her role as principal and 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 said her principal coach helped her become more adept at developing an effective literacy coaching plan, encouraging teachers to accept coaching, and holding teachers more accountable for their instructional practices and student growth. She described a leadership strategy she learned from her UEI principal coach to communicate expectations for teachers in coaching:

> *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. Leaders had to prioritize which Pathway components to tackle first, and some parts necessarily received more attention than others (e.g., assessment over out-of-school time). Further, principals still had to address school needs not related to the initiative, such as math. 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 annual 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 to help increase program coherence. 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 superintendent originally assigned to supervise the Pathway schools were reassigned in the second year of the initiative. These associate superintendents had been actively involved with the principals and UEI, worked to understand the schools' goals in relationship to the program, and tried to protect the principals' time so they could focus on the initiative work. 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 two schools needed flexibility to meet initiative goals.

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

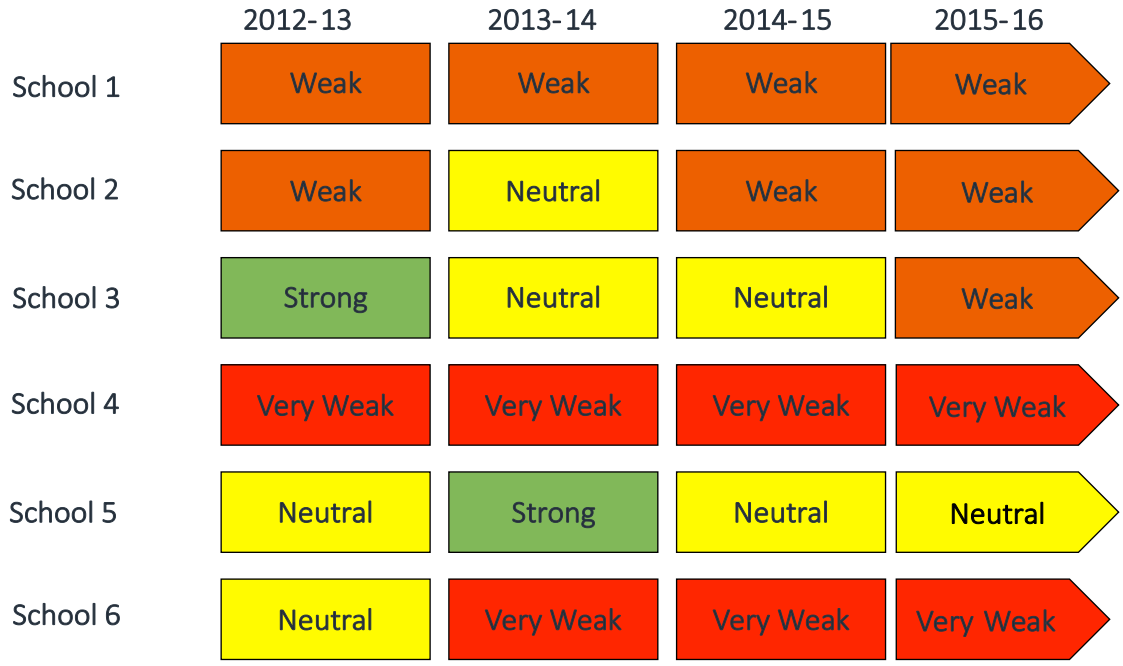
Although UEI principal coaches and principals themselves reported that principals' leadership skills grew as a result of the initiative, most Pathway principals received low ratings on the effective leaders domain of the 5Essentials survey that was completed by all school staff. Despite principal progress on streamlining and focusing school efforts, in 2015–16 only one principal of the six Pathway schools received a rating higher than weak (Exhibit 4).

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, some teachers reported feeling like directives were very top down. In another 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 said there was not a lot of transparency before around student performance (with poor achievement attributed to student characteristics/needs), which created a false sense of how good the teachers were and did not help them improve. She explained the evolution of this cultural shift 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."*

Exhibit 4. Effective School Leadership: Pattern and Trends from the 5Essentials Survey



Note: Dark Green=Very Strong, Green=Strong, Yellow=Average or Neutral, Orange=Weak, Red=Very Weak

Shared Professional Development/Strong Professional Community

To facilitate alignment of expectations and literacy practices from PreK to third grade, UEI provided the teachers with professional development and support in reviewing and using student data to inform their 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 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.[10] 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. For example, they reorganized CAP data into four domains (one-to-one matching, letter versus word, structure/punctuation, and directionality) so teachers could see domain scores rather than one overall score and use that data to inform instruction on concepts of print. UEI tied professional development on turn and talk (an instructional strategy that has students reflect, evaluate, and share their ideas with a partner) to Mondo data to promote oral language development, inferential thinking, and comprehension.

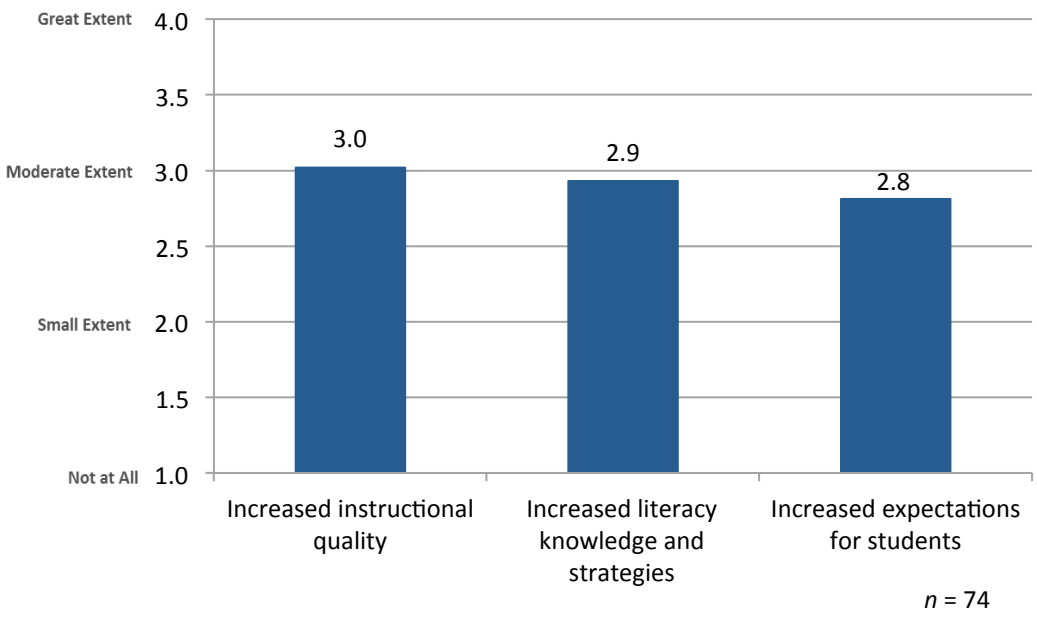
The majority of interviewed teachers said that the greatest takeaway from the UEI professional development was gaining the ability to analyze data and tailor teaching based on those data. Teachers reported becoming more adept at using data to identify learning goals, narrow the focus of lessons, select texts and develop guiding questions about the texts, and use data to differentiate lessons for guided reading groups and small group instruction. A MPS teacher described the process of using data to determine how to support guided reading groups:

> *The guided reading groups are more focused now in terms of what the child needs in order to move. Some students need comprehension so I put them in a group for comprehension. Others need word solving. And I'm seeing gains and that's been exciting.*

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 5).

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

Exhibit 5. Teacher-Perceived Impact of UEI-Led Professional Development



Source: 2015 Teacher Survey

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 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." SPPS school and district administrators credited the literacy coaches for instilling a coherent literacy program, and teachers said school literacy coaches communicated schoolwide literacy expectations and instructional goals.

