High-Quality Curricula

and

Team-Based Professional Learning

A Perfect Partnership for Equity

learningforward

THE PROFESSIONAL LEARNING ASSOCIATION

Learning Forward
504 S. Locust St.
Oxford, OH 45056
Tel: 800-727-7288
Fax: 513-523-0638
Email: office@learningforward.org
www.learningforward.org

Citation for this work: Learning Forward. (2018). *High-quality curricula and team-based professional learning: A perfect partnership for equity.*

Writer and researcher: Lynn Olson
Editor: Tracy Crow
Designer: Jane Thurmond
Image credits: Getty Images

Visit www.learningforward.org to learn more.

Introduction

Scan the vision and mission statements of schools and it is nearly impossible to find a school that doesn't commit to educating "all" students or meet "each" or "every" student's need. Yet we know that many schools fall far short of this mark. Too many students don't experience the same high-quality learning experiences that even their peers across the aisle, hall, or county have access to. This is an equity challenge. Combine the uneven results within and across districts with the fact that the students more likely to be lagging are students of color and students from high-poverty contexts and the equity challenge is compounded.

Among the factors that schools have the power to address, the quality of teaching and the quality of the curriculum materials are two factors that, when integrated and improved with intention, have the potential to answer those equity challenges. When all students experience high-quality teaching, they are more likely to learn. When all classrooms are filled with high-quality instructional materials, students are more likely to learn. Establishing these conditions for all learners will help close achievement gaps.

This report explores the premise that there's nothing more powerful than great teachers skillfully using great instructional materials to motivate and engage students in their learning. Three real-world examples illustrate how schools and school systems are working to support teachers to skillfully use high-quality, standards-aligned curricula, by providing teachers with the time and expertise to use those curricula well, with a focus on team-based, collaborative learning. The report also provides lessons learned across these sites and action steps to get schools and districts started on the journey.

The rationale

When all students experience high-quality teaching, they are more likely to learn. When all classrooms are filled with high-quality instructional materials, students are more likely to learn.

Research has found that effective teaching and high-quality materials both matter for student learning. While educators already know from an extensive body of research that having an effective teacher can dramatically increase student achievement (Rivkin et al., 2003; Gordon, Kane, & Steiger, 2005), now a growing body of evidence underscores the power of high-quality curricula for student growth (Steiner, 2017; Chingos & Whitehurst, 2012; Boser et al., 2015).

The high-leverage strategy to achieve the effective teaching aspect of that equation is already in place in many schools and districts — collaborative learning teams. Learning Forward's Standards for Professional Learning state that, "the body of research about effective schools identifies collaboration and professional learning as two characteristics that consistently appear in schools that substantially increase student learning," (Learning Forward, 2011). At the same time, years of evidence from research and practice demonstrate that not all collaboration or professional learning are effective.

Learning Forward believes that schools will achieve the real power of that professional learning strategy when they make it possible for teachers to engage in job-embedded professional learning aligned with the curriculum they use with students on a daily basis (Taylor et al, 2015; Toon & Jensen, 2017; Wiener & Pimentel, 2017).

Effective use of curriculum requires teachers who understand it deeply and use it with intentionality and professional judgment, based on their particular context and the needs of their students. "Frequent and ongoing professional development is needed to support teachers in understanding, internalizing, and effectively using curriculum," notes Instruction Partners, a nonprofit that works with districts to improve instruction (Instruction Partners, 2017).

Clarifying the work of PLCs

Learning teams or professional learning communities (PLCs) continue to proliferate in schools. Every week, another school district announces the adoption of a new schedule to provide teachers with time in the school day for learning. The definition of professional development in ESSA calls for learning that is "sustained, intensive, job-embedded, classroom-focused, and data driven," (ESSA, 2015). Teacher learning teams epitomize the definition in action. Yet without a purposeful agenda, intentional support and structures, and effective leadership knowledgeable about college- and career-ready standards, learning teams may not achieve their intended outcomes.

Learning communities also have the potential to ensure that teachers share their best ideas across classrooms rather than being confined to a single classroom.

With a focus on the curriculum and specific needs of the students in relation to that curriculum, grade-level, subject-specific professional learning communities enable teachers to plan, execute, observe, reflect on, and revise lessons and units collaboratively, including analyzing student work.

Surveys have found that teachers regularly supplement and modify district curricula or use materials that they or their colleagues have developed (Kane et al., 2016; Opfer et al., 2016). The three big reasons teachers adapt curriculum materials, according to surveys, are: (1) to better align to standards; (2) to meet the needs of students who have gaps in their learning or are advanced; and (3) pacing. Professional learning communities have the potential to ensure that those decisions are made carefully and in ways that increase coherence and learning across classrooms within a school. Learning communities also have the potential to ensure that teachers share their best ideas across classrooms rather than being confined to a single classroom.

There is every day more research on and a growing understanding about the impact of instructional materials along with increasing availability of high-quality, standards-aligned curricula, as identified by EdReports and by the use of curriculum evaluation tools such as IMET (Instructional Materials Evaluation Tool) and EQuiP (Educators Evaluating the Quality of Instructional Products). Therefore, school systems and schools now have an unprecedented opportunity to bring curricula and job-embedded professional learning for teachers together in service of student learning. While there is still much to be learned about how to do this effectively, there are an increasing number of schools and school systems taking on the challenge and providing powerful lessons for others to learn from.

Exemplars in the Field

Going deep at an Atlanta public school
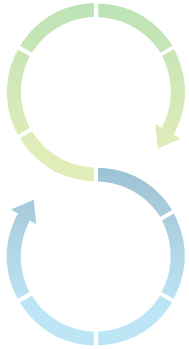
Hollis Innovation Academy is a PreK–6 Expeditionary Learning (EL) School in Atlanta, which opened in 2016 to serve students in a low-performing "turnaround" school that was closed the previous year. It serves 560 students, most of whom are low-income (100% free and reduced priced lunch) and African-American (95%).

EL Education, now in its 20th year, started out as the Expeditionary Learning whole-school design model, but in the past five years has focused on the development of high-quality curricula as a way to support many more schools where students can think critically and take active roles in their classrooms and communities. In addition to developing the popular EngageNY 3–8 English Language Arts curriculum, which is in use in 45 states plus the District of Columbia and has been downloaded over 8.7 million times, EL has recently released an updated interdisciplinary, content-based K–5 Language Arts curriculum, which was found to be fully aligned with standards in EdReport's reviews.

Hollis began implementing the Language Arts curriculum in the 2016–17 school year, with multiple opportunities for teacher learning. "I'm a previous instructional coach myself," says Principal Diamond Jack, "so I really believe in job-embedded professional development, making sure teachers have an opportunity to practice, and knowing it takes time and they're learners just like children are learners."

The focus of any particular PLC meeting is determined by the pacing of the curriculum and data collected during learning walks.

To support teachers in this work, the school has used professional learning communities that meet weekly for 90 minutes during the school day. During these sessions, the school's literacy and math coaches use a co-teaching model to reinforce the transfer of literacy strategies from ELA to math. For example, teachers may work on a particular instructional strategy, like "turn and talk," in which a student discusses an idea with a peer. Or they may spend time using the materials from an upcoming lesson as if they were a student, and then debrief about the big concepts in the lesson. "Having that experience gives teachers the opportunity to bring that emotional piece back to their students," says Wanda McClure, an EL staff member who works with the school, "and really think through not just what am I delivering, but how am I delivering it?"

EL Education brings strong content for the PLCs, such as videos of teachers implementing specific strategies to view and discuss, processes for analyzing student exit tickets, and task cards to help with module- and unit- lesson planning. A detailed curriculum companion supports teacher learning.

The focus of any particular PLC meeting is determined by the pacing of the curriculum and data collected during learning walks, which are another important feature of Hollis's job-embedded professional learning for teachers. Learning walks occur at least every three weeks and are co-led by the literacy and math coach. The walks are designed to illuminate whether the PLCs are helping teachers make the practice shifts they are focusing on, not to evaluate individuals. They both celebrate areas where teachers are excelling at implementing the curriculum and EL Education Core Practices and identify common themes for improvement. Those become the focus of the PLCs over the next two weeks.

Atlanta

Strategy cafes, which occur every four to six weeks in place of a regular one-hour staff meeting, provide an opportunity for teachers to participate in differentiated learning, often building off of themes identified during the learning walks. The cafes offer mini-sessions for teachers, and chances for teachers to visit the classrooms of teacher leaders — one from every grade level — who share their instructional strategies with their peers.

"I think that's what they do really well," says McClure. "There is this continual cycle of 'How well are we doing this' and 'How much better can we be with this?'"

The school also has a designated data room, and the faculty has been trained by the DataWise team at Harvard University to continually use data for improvement — from pre- and post-tests, to unit tests, to measures of oral reading fluency. Those data are pulled into the work of the PLC inquiry teams. "The data piece is really huge for us," says Jack. For example, Hollis's grade-level teams track data from the K–2 Reading Foundations Skills Block throughout the school year to analyze how quickly individual students are progressing in their decoding and encoding skills.

Through this focused, strategic professional learning, both teaching practice and student performance are shifting.

Through this focused, strategic professional learning, both teaching practice and student performance are shifting. In the first year of implementing the EL Language Arts curriculum, for example, the percent of students scoring at the beginner level on the Georgia Milestones Assessment in Reading decreased by 3%. The largest ELA improvement was in grade 5, where the percent scoring at the beginner level declined from 79% in 2016 to 57% in 2017.

"We know a lot about how to develop good curriculum," says Beth Miller, the chief knowledge officer for EL Education. "The professional development that surrounds it, and these more intentional literacy partnerships to help a school or district get there, that's newer work for us."
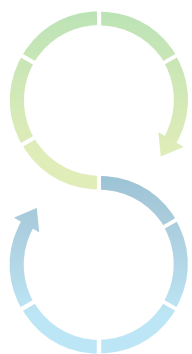
Findings are emerging about the program's impact. Under a five-year, federal i3 grant, Mathematica Policy Research is using a randomized control trial to evaluate EL Education's Teacher Potential Project (TPP). TPP trains teachers in skillful use of EL's English Language Arts curriculum through a series of five institutes throughout the year; ongoing, personalized on-site coaching; and online support.