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." For example, in one school the coaches were seen as an arm of the administration and were not welcomed into some teachers' classrooms. A coach expressed, "[Being perceived as administrators] has served as somewhat of a barrier between our relationship with teachers and some of the openness of our coaching conversations which we believe to be the crux of our work." At another school, teachers reported feeling like "there [was] a lot of telling" from the coaches and that teachers did not have much input into their instruction. Still other teachers were not sure what help they needed that coaches could provide. 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.

In 2014–15, CPA adjusted the master schedule to provide teachers with 70 minutes of common planning time with their grade-level peers twice a week, once each for literacy and math. During this time, CPA teachers reviewed data, planned lessons, and discussed observation feedback with the literacy or math coach. School staff credited this planning time with improving instructional alignment. CPA teachers also met across PreK–6 during a weekly schoolwide PLC, during which teachers would group across grades to discuss vertical alignment and teachers who attended the literacy collaborative would present what they learned.

In BCCS, respondents said common planning time made the grade-levels more coherent, particularly PreK. Additionally, BCCS kindergarten teachers received extra release time during the day—a half-day every other week—for intensive coaching to bring their instruction closer to that of PreK.

Conversely, teachers reported a lack of collaboration time as a key barrier to PreK–3 coherence. Unlike CPA, 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. In BCCS and SPPS, teachers noted the importance of creating time to share resources and strategies with classroom, special education, and EL teachers, as they instruct the same students. SPPS EL teachers did not have common planning time with classroom teachers, so collaboration had to happen before or after school, if at all. The pull-out model made it particularly difficult for EL teachers to have time to meet with regular classroom teachers. According to the spring 2015 teacher survey, on average teachers reported collaborating with EL resource specialists around literacy instruction about one or two times a month.[11] CPA hoped that its co-teaching model would facilitate more collaboration and alignment between the teachers.

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

The supports teachers received from UEI focused heavily on STEP administration and data analysis. While STEP helped teachers understand that changes were needed in the classroom and UEI helped expand teachers' toolbox of instructional strategies in literacy, there was less attention on how to tie STEP results to developing specific lessons or using the school's early literacy curriculum (if one was in place). School leaders requested that UEI trainers focus on data analysis to help build school literacy coach capacity in that area, especially in cases of school literacy coach turnover, and to bring teachers new to STEP up to speed.

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*

[11] The mean response was 2.9, where 2 is "a few times a year" and 3 is "1 or 2 times a month."

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. A teacher said she requested several times to see examples of good instruction for certain STEP levels: "It would be nice just to see from UEI exactly what that looks like." 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. During the planning year, Pathway schools received support from a UEI consultant, a national DLL expert, who provided some general information on supporting literacy with DLL students. The UEI consultant departed the initiative that year.

Compounding this shortage of expertise was unexpected growth in some non-native English speaking populations at the schools over the course of the initiative. In particular, the MPS Pathway schools saw a dramatic increase in the number of Somali students . Three years into implementation, MPS teachers still felt like they did not have the right support for DLL students. In fall 2015, 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. For example, BCCS used initiative funds for a one-time, 2-day training on the Sheltered Instruction Observation Protocol (SIOP) in spring 2013 to help teachers learn instructional strategies for supporting DLL students, but this effort was not sustained. In 2015, MPS leaders connected developmental dual language coaches and teachers with professional development focused on developing biliteracy (Literacy Squared).

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. BCCS had the highest rate of school literacy

coach turnover, replacing four literacy coaches during this period. 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. At Jefferson, only 6 of the 19 teachers (26 percent) on the PreK–3 faculty in 2012–13 remained at the school in 2014–15. Over that same period, 66 percent of Andersen teachers and 59 percent of BCCS teachers remained. 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." In contrast, SPPS schools benefited from a relatively stable workforce. However, SPPS used a phased-in approach to initiative participation, so only PreK and kindergarten teachers had the opportunity to participate in all years of implementation. At both SPMA and Wellstone, all of the PreK and kindergarten teachers who began implementing the initiative in 2012–13 remained at the school in 2014–15. 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).[12] 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. For example, one teacher

[12] 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."

stated, “I look at the STEP test and I look at the DNA [did not achieve]. I look at the areas where they did not meet proficiency… Then I say, ‘Okay, we need to work on A, B or C. These are the things to look at. Most of the kids in the group need this. There’s a high number that need silent reading comprehension.’” 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. I get data that will indicate they are able to do 7 out of 10 phonological segmentations rather than the 10 out of 10 or 8 out of 10 or whatever they need. So I know they are almost there or I know that they haven’t even begun to pick up on this skill. And, it has made me more concentrated in my effort and deliberate in my guided reading groups.*

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. 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.

To help parents understand the STEP results, the schools held informational sessions on the assessment system. For example, in BCCS, PreK teachers reported conducting informal informational sessions for parents about the Pathways Schools Initiative, which included providing them with information about STEP. MPS gave a presentation on STEP to families in Way to Grow, one of its community partners.

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. For example, some parents in BCCS did not understand the requirements for progressing from one STEP level

to the next or how to interpret STEP results on reports sent home, despite teachers' attempts to explain it to them at conferences and opportunities to learn about it at school events.

These parents also were concerned that certain skills were "holding [their children] back" from progressing on STEP. In MPS, several parents were not aware of STEP by name and were not sure if it was a curriculum, assessment, or set of standards. They, too, were unsure of how to interpret assessment reports.

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. Teachers were expected to administer the STEP four times a year, per UEI's guidelines. (Schools administered the STEP less often at different points in time. For example, BCCS administered the STEP three times in 2013–14 and MPS and SPPS administered it three times in 2014–15.) 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 each individual administration averaged about 30 minutes (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. For example, BCCS teachers initially found that students in a single classroom encompassed a wide range of STEP levels (8 to 10 levels), leading teachers to feel like they needed to operate that many small groups. The UEI coaches tried to reassure BCCS teachers that the range of STEP levels in a given classroom should narrow as they continue to use the program and suggested ways of combining students into mixed groups that focused on a skill rather than level.

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 to 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, including the MCA, curriculum assessments, intervention assessments, as well as assessments for DLL students. Teachers' difficulty stemmed from redundancy of assessments, misalignment across assessments, and lack of a comprehensive data warehouse that stored all assessment 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 to monitor progress, and staff noted that this duplication of assessments was repetitive and reduced coherence. For example, MPS staff said that STEP and the assessment used by the Minnesota Reading Corps were different but assessed the same skills.

In other cases, teachers and school leaders were concerned that STEP was not well aligned to other assessments. Because educators are ultimately held accountable by their state test scores, they questioned how well STEP could inform student preparation for the MCA and wanted information on how well the two correlate. Districts examined the two and came up with conflicting results. In BCCS, the assessment coordinator looked at proficiency scores on the MCA and STEP and found that especially for third grade, the two assessments were highly correlated. In SPPS, at least one administrator felt that the STEP assessment correlated more strongly with MCA scores than the Mondo assessment had. However, an MPS leader noted that focusing almost exclusively on STEP did not lead to improved MCA scores. 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.

Teachers also reported a lack of alignment with assessments used by EL teachers and interventionists working with struggling readers. School staff in several districts reported the challenge of integrating English language proficiency assessments (WIDA/Access) with other assessments (i.e., STEP) used by classroom teachers, explaining that they measure different skills. Spanish teachers in MPS' developmental dual language program had to translate the district benchmark assessments, and teachers reported that some of the English skills being assessed were not important for Spanish literacy skills. Moreover, at CPA the tutoring service's assessment system was not well aligned to STEP, so the tutors used their own system to monitor progress. The school literacy coach met with the tutoring organization's site coordinator to address alignment of the tutor's instruction and assessment with STEP.