The study has found that after one year of implementation, "TPP-trained teachers engaged students more in developing reading, writing, and developing content knowledge than teachers who were not trained in the TPP. In addition, the TPP-trained teachers placed more emphasis on having students cite evidence from the text, use higher-order thinking skills, and develop responsibility for their own learning," (Choi & Dolfin, 2017). Although the study focused on novice teachers, the teacher impacts were similar for novice and experienced teachers. Future analyses will focus on both changes in teachers' instructional practices and in student learning.

Atlanta

A districtwide approach to redesigning professional learning in Delaware

In 2013, Delaware's annual survey of teachers found that 92% of teachers were being held to high professional standards for delivering instruction, but only 44% reported receiving professional development differentiated to meet their individual needs. Moreover, teachers said the results of professional development were rarely evaluated or communicated to them.

So, the Delaware Department of Education launched a model for the type of professional learning it hoped to see in the future. Common Ground for the Common Core engaged school teams from across the state in a three-year professional learning cycle focused on shifting instruction to align with the state's new education standards. The state used Guskey's five critical levels for evaluating professional development to track shifts in teaching practice and in student learning (Guskey, 2000). The levels progress from measuring learner reactions to changes in educator practice to improvements in student outcomes.

92% of teachers were being held to high professional standards for delivering instruction, but only 44% reported receiving professional development differentiated to meet their individual needs.

Three years later, the state built on this initiative by launching a competition for districts to redesign their professional learning, with educators' needs in mind and informed by meaningful data and feedback. In the spring of 2016, Delaware awarded over $400,000 in Reimagining Professional Learning Innovation Grants to 21 schools and districts. The recipients agreed to ground their work in Learning Forward's Standards for Professional Learning, which were adopted by Delaware in 2012, and to evaluate the results using Guskey's framework for evaluating professional learning. One of those grantees was the 9,900-student Colonial School District.

"This grant came at a really good time for us," says Crystal Lancour, the district supervisor of curriculum and instruction for mathematics. The district was going through the curriculum adoption process at both the middle and high school levels. Leaders decided to use the grant to help middle schools implement the new math curriculum CMP3, which, while not fully meeting alignment criteria on EdReports, scored well on aspects of rigor, an important area identified by the district. CMP3 is an inquiry-based math program for grades 6–8 that requires students to connect problem solving to practical situations by focusing on such mathematical practices as problem solving, reasoning and proof, communications, representation, and connections. "We wanted to make sure this was something that teachers could buy into," says Lancour, "that it wasn't just one more thing for them to be thinking about."

Leaders in the Colonial School District designed a multi-layered approach to support CMP3 implementation that included both districtwide professional learning and job-embedded learning at each school site:

- Five district professional learning days over the course of the school year familiarized teachers and school leaders with the curriculum.
- Middle school math teachers in the district were already meeting for at least 90 minutes per week in grade-level professional learning communities (45 minutes during the day and at least 45 minutes after school on Mondays) supported by school-based coaches.
- The district also enabled teachers to attend districtwide PLCs by grade level once a month after school, in place of the building-level meetings. These monthly CMP3 and Common Core Chats brought middle school math coaches and teachers together to work on preparing to teach the upcoming CMP unit including aligning curriculum documents with student learning progressions, analyzing student work, practicing instructional routines led by

Delaware

colleagues, such as "number talks," and designing formative assessments to use in teaching.

- Collaborative instructional rounds engaged principals, coaches, math supervisors, and teachers in making observations across school sites to gather descriptive evidence about teaching practice, focused on questioning.
- The Colonial Aspiring Mathematics Leaders, or CAML, program enabled teacher leaders to meet several times during the school year — in addition to Common Core Chats and professional learning days — to read research, conduct book studies, attend national conferences, and design professional learning for other teachers.

The Colonial School District adopted CMP3 because the materials were consistent with the system's focus on inquiry-based learning. Even so, teachers found it challenging to adjust their practices to maintain the curriculum's rigor and focus on conceptual understanding in the classroom.

"One thing we noticed in our schools was that a lot of our questions were lacking rigor," says Ige Purnell, the principal of McCullough Middle School. The instructional rounds focused on the cognitive rigor of mathematical questioning, based on the Cognitive Growth Targets published by Modern Teacher Press (Modern Teacher, 2012). The classroom visits helped educators identify that many of their questions were focused on the retrieval of information and on basic comprehension, as opposed to analysis, reasoning, or metacognition. Purnell found the cognitive growth targets to be so important "that I actually bought flip charts for every teacher in my building to force them to keep thinking, 'What can I do to push my students to the next level?' We use these cognitive growth targets a lot when we're doing our instructional rounds to identify the level of rigor and the types of questions that our teachers ask. Sometimes, you can take an activity and re-word it a little bit and really raise the cognitive demand in an assignment."

During the 2017–18 school year, the rounds were held twice, once in the fall and once in the spring. After visiting three to four classrooms in a school in the fall, teams came together to debrief using sticky notes to highlight any useful evidence and identify trends. This resulted in two to three bite-sized improvements for each school to make before the next instructional rounds in the spring.