Finally, in BCCS and SPPS, STEP was not in the districts' data systems. Having STEP in a different data system made it difficult for BCCS teachers to pull out STEP data for special education and DLL students and compare their results to other students. In SPPS, teachers could no longer rely on the district DataZone data system to group students and identify materials for those groups as they did in the past with the Mondo assessment.

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. Indeed, in SPPS STEP helped improve coherence across the programs because it was available in both languages, unlike the previously used Mondo assessment that was available only in English. 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,[13] 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 instruction.

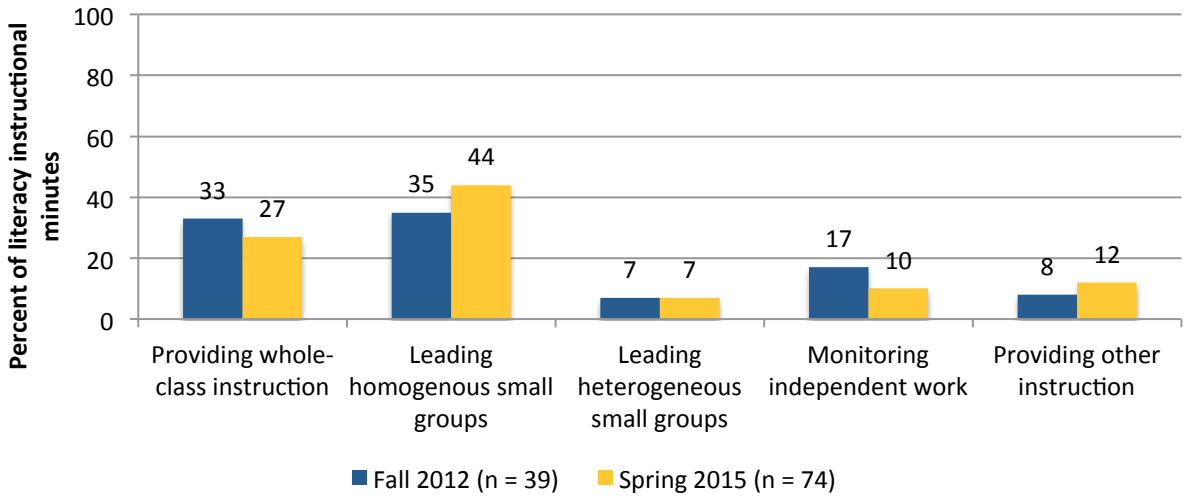
Throughout the initiative, the amount of time teachers spent on literacy instruction remained high, and teachers shifted from engaging in whole group instruction to spending more time

[13] 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.

instructing small groups. The instructional logs from the first 2 years of the initiative (2012–13 and 2013–14) and the teacher survey in the third year (spring 2015) captured data on similar items related to the time spent on literacy instruction and how that time was used.[14] 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[15] 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.[16]

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) (Exhibit 6).[17]

Exhibit 6. Change in Teacher Time Spent on Various Literacy Instructional Formats



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

[14] The survey captured some of the same information that had been in the log, including the total number of minutes spent on literacy in a typical day; the percentage of time devoted to large group, small group, and independent work time; and the frequency with which various literacy instructional strategies such as oral language, guided reading, and shared reading were employed.

[15] 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.

[16] 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 (Presley, et al., 1998).

[17] Students engaged in independent work when they worked independently on tasks such as reading books, engaging with technology, completing assignments (e.g., worksheets, writing in journals), or doing activities at learning centers.

read-alouds; on average, they engaged in these 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 both MPS and 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."

In MPS, the district rolled out Focused Instruction, which included curriculum guides for certain grade levels, but not for the lower grade levels engaged in the initiative. Further, 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.

In BCCS, teachers operated for almost 2 years without a curriculum after the district decided to stop using the Basal curriculum when it moved to a balanced literacy framework. After teachers requested a scope and sequence, school literacy coaches tried to write their own curriculum. Given all of their other responsibilities, coaches were not able to write the curriculum fast enough to keep pace with the teachers, so BCCS purchased a new curriculum, Benchmark Literacy Curriculum, in late fall 2013. The mid-year start of the curriculum was challenging, so BCCS offered intensive training on the curriculum the following summer (2014). Teachers who

used it appreciated having a curriculum to follow, and some felt it made their literacy instruction more rigorous and helped them implement balanced literacy. One teacher described the benefits of the curriculum:

> *With the new curriculum, I feel like my whole group lessons are more focused with a better scope and sequence; whereas the last 2 years where we didn't have a curriculum it was very much, "What do we do?" I didn't feel like I was an expert enough at literacy to know the comprehension strategies and metacognitive skills that should come first, second, and third.*

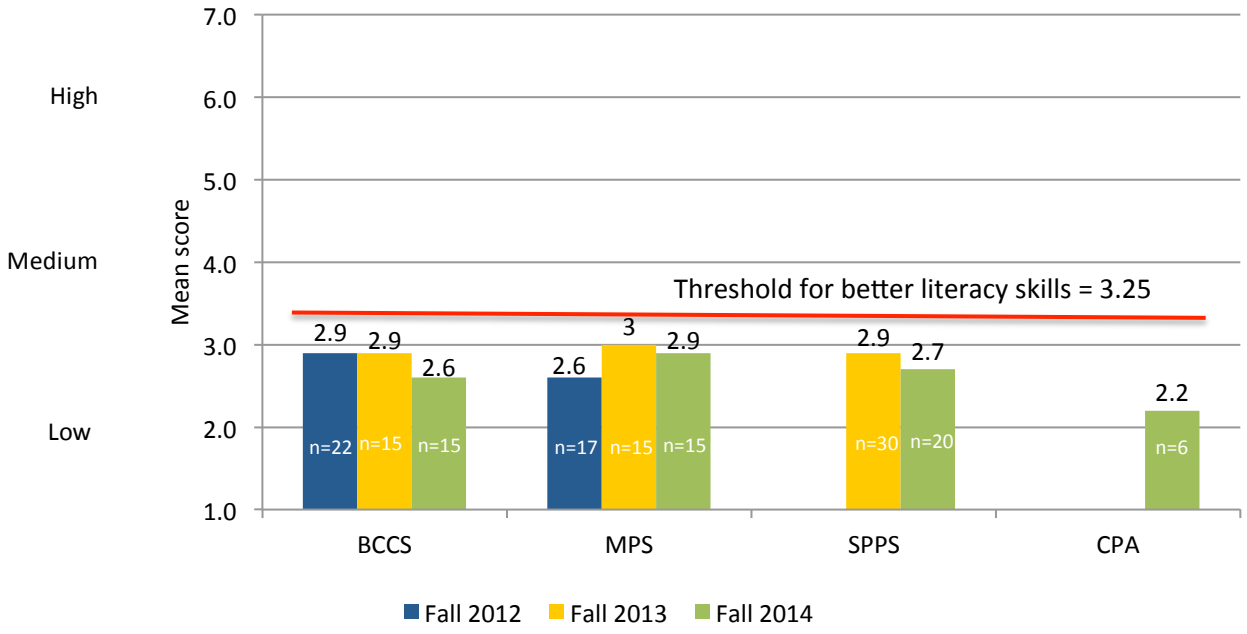
Compounding the curricular challenges was the lack of resources and strategies for DLL instruction. In particular, the dual language programs in MPS and SPPS lacked some of the common resources that existed in English-medium settings.[18] In SPPS, the dual language program classrooms lacked Spanish instructional 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 observations 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 7). 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).

[18] 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 Spanish two-way immersion program that served both native English-speaking and native Spanish-speaking students.

Exhibit 7. CLASS Instructional Support Scores



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 8). 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 (Exhibit 9). 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 8. Pathway Schools and Matched Comparison Mean Student Achievement on Third-Grade Reading Assessment, 2014–15

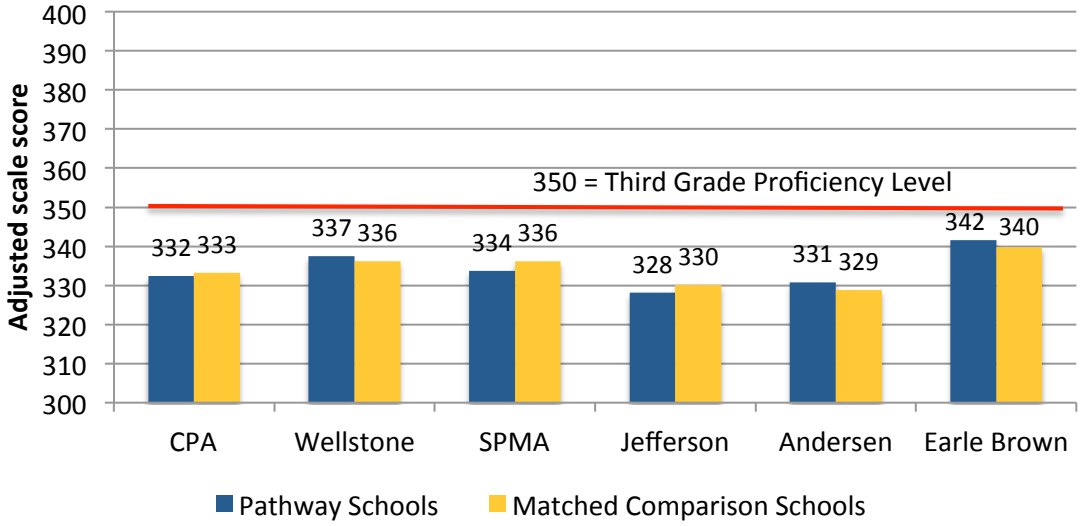
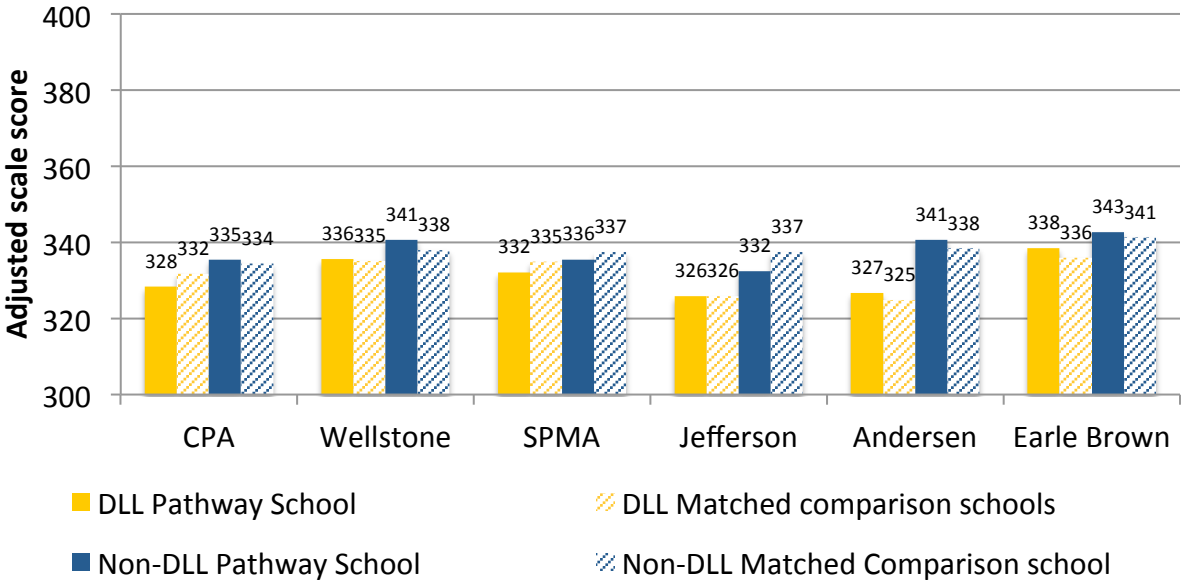


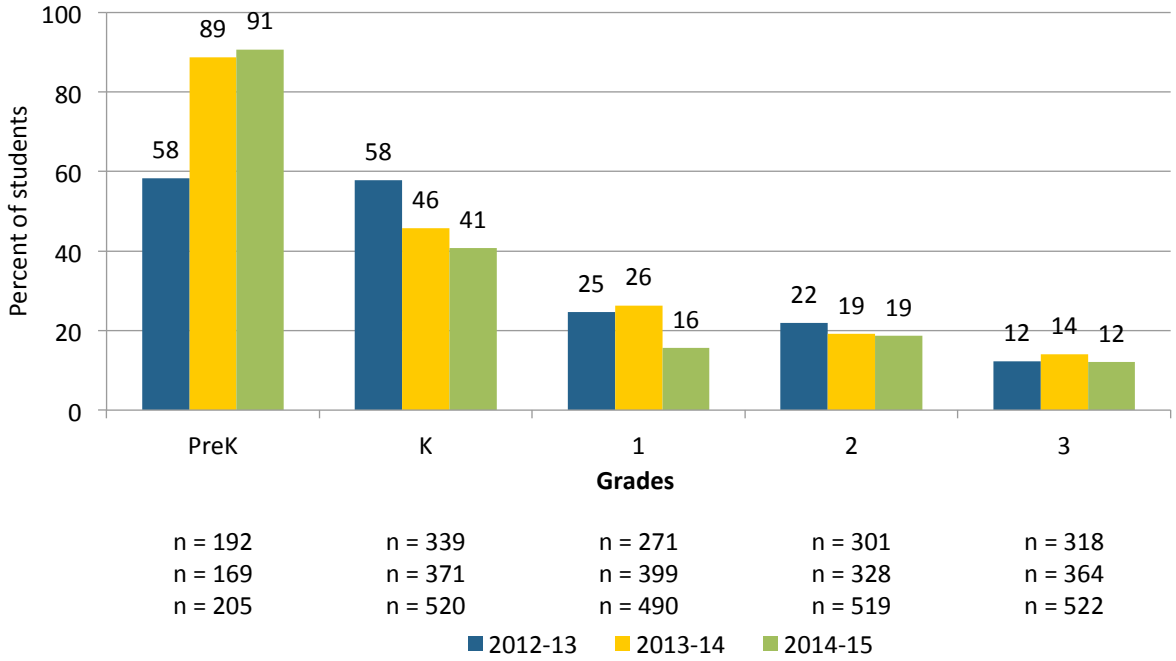
Exhibit 9. Pathway Schools and Matched Comparison Mean Student Achievement on Third-Grade Reading Assessment by DLL Status, 2014–15



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.