McCullough Middle School does more frequent instructional rounds on its own. Jennifer Bonham, the math coach at McCullough Middle School, says, "We needed to pose higher level questions and allow wait time for productive struggle. What was happening was the task was very high-level, but then we'd immediately scaffold it with 10 minutes of instruction or ask a question and then three questions that quickly scaffolded it. That's still our problem of practice."

As part of the state grant, all of the sites committed to working with the Delaware Department of Education and WestEd to collect evidence about the impact of teachers' professional learning at all five levels of Guskey's framework, from gathering participants' reaction to professional learning sessions through exit tickets; to pre- and post-tests of teachers' content knowledge; to evidence of student outcomes.

Based on the pre- and post-tests, Colonial middle school teachers showed growth in their knowledge of math content and the structure of the discipline; the quality of their questions; and their knowledge of pre-requisite relationships in mathematics. The percent of 6th graders who scored at the proficient level on the Smarter Balance mathematics assessment increased from 15% in 2015–16 to 24% in 2016–17. The classrooms of some individual teachers showed even greater growth. "So, we are seeing all this work and effort reach our students," says Bonham.

Delaware

Building a statewide network focused on early literacy in Tennessee
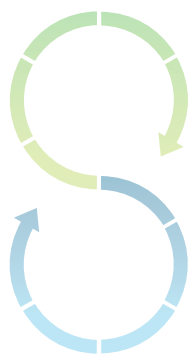
In Tennessee, Leading Innovation for Tennessee Education, or LIFT, is a statewide group of 13 district superintendents working together to share innovative practices that benefit their students. Tennessee SCORE, a nonprofit and nonpartisan state advocacy and research group, formally convenes the network.

In March 2016, the group adopted a common problem of practice based on disappointing state test results in 3rd-grade ELA and their observations of classroom practice: "K–2 students are not yet accessing a high-quality literacy program that lays the foundation for meeting rigorous standards. District teachers and leaders have not yet fully made the shifts that ensure implementation of those standards," (SCORE & TNTP, 2017). Together, the districts made a bet that strong instructional materials that reflect the demands of the Tennessee standards would drive significant improvements in classroom instruction.

…the districts made a bet that strong instructional materials that reflect the demands of the Tennessee standards would drive significant improvements in classroom instruction.

Beginning in spring 2016, TNTP, a national nonprofit that supports states and districts to end educational inequities, worked alongside district leaders to perform an instructional review of early literacy practices in nine of the districts. This included sessions with district staff to build their content knowledge of early literacy instruction, visits to 10–30 K–2 ELA classrooms in each district to observe instructional practices using a walk-through tool adapted from the Student Achievement Partners Instructional Practice Guide, and then debrief sessions to plan next steps. Districts across the network then came together to identify common trends, with TNTP serving as a content partner.

Those initial reviews found that while most K–2 ELA classrooms were teaching such foundational skills as phonics and phonemic awareness with varying levels of quality, few were systematically building students' vocabulary and content knowledge through rich, complex texts appropriate for each grade level. That became the focus for the first 18 months of work.

In the past, many districts had teachers create or compile their own ELA materials, a finding that was true across the state. The Tennessee Educator Survey found the average K–3 reading teacher was spending 4.5 hours per week creating or sourcing materials for daily reading blocks (Tennessee Department of Education, 2017). Almost half of instructional coaches also said they spent time every day helping teachers obtain instructional materials, though few coaches thought it was the most effective use of their time.

So, in the 2016–17 school year, LIFT districts piloted several sets of instructional materials aligned with the state standards in a subset of their classrooms: Core Knowledge Language Arts (CKLA), a full preK–5 curriculum created by the Core Knowledge Foundation; Wit & Wisdom, a K–8 ELA curriculum from Great Minds; and the Read-Aloud Project, an initiative of Student Achievement Partners. Both CKLA and Wit & Wisdom were found to be fully aligned with standards by EdReports. In each district, the materials, pilot program, and support look slightly different, enabling sites to address any context-specific needs even as they learn from each other. But all of them have a strong focus on "read-alouds" to help students build knowledge of the world, vocabulary, and speaking and listening skills before they are able to read complex texts independently.

TNTP supports the implementation through knowledge-building sessions for district leaders; monthly visits to districts to observe instruction and to discuss key trends; occasional curriculum-specific professional learning sessions for teachers and leaders;

virtual cross-district and cross-network PLCs for district leaders focused on specific instructional materials; and regional and statewide convenings of district leaders to norm on high-quality practice and discuss common challenges and potential solutions.

In addition to LIFT activities, 10 of the districts participated in a suite of early literacy programs offered by the state department of education, called Read to Be Ready, designed to build the knowledge of instructional coaches and teacher leaders throughout the state. The Putnam County school district, for example, piloted the Core Knowledge Language Arts curriculum in 2016–17 with at least one teacher in each of its 11 elementary schools, and expanded the Listening & Learning strand of the curriculum across all its K–2 classrooms in 2017–18, along with piloting the curriculum in grades 3–4.

The midsize district supported its Read to Be Ready instructional coaches in providing ongoing, job-embedded professional learning for teachers focused on the curriculum. These instructional coaches now target their classroom observations, feedback on lesson plans, teachers' analysis of student work, and leadership of professional learning communities on implementing the curriculum thoughtfully and intentionally. The five elementary schools without a Read to Be Ready coach receive support from the district ELA specialist.

"In our grade-level PLCs, we bring in all the curriculum and instructional materials to the table," says Carissa Comer, a Read to Be Ready instructional coach. "And then we go through and discuss as a team and decide, 'with this lesson, what does it need to look like.'" Jill Ramsey, the elementary supervisor for the district, says implementation of the curriculum is more consistent in the buildings supported by the Read to Be Ready coaches on a daily basis.

"We have always been one to trust our teachers to use the right materials and the best materials, and they do make good choices," she says, "but it wasn't happening consistently. They were pretty good at choosing good texts, but they may have been using the same good texts three grades in a row and it wasn't building knowledge on important topics."

One of the biggest changes, she says, has been in teachers' expectations for their students. "When we first put the materials in these classrooms, the teachers predominantly said that the kids couldn't do it. To their surprise and shock, the kids could do it and were much more engaged in the lessons and interested in the materials."

Last year, elementary school principals in the districts also used the Instructional Practice Guide, a content-specific, standards-aligned observation tool, to visit each other's schools in teams of four to observe ELA lessons. "We wanted to make sure that they have enough information and comfort level to support and promote the work that the teachers need to do and, ultimately, the student work that we need to see" says Superintendent Jerry Boyd. "If we do not get buy-in from the gatekeepers, which are principals, then we just know we're not as successful."

Working with a partner like TNTP, Boyd adds, "has really expanded our knowledge. It's made our vision more acute. We understand better what we're trying to do. So, I want to impress the importance of using powerful partners for improvement."

The approximately 4,150-student Lauderdale County School District piloted the Wit & Wisdom curriculum in grades K–1 in the 2016–17 school year and expanded to grades 2–3 in 2017–18. The school system took advantage of weekly PLCs and common planning time to enable grade-level teams to come together to read the materials, prepare lessons, and figure out how the materials and assessments worked. "We've done a lot of modeling and coming back and debriefing through the PLCs," says Jennifer Jordan, the district's literacy director. Wit & Wisdom is challenging both because of its rigor, she says, and because it's new.

Tennessee

"I don't know how we would have done it, if we didn't have PLCs, and we couldn't touch base on that weekly basis." The district also has three days set aside for professional learning during the school year and scheduled book studies after school.

At the end of last school year, the district conducted focus groups with teachers to get feedback on planning, grading, pacing of the materials, and lessons learned. As a result of that feedback, the district is now piloting a standards-based report card in some 1st grade classrooms, which is more aligned with the new curriculum. This spring, teachers also will use the PLCs to analyze student writing tasks more closely, because of the increased demands those tasks place on students and teachers. "One of the biggest challenges with writing is students just have not written independently," says Jordan. "So, we have really raised expectations on writing, and what we're finding is our kids are meeting our expectations."

So, we have really raised expectations on writing, and what we're finding is our kids are meeting our expectations.

A September 2017 report published by SCORE and TNTP, *Early Literacy Implementation Work: Annual Report,* found significant progress across the districts in the first 18 months of work (SCORE & TNTP, 2017):

- A third of literacy classrooms showed some or full alignment to the state's ELA standards, compared to less than 10% during the 2016 diagnostics. Of particular importance was a shift in the quality of texts in classrooms. During the diagnostic visits, only 21% of lessons were centered on high-quality, complex texts. By the end of the first semester of implementation in districts piloting strong instructional materials, 86% of lessons were centered on high-quality complex texts.

- Almost 9 in 10 teachers felt "more supported" because of this work. A February 2017 survey of 241 teachers piloting materials across the nine districts, found 97% said the materials were "easy to use," 84% felt "more supported as a result of the materials," and 87% said the materials "allowed them to deliver higher quality lessons than before."

- More than 9 in 10 teachers believed this work "benefits the students" in their districts. 84% said students were "more engaged with these materials," 96% said "vocabulary is growing noticeably" with these materials; and 92% said "overall, these materials benefit the students of my district." Teachers found the materials particularly beneficial with struggling students.

Now, instead of spending their valuable and limited time searching for resources, teachers can focus on honing questions and tasks and planning how to deliver instruction to meet the particular needs of their students. According to the report, teachers are using their collaboration time to identify which questions to spend more or less time on during discussions with students, how to supplement or improve the rigor in classroom activities, and how to differentiate instruction for students.

In the 2017–18 school year, LIFT teachers using the new instructional materials are taking part in a cycle of continuous improvement centered at the unit level, during existing professional learning structures, such as grade-level PLCs. "This type of curriculum analysis is the core work of the teaching team," according to the report, and will include three components: (1) teachers prepare for the unit by reading all texts and considering vocabulary, concepts, big ideas, and end-of-unit tasks that allow student to demonstrate their understanding of the unit; (2) teachers implement this plan, including individual lesson planning, and teach the unit and discuss and fine-tune along the way; (3) teachers reflect and debrief after completing each unit, including looking first at student work on the culminating task. This informs how the unit will be taught in the following year and how instruction should change for the next unit.