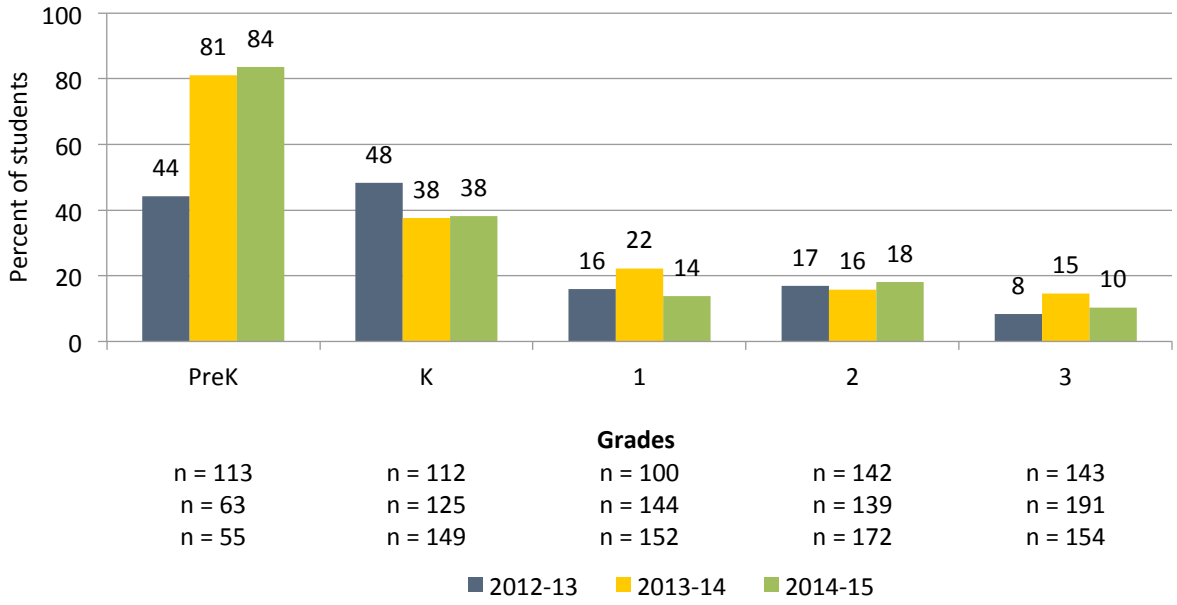
In each of the first 3 years of the Pathway Schools Initiative, the proportion of students that met their grade-level end-of-year goal on the English STEP decreased with each subsequent grade-level (Exhibit 10). In the third year of the initiative, only 13 percent of third-grade students met their grade-level 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 (Exhibit 11).

Exhibit 10. Students Meeting English STEP Grade-Level 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.

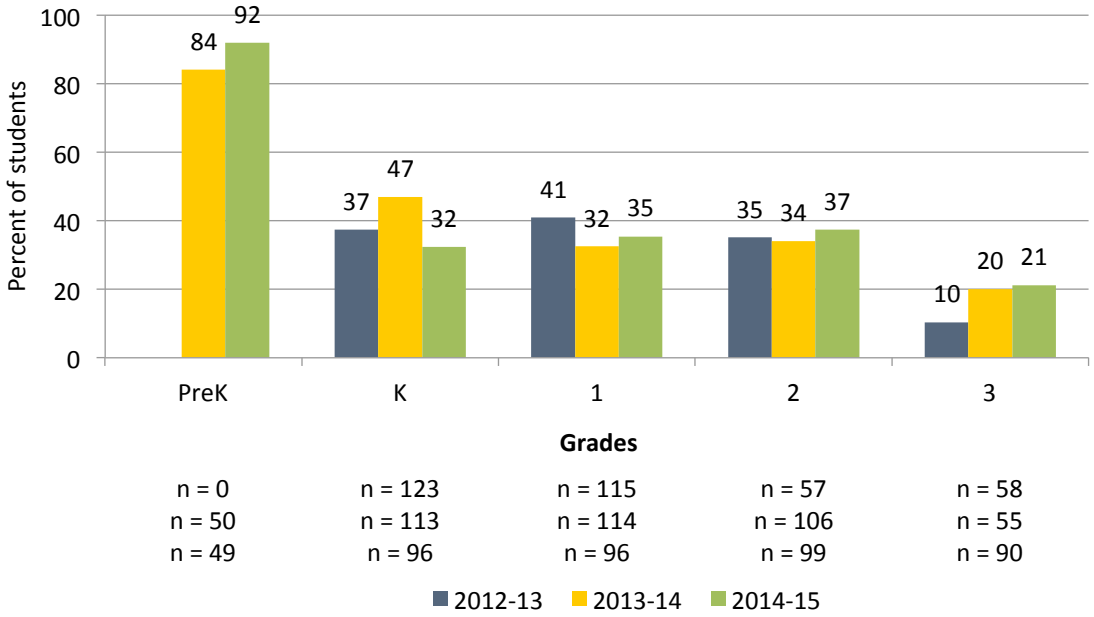
Exhibit 11. DLL Students Meeting English STEP Grade-Level Proficiency Goals



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.

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 (Exhibit 12). However, there was a larger improvement in grade 3 on the Spanish STEP than on the English STEP.

Exhibit 12. Students Meeting Spanish STEP Grade-Level Proficiency Goals



Notes: (1) 2012–13 and 2013–14 data include MPS schools; 2014–15 data include MPS schools and Wellstone Elementary in St. Paul Public Schools. (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.

Literacy 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 13). 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. Of the 339 students who were assessed with STEP in English in kindergarten in BCCS and the two MPS schools in 2012–13, 190 were still in those schools in second grade in 2014–15.[19] Exhibit 14 shows the proportion of these students who met their grade-level end-of-year proficiency goals each year, in comparison with students in the same grades who were not in the Pathway schools for all 3 years. Although there was no significant difference between these groups in their first or second years in the initiative, by the third year 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.

[19] Students in CPA were not tested on the STEP in 2012–13, and the two SPPS schools only had one year of STEP data (2014–15), so those schools were not included in the longitudinal analyses.

Exhibit 13. Average Number of Steps Progressed on the English STEP for K–3 Students in 2014–15, by Years of Teacher Experience with STEP

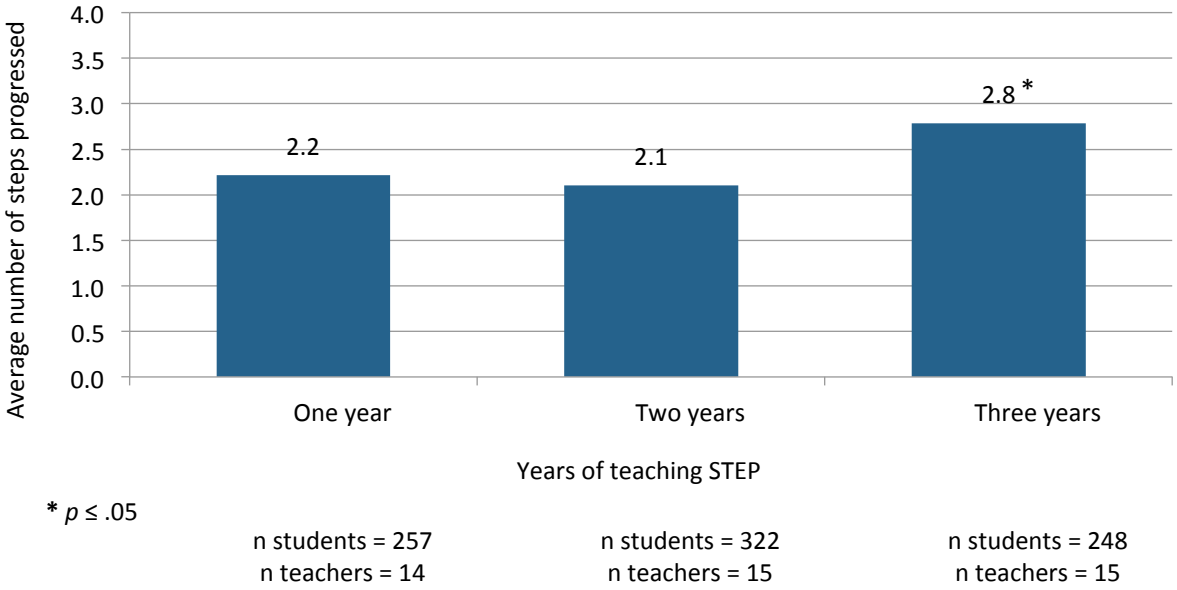
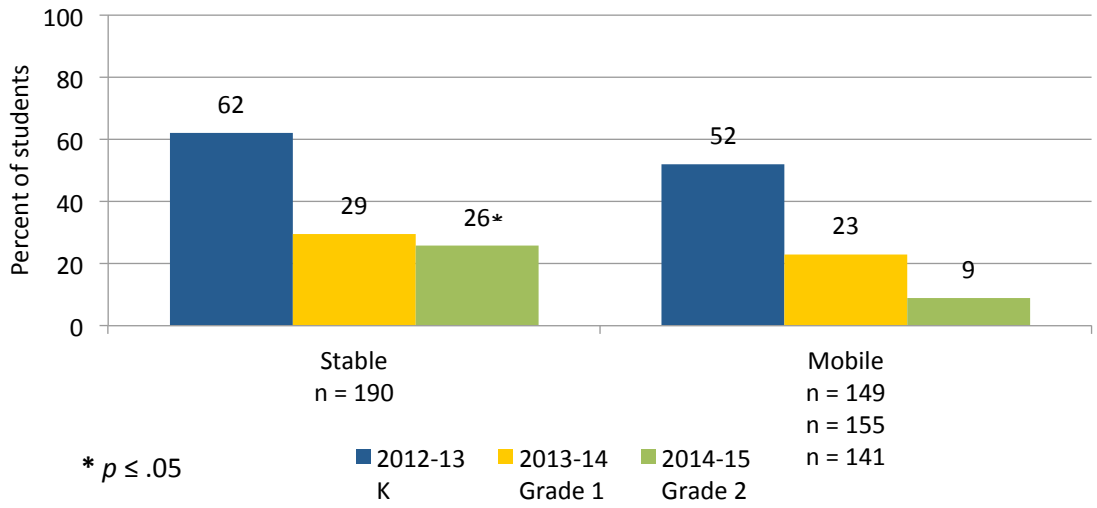