Tennessee

The Solution: Team Learning

Teachers learning in teams grounded in high-quality curricula

The inquiry cycle now being piloted across the LIFT districts is similar to the teacher-led cycle of continuous improvement described by Learning Forward in *Becoming a Learning Team.* (Hirsh & Crow, 2017). As part of this cycle, teacher teams: (1) examine student and educator learning challenges by analyzing data and examining trends; (2) identify shared goals for student and educator learning based on the data; (3) gain new knowledge and skills aligned with those goals by learning individually and collaboratively; (4) implement their new learning in classrooms; and then (5) monitor, assess, and adjust their practice as a result.

Team and school leaders will need to decide the priorities within the curriculum that demand attention of the team for each cycle and throughout the year.

Team and school leaders will need to decide the priorities within the curriculum that demand attention of the team for each cycle and throughout the year. Preferably, this would occur in grade-level, subject-specific teams both within schools and across a district, so that teachers can focus on the actual content they are using with students.

In contexts where teams can collaborate across a district, a 6th-grade math team would work with other 6th grade math teams. Ideally, the teams also would have opportunities to connect vertically with other grades to ensure coherence. An advantage of high-quality, aligned curricula is that by their nature, they provide greater coherence and vertical alignment across grades than having teachers in each classroom develop their own materials. This alignment and consistency also ensure equity, where all students have access to the same high-quality materials, and in districts that prioritize team-based learning — to high-quality teaching as well. Teachers also need opportunities for webinars and workshops to go deep on areas of particular need within the curriculum.

Given educators' limited time, teacher teams will be forced to choose among high priorities. They don't have the hours to study everything every year. For example, the Colonial

Learning to use a new curriculum is a multi-year arc.

School District focused during 2016–17 on the rigor of mathematical questions, and the LIFT districts focused on literacy "read alouds" and knowledge-building sessions. Teams may go deep on six units in a year, working through the cycle, with the cycle adapted to meet the needs of the participating teachers and their students. There's value in going deep, developing expertise, lessons, knowledge, and products that will carry over year to year.

Learning to use a new curriculum is a multi-year arc. What teachers do in their first year of teaching a new curriculum is different than what they might do in year five, when the focus is less on learning the fundamentals and more on how to make the curriculum sing for every student in the class. Recognizing that there will be implementation dips, new teachers coming on board, and other inevitable changes, teacher teams will always need to monitor progress and adjust as they go; their growing skills in using the stages of an inquiry cycle will be essential.

Lessons Learned

While all three of the sites described above continue to improve how they bring collaborative professional learning and high-quality, standards-aligned curriculum together, there are some early lessons:

Selecting high-quality, aligned curricula is key

Districts such as those in the LIFT network engaged in a comprehensive review process of multiple sets of high-quality instructional materials, involving administrators, building leaders, teachers, and occasionally community members, using tools such as the Instructional Materials Evaluation Tool and reviews from organizations such as EdReports. They've then thought carefully about how to pilot these materials and increase their use over time so that teachers can build both their knowledge and comfort level.

As Instruction Partners' interviews with early implementers of curriculum found, "Most teachers feel empowered, unburdened, and more creative when they have strong materials. Our research shows us that teachers who understand and believe in the type of instructional shifts necessary to raise student achievement are looking for high-quality curriculum to meet students' needs. And when they find it, it is like water in the desert. In fact, several respondents noted that having strong materials allowed them to spend their time on important content work and analyzing student data to inform intervention efforts, as opposed to searching the internet for supplementary materials or using resources like Teachers Pay Teachers and Pinterest" (Instruction Partners, 2017).

Using a standards-aligned curriculum well requires skillful professional learning

While rigorous student standards and expectations result in new classroom content and instructional processes, support for most teachers to make these shifts has been limited.

For many teachers, new state standards are still just that — new. While rigorous student standards and expectations result in new classroom content and instructional processes, support for most teachers to make these shifts has been limited. Using a standards-aligned curriculum requires hard work to unpack and understand the curriculum, learn and test new instructional routines, figure out the pacing with students, and formatively assess student progress. This work requires time for teachers who are working on the same curriculum at the same grade to collaborate and figure it out together. Some standards-aligned curricula, like EL's Language Arts Curriculum, are described as "educative curriculum" because they have built-in supports and contents to support teacher learning, (Davis & Krajcik, 2005). EL's *Your curriculum companion: The essential guide to teaching the EL Education K–5 Language Arts Curriculum,* for example, provides extensive teaching notes, guidance for using new instructional techniques and protocols, suggestions for supporting English language learners, and step-by-step practices such as leading students in close and careful reading of complex texts or citing evidence in writing (Woofin & Plaut, 2017). Resources like these can be incredibly valuable to the collaborative

learning process. Unfortunately, too few curricula can yet be described as educative. Implementing a new curriculum — and knowing when and how to adjust or make modifications to address specific student needs — requires professional learning that enables teachers to actually experience, understand, and practice with the new materials. As Davis and Krajcik note, even educative curriculum materials will almost certainly be more effective if used in conjunction with other forms of support. Some PLCs, for example, are using EL's *Curriculum Companion* to do a year-long book study.