Exhibit 14. Stable and Mobile Students Meeting STEP Grade-Level (K–2) Proficiency Goals

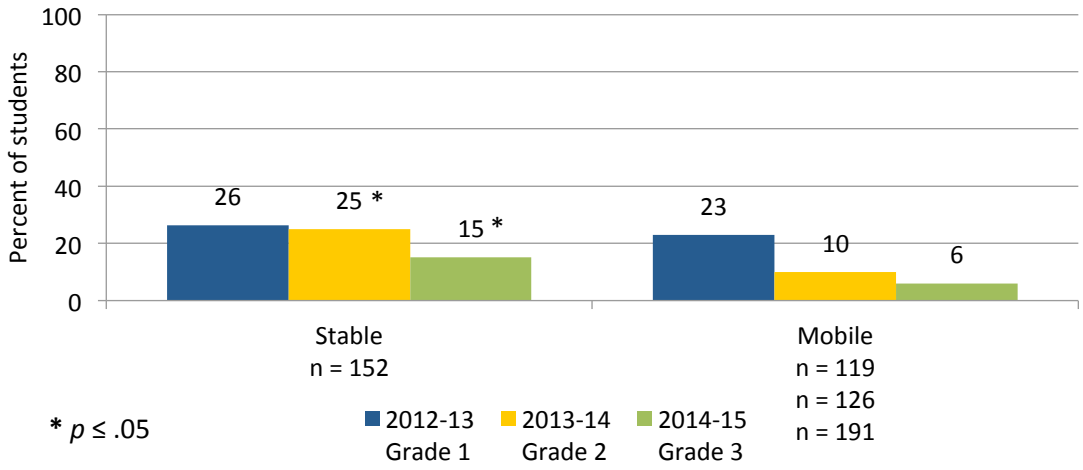


Note: Includes only students from BCCS and MPS schools because only these schools used STEP for at least 3 years.

Similarly, of the 271 students who were assessed with STEP in English in first grade in BCCS and the two MPS schools in 2012–13, 152 were still in those schools in third grade 2014–15. Exhibit 15 shows the proportion of these students who met their grade-level end-of-year proficiency goals in each year of Phase I, in comparison with students in the same grades who were not in the Pathway schools for all 3 years. Although there was no significant difference between these groups in their first year in the initiative, in the second and third years 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. "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 15. Stable and Mobile Students Meeting STEP Grade Level (1–3) Proficiency Goals



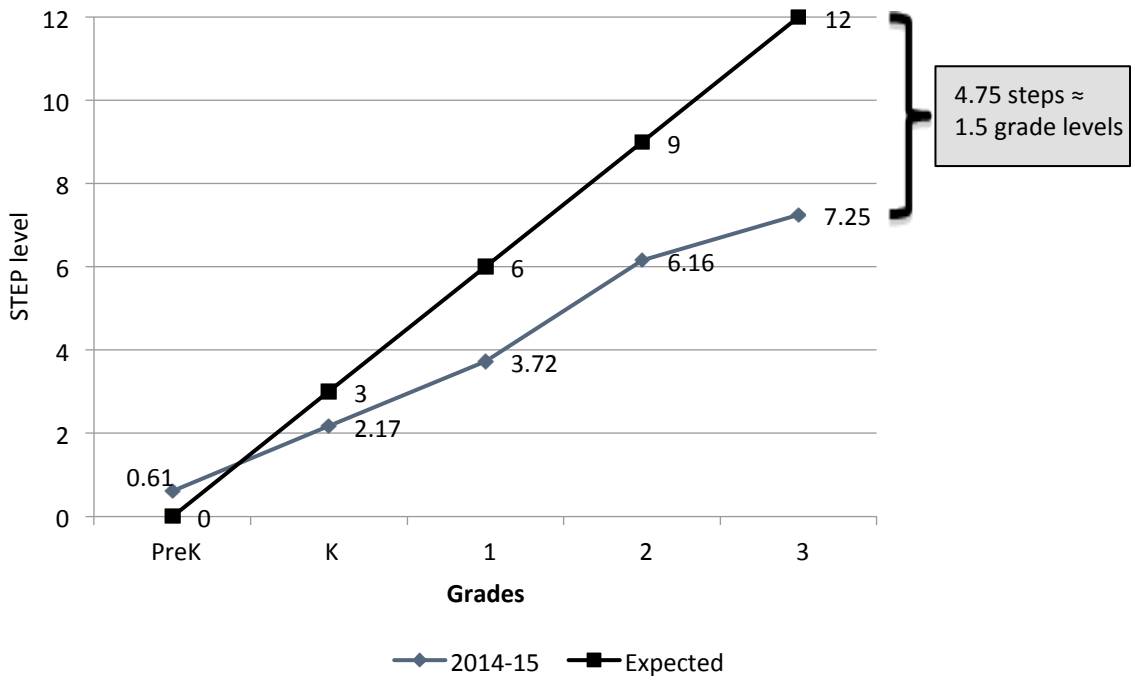
Note: Includes only students from BCCS and MPS schools because only these schools used STEP for at least 3 years.

Students not making the expected progress on STEP each year as they moved through the grades 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 16). 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).

Meeting grade-level proficiency goals may be particularly difficult in later grades, as less than expected progress in each grade accumulates over time. For example, second- and third-grade students may begin the year two or more steps behind, and even if they make the expected progress of three steps, they will not meet their grade-level proficiency goal. Further, a quarter of K–3 students remained at the same STEP level for three or more assessment windows each year.

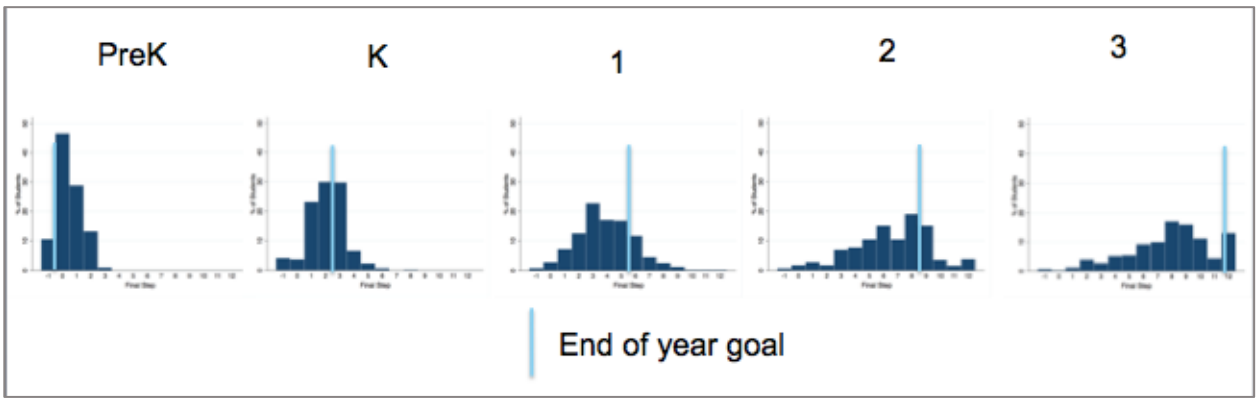
Exhibit 16. Expected and Average Actual End-of Year STEP, by Grade



The range of students' reading levels widened with each increasing grade level, making it challenging for teachers to plan appropriate lessons for so many levels.

The distribution of STEP levels widened across grades. For example, in kindergarten, the vast majority of students spanned 3 STEP levels and, by second grade, students spanned 12 STEP levels (Exhibit 17). Further, the proportion of students below the expected STEP goal increased with each subsequent grade level.

Exhibit 17. Distribution of Students on English STEP in 2014–15, by Grade Level



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. Many aspects of the initiative were not clear from the outset. 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. Though school and district leaders had the freedom to define the supports needed to address other aspects of the theory of action, the level of effort needed to learn to use STEP with fidelity and engage in deep leadership and organizational development left little time to focus elsewhere. 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, interviewed 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 interviews indicated that the collaborative model led to stakeholder confusion in roles and responsibilities.

Because the initiative started as a partnership between the Foundation, intermediary, and national advisory board, those involved reported that it was challenging to know where the lines of partnership were drawn. For example, one adviser asked, "Who gets to make decisions and who's advising? Who's being evaluated?"

The intermediary acted as the Foundation's primary representative across the initiative, in addition to providing the professional development supports, which may have created confusion for district and school participants, who were not sure if UEI was acting as initiative managers or as professional development partners. Midway through Phase I of the initiative, the Foundation hired a program officer who took over several of the leadership and management tasks from UEI, especially in relation to the evaluation, which improved the communication substantially between the Foundation and the districts, schools, intermediary, and evaluators.

With multiple entities providing leadership, another 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." Foundation staff were not accustomed to directly engaging with grantees around program decisions because historically the Foundation has functioned more as a grantmaker than a program developer. The Foundation did not see it as their role to determine the necessary supports and activities, and relied on UEI to play that role. Finally, changes in who was involved in initiative leadership among Foundation staff, ELNAC members, and the intermediary further contributed to role confusion. 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 these 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. Interviews indicated that 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. A Foundation leader reflected, "I think a surprise for the Foundation was how prevalent dual language learners are and how ill-equipped the entire educational system is right now to support them." District and school meetings with the DLL expert during the planning year focused on giving the expert an overview of the instructional programs offered to DLL students and did not focus on reviewing the proposed interventions. 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. Interviewed 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. More deliberate planning was needed during the planning year to assess the readiness of districts and schools, including their current capacity and understanding and buy-in of all participants. 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. UEI leaders could have worked with district and schools to prepare teachers for STEP and build buy-in before beginning training. One of the BCCS leaders noted that the biggest lesson learned was that their district should have taken the planning year to plan, take stock of and build teachers' capacity, and help teachers better understand the full program and its expectations. School leaders also wished they could have received a roadmap from UEI for what to expect with the launching of STEP. Another Pathway school leader wished that she had the foresight to have put in place the system pieces during the planning year that they ended up needing to establish during their first and second years of implementation (e.g., creating a school master schedule that enabled more PLC time for shared data review and planning every week). She said, "Had I understood what we needed, I would have used the planning year a different way."

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. Foundation staff knew state and local policies and priorities could potentially influence the initiative's implementation. However, they expected that the Pathway districts and schools would address any conflicts that arose. As a result, the Foundation did not focus explicitly on trying to influence local policies until they hindered initiative implementation and it appeared the districts were not taking the lead in addressing them. The Foundation, with support from UEI, began to try to influence the amount of flexibility and types of supports that the larger districts in particular provided to the Pathway schools. For example, the Foundation and UEI encouraged districts to address certain policies that impacted implementation 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 required. The initiative also ran into some conflicts with districts' supervision of principals and evaluation when UEI principal coaches were not in communication with the associate superintendents who supervised the principals.

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." Thus, initiative leaders knew that 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 any headway with changing systemic issues. The initiative leaders may have benefitted from agreements with districts about certain policies 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. For example, teachers were learning to administer and analyze data from a new formative assessment, make text selections based on assessment data, adopt new instructional frameworks, use new teaching strategies such as guided and shared reading, and implement new classroom management techniques to support small group work. With these numerous demands placed on them, many interviewed teachers reported feeling overwhelmed and wanting more professional development.

Some coaches reflected that teachers were implementing all of these activities but the quality of these activities may have been low because not enough time was dedicated to professional development and coaching around each activity. Similarly, school leaders were trying to learn the new formative assessment, establish new coaching and PLC models, increase expectations

among staff for literacy instruction and student achievement, increase family engagement in literacy, and work on their own leadership skills and school organization. Both teachers and school leaders also were busy addressing many other needs and priorities outside of the initiative, such as work around improving math skills that were similarly low in these schools. 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. For example, schools may have needed an aligned curriculum and practices for supporting DLL students in place first to be better positioned to use STEP to increase student progress.

Similarly, the schools and districts received supports from different entities at UEI. In particular, schools received STEP training and literacy collaborative support from the STEP team, principal coaching from UEI consultants, assistance with the administration and analysis of 5Essentials data and the leadership collaborative from the 5Essentials director and staff, and district superintendent check-ins and central office executive briefings with UEI leaders. During the first year of implementation (2012–13), these supports were not well coordinated. School leaders and teachers were confused by the different UEI team members coming into their schools and did not know who to contact with questions. In response, 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. For example, principal coaches began scheduling their visits at the same time as the STEP data debrief sessions and to overlap with the leadership collaborative meetings to engage the principal and her team in broadening leadership capacity for the school. 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." In particular, teachers reported wanting more assistance with implementing effective instructional strategies and in working with DLL students. 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."

While teachers received training from UEI STEP trainers on general instructional strategies to promote word solving, fluency, and comprehension, teachers requested more prescriptive guidance around designing instruction in response to formative assessment results. However, school leaders requested that UEI keep the focus of STEP trainings on data analysis rather than moving to instructional practice. Thus, there may have been a misalignment between the professional development needs of teachers and the almost exclusive focus on formative assessment. Therefore, initiative leaders may have needed to ensure that UEI trainings and school literacy coaching focused on helping teachers develop lessons or use a comprehensive early literacy curriculum, in addition to using assessment data.

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, "Our district should have had a deeper conversation about alignment or misalignment." Another 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 district literacy 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. Despite the efforts of school leaders to gain teacher buy-in, stakeholders estimated that about a quarter to a third of teachers did not buy in to the strategies promoted by the initiative. The leadership believed that teachers were resisting top-down expectations, while teachers believed that the expectations were not realistic. 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. Not having had widespread buy-in slowed implementation down, as explained by an initiative leader: "So maybe it comes down to buy-in. I think with an externally driven initiative, you have to spend a lot of time building buy-in and telling the tale."