Investing in leadership at the school and district levels is essential

One of the challenges in skillfully using new curricula is having school and district leaders who actually understand the content, expectations, and practices embedded in the curriculum. All of the sites described in this article spent considerable time and effort to ensure district and building leaders also were deeply familiar with the new curriculum. This is important because these leaders are constantly making decisions about resource and time allocations, human capital management, and teacher evaluations and observations, all of which can influence how well a curriculum is used.

For example, the instructional rounds process that leaders in the Colonial School District used engaged leaders at all levels in examining teacher practices related to new curriculum materials. Such processes are critical for building coherence across a district and at the same time, they require explicit attention to learning for school and system leaders. Using such observation protocols effectively, and drawing lessons from them, requires support for leader learning.

Ensuring expert teacher leaders is also important

Based on interviews with 52 educators implementing new curricula, representing 70 schools across 16 states and the District of Columbia, Instruction Partners found,

Teachers need the expertise to not only lead teams but also offer content and pedagogical support and serve as models for assuming collective responsibility for all students.

"Professional development that is 'frequent and ongoing' was named by respondents as a recommendation for strong implementation, as was having an experienced teacher-leader collaborating with and supporting staff with the content and pedagogy. Respondents also said consistent support from the school and district administration that reflects a vision of success was critical," (Instruction Partners, 2017).

The role of teacher leaders is essential in this process. They will in many cases take the lead in facilitating learning teams, keeping people focused and on task when there are so many issues in schools that demand their attention. Teachers need the expertise to not only lead teams but also offer content and pedagogical support and serve as models for assuming collective responsibility for all students. They drive this effort on the ground, helping their peers understand that achieving excellence and equity for students happens in classrooms every day because of their commitment to improve continuously.

Effective team learning is part of a larger instructional improvement and learning system

As Learning Forward's Standards for Professional Learning make clear, team-based collaborative learning is just one component of a coherent instructional improvement or learning system whose end goal is improving student learning. Studies have found that intentionally creating instructional infrastructures that give teachers multiple, robust opportunities to learn from more informed peers, such as teacher leaders, can change both teacher mindsets and practices, (Spillane, Hopkins, & Sweet, in press). The sites described in this paper are all intentionally weaving together multiple components of an instructional improvement system grounded in high-quality curriculum. James Hiebert and James W. Stigler describe one such system for improvement in Japanese K–8 lesson study (Hiebert & Stigler, 2017). Such systems require shared goals for student learning and curriculum, assessments, and professional learning aligned to those goals.

Learning systems, in Learning Forward's language, are systems that improve continuously, or learning organizations, as well as systems where every educator at every level works as a learner and supports the learning of others. In learning systems, "individuals understand their role in and responsibility for helping the district achieve its vision, mission, goals, and objectives. In learning systems, educators at every level of the organization share responsibility for student and adult learning, dedicate themselves to continuous improvement, use data to drive decisions, and monitor and adjust their practices based on feedback," (Hirsh, Psencik, & Brown, 2018).

Learning Forward's Professional Learning Standards suggest that, in addition to school-based teacher teams, professional learning within a coherent instructional improvement infrastructure must include:

- Skillful leaders, who develop capacity and advocate for and create support systems for professional learning;
- Resources that are prioritized, monitored, and coordinated for educator learning;
- A variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning;
- Effective learning designs that integrate theories, research, and models of human learning to achieve its desired outcomes;
- Implementation that supports long-term change, based on understanding the change management process;
- Outcomes aligned with educator performance and state education standards.

Challenges Ahead

Aligning assessments, observations, and curriculum

One of the biggest challenges in connecting the use of new curricula to the data-based inquiry cycles used by well-structured PLCs is to ensure that the assessment data used by PLCs is actually aligned with the curriculum. Otherwise educators run the risk of teams examining data that do not identify problems that can be addressed in the curriculum. Many schools and district invest in developing their own formative assessments, end-of-unit tasks, and performance tasks to help generate additional student data aligned with the curriculum.

Establishing sufficient regularly scheduled time and structures for PLCs and other learning strategies

The quantity of work and deep learning that can be accomplished in learning teams is directly related to the amount of time teams have to work together. Yet not all time spent in collaboration is valuable — just as important is knowledgeable support, facilitation, and participation with purposeful agendas and shared goals.

The quantity of work and deep learning that can be accomplished in learning teams is directly related to the amount of time teams have to work together.

Also important and challenging is prioritizing time for instructional rounds and walk-throughs that enable teachers and others to visit classrooms and share expectations for excellent instruction. Expert guidance for these learning designs is essential. Some sites have developed their own "look for" documents to make these rounds more focused and impactful and some are using tools like Student Achievement Partners' Instructional Practice Guides or TNTP's Core Rubric. Other sites are experimenting with video or classroom artifacts that teachers can examine after school as a way to observe and discuss practice. The power that sites in this paper have found from combining formative classroom observations with more dedicated team time should not be ignored.