Prioritize collaborative planning time *and how it is used*. Interviewed teachers noted they did not have the time, resources, and training they needed to develop the differentiated instruction required for their various guided reading groups, as well as for whole group instruction and students' independent work time. Teachers reported spending approximately 1 to 2 weeks on assessing children with STEP four times a year but did not have enough individual or collaborative planning time to adequately apply the data to their instructional plans. Districts

and schools tried to use PLC meetings to support collaboration and provide assistance for teachers to analyze data with their peers and use data to plan lessons. However, collaboration time was diminished by conflicts with other curricular priorities that needed attention at PLC meetings or a reduction in the number of PLC meetings available.

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. To support effective planning with data, teachers also needed planning templates, model lesson plans, and coaching. 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.

Therefore, it is important for districts or schools to develop long-term strategies to reduce staff turnover while providing sufficient support to both new and more experienced staff so there is minimal disruption or loss of momentum in improvement efforts. These strategies may include working with teacher unions to prioritize teacher stability, working with districts on hiring policies, and making remaining at schools more desirable by offering special professional development opportunities and substantial time to collaborate and plan with colleagues.

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, the amount of coaching provided, relationships with teachers, and expectations from leadership varied across the Pathway schools and over the years.

Coaches were not able to work with all of the teachers who needed or wanted their support. Sometimes coaches needed to focus on teachers new to the initiative and could not provide sustained support for teachers who had received support in prior years. 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. Further, some teachers were resistant to coaching because they viewed the coaches as an evaluative extension of the school's administration and, therefore, did not trust them. Finally, school leaders did not always make working with the coaches an expectation, and so some teachers did not opt to work with their coach or know if they were allowed to request support.

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. Interviewed 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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Evaluation Methods Appendix

The evaluation team employed multiple evaluation methods to gather qualitative and quantitative data on the Pathway Schools Initiative's program implementation, progress, and outcomes from fall 2011 through fall 2015.

Site Visits and Interviews with District and School Staff. Every fall and spring, the evaluation team conducted interviews using semi-structured interview protocols with district and school administrators, and a sample of approximately eight PreK–3 teachers per school. The administrator interviews asked about school and district policies and practices, changes in the literacy system, the development of PreK–3 pathways, implementation successes and challenges, and perceptions of the initiative and its ability to improve student literacy skills. The teacher interviews asked about teachers' instructional strategies in literacy, professional development in literacy instruction, and collaboration with other teachers. Data from interviews were synthesized in structured debrief summaries after each round of site visits for each district/school, noting similarities and differences in responses by respondent type (e.g., district or school personnel, administrator or teacher, classroom teacher or specialist, grade level). Themes that cut across the districts and schools were identified in cross-case meetings, and then verified through careful review of interviews and debrief summaries to identify all supporting and contradictory evidence. Validated themes were included in reports and briefs.

Interviews with UEI and Foundation Staff and ELNAC Members. Each fall and spring, the evaluation team conducted interviews with UEI staff who provided initiative coordination/leadership, leadership coaching to the principals, 5Essentials survey coordination and training, and STEP and assessment training and coaching to the schools. At the completion on Phase I, in fall 2015, the evaluation team interviewed ELNAC members and Foundation staff, asking them to share their reflections on the Initiative to date. The same analytic methods were used to identify themes and level of evidence for themes among interviews with initiative leaders that were used with district and school interviews.

Parent Focus Groups. Each spring, the evaluation team conducted focus groups at each Pathway school of parents of children in PreK through grade 3. Separate focus groups were conducted for English-, Spanish-, Somali-, and Hmong-speaking families as needed. Each focus group included six parents, on average. The focus groups asked about the supports, services, and information parents received about their child's literacy skills and how parents supported their children, the usefulness of the schools' resources, and additional resources needed. The same analytic methods were used to identify themes and level of evidence for themes among focus groups that were used with interviews.

Observation of UEI Professional Development. Each year, the research team observed approximately three sessions of UEI or other initiative-funded professional development in each Pathway school/district, as well as cross-district workshops.

Student Enrollment Pipeline Data. The evaluation team worked with each of the Pathway districts to collect student enrollment and demographic data, including student race/ethnicity, gender, special education and Dual Language Learner (DLL) status, participation in the free and reduced-price meal program, and grade. Using the student enrollment data provided by each district, the evaluation team identified several cohorts of students who either began at the Pathway schools in PreK or in kindergarten. Students were labeled as either pre-implementation or post-implementation depending on the first year in which the student enrolled and the year in which their school began Pathway implementation. The evaluation team then assessed the sustained enrollment patterns both before and after implementation of the initiative.

Teacher Turnover Data. To determine teacher turnover from the start of Phase I through 2014–15, the research team examined teacher rosters schools submitted for the administration of teacher logs and surveys. The team used the rosters to learn whether PreK–3 teachers present in 2012–13 were still teaching at the school as PreK–3 teachers in 2014–15. In SPPS, 2012–13 data was available for PreK and kindergarten teachers only, so the team calculated teacher turnover starting in 2013–14.

Teacher Logs and Survey. The evaluation team employed two different methods to measure teachers' instructional practices in literacy over the course of Phase I of the evaluation. In the fall and spring of the 2012–13 and 2013–14 school years, teachers completed a log of their daily instructional practices. The log provided a snapshot of teachers' routine literacy practices over five (ideally consecutive) days. The evaluation team switched to a teacher survey in 2014–15 to boost teacher response rates. In spring 2015, teachers completed a survey that captured some of the same information that had been in the log, and it gathered information in new areas that had become of interest during the course of Pathway Schools Initiative implementation, including teachers' experiences with and perceptions of professional development, coaching, collaboration, the STEP assessment, and working with families.

Classroom Observations. To measure teachers' classroom practices, trained observers conducted classroom observations using the Classroom Assessment Scoring System (CLASS) observation instrument. CLASS is an observational tool that focuses on developmentally appropriate classroom interactions.[1] CLASS measures three domains of classroom quality that have been linked to student learning and achievement: emotional support, classroom organization, and instructional support. The evaluation used both the PreK and K–3 versions of the CLASS. Trained and certified observers from the University of Minnesota observed all eligible, consenting PreK–3 grade teachers in the five original Pathway Schools Initiative schools in fall 2012, fall 2013, and fall 2014, and in CPA in fall 2014.

STEP Data. Each of the Pathway districts began using the Strategic Teaching and Evaluation of Progress (STEP) literacy assessment with PreK–3 students in different years. While data from STEP are primarily used to inform teacher instructional planning, the evaluation team used

[1] For a summary of research on CLASS, see: Center for Advanced Study of Teaching and Learning. (n.d.). Retrieved on January 29, 2016, from http://www.teachstone.org/research-and-evidence/research-summary-2/.

STEP data to examine student literacy progress and proficiency. All BCCS and CPA students were assessed with the English STEP, as were MPS and SPPS PreK–3 students in English–based programs. Students in the MPS and SPPS dual language programs were assessed with the Spanish STEP, and some of them (mostly students in grades 2 and 3) were also given the English STEP.

Student MCA-III Reading Achievement. The districts provided the evaluation team with longitudinal student records including enrollment, demographics, and MCA-III results. To better understand the difference the Pathway Schools Initiative may be having on students' literacy performance, the evaluation team compared third-grade MCA-III scores in Pathway schools to those in matched comparison schools in 2012–13, 2013–14, 2014–15. The evaluation team first selected a set of matched schools and then compared the third-grade MCA-III scores for students in the Pathway schools to those in the comparison schools, statistically adjusting for the individual students' demographics (i.e., race/ethnicity, limited English proficiency status, and free or reduced-price lunch eligibility).