Applying change management strategies

Making meaningful shifts in curriculum and professional learning will not happen overnight and everything will not go smoothly. Leveraging change research and management tools will assist the leadership team and individual leaders responsible for its overall success to support the process through its ups and downs. Such strategies will address the benefits of strong teacher engagement from the outset; staying resilient through potential implementation dips; addressing the psychological and managerial challenges teachers face when implementing substantive changes; and monitoring and assessing progress and celebrating successes both large and small.

Standards-aligned curricula, which embody the instructional shifts in college- and career-ready standards, require significant changes in teaching practice and in expectations for students. This necessitates intentional sequencing of implementation activities and the engagement of teachers and others in the work.

Next Actions

The following actions will help schools and districts integrate professional learning and high-quality curricula at whatever stage of the journey they are on.

Build deeper knowledge about this issue

The evidence demonstrating the importance of a high-quality curriculum is emerging seemingly on a monthly basis, so staying on top of recent information will help school and system leaders understand and build the case for a concentrated focus on this issue.

While the references section of this paper offers a full reading guide on the issue, start the learning journey with these key pieces:

Wiener, R., & Pimentel, S. (2017). *Practice what you teach: Connecting curriculum and professional learning in schools.* Washington, DC: Aspen Institute. Available at https://assets.aspeninstitute.org/content/uploads/2017/04/Practice-What-You-Teach.pdf.

Steiner, D. (2017, March). *Curriculum research: What we know and where we need to go.* Washington, DC: StandardsWork. Available at https://standardswork.org/wp-content/uploads/2017/03/sw-curriculum-research-report-fnl.pdf.

Brown, F. (2018, Feb. 22). *How systems can support high-quality curricula.* Oxford, OH: Learning Forward. Available at https://learningforward.org/publications/blog/learning-forward-blog/2018/02/22/how-systems-can-support-high-quality-curricula.

Hirsh, S. (2018, Jan. 25). *Focus professional learning communities on curriculum.* Oxford, OH: Learning Forward. Available at https://learningforward.org/publications/blog/learning-forward-blog/2018/01/25/focus-professional-learning-communities-on-curriculum.

Assess the quality of the curriculum

Once they understand the importance of a high-quality curriculum, district and school leaders will next want to examine the quality of materials in use at their schools.

Questions to ask include:

- Is the curriculum aligned to the standards students need to master? According to what evidence?

- Do the materials offer educators guidance on understanding the rigorous content covered and the instructional practices required for implementation?

- Are teachers in the school or district spending significant time crafting their own lessons or materials because either those included in the curriculum don't align to standards or because teachers don't know how to implement them?

> Organizations and resources useful for this process include:
>
> The curriculum ratings on EdReports: https://www.edreports.org/.
>
> The Instructional Materials Evaluation Tool from Student Achievement Partners: https://achievethecore.org/page/1946/instructional-materials-evaluation-tool.
>
> EQUIP (Educators Evaluating the Quality of Instructional Products) facilitated by Achieve: https://www.achieve.org/our-initiatives/equip.

For those districts and schools without a high-quality curriculum in place, these sites offer a first step for outlining processes to select materials.

Establish professional learning communities

In schools or districts where learning teams or PLCs are not established, education leaders will need to take the first steps to establish them. Having a strong purpose — that is, building teacher capacity to implement aligned curricula — will be a critical rationale to make the case that learning team time is worth the investment.

A useful step in establishing learning teams is finding the time to do it. School or district leaders will need to establish their vision for collaborative learning, create a schedule, and find the support teachers need to do this well.

This Learning Forward toolkit, *Establishing time for professional learning,* outlines a process to create a new schedule and justify the investment: https://learningforward.org/docs/default-source/commoncore/establishing-time-for-professional-learning.pdf?sfvrsn=8

Strengthen learning teams

Many schools and districts already have structures in place for team learning. In that case, questions to examine include:

- Are teams or communities focused tightly on the materials and standards teachers are implementing in classrooms?
- Are strong processes in place to support curriculum-embedded learning cycles?
- Do teams have sufficient time set aside during the work day for this important focus?

Consider taking time to assess what takes place within PLCs and use that information to make a case for transitioning to new processes. Engage team leaders in conversations about challenges and opportunities they see associated with their current practices. Test new strategies with early champions who will be able to provide reassurance to colleagues who may be skeptical of more prescriptive processes.

A useful overview of the learning team cycle is offered in this issue of *Tools for Learning Schools:* https://learningforward.org/publications/tools-for-learning-schools/tools-for-learning-schools/2015/11/20/tools-for-learning-schools-fall-2015-vol.-19-no.-1.

Develop building- and team-level expertise

Do the teacher leaders, instructional coaches, or others leading PLCs have the curriculum, content, and pedagogical content expertise to help lead a well-structured PLC, as well as the tools to ensure teachers' time is used well? Leaders may need to make the case for more learning focused on supporting teachers in curriculum implementation, and that support extends from teachers to coaches to school leaders to district leaders.

Consider an internal leadership academy for those who will lead this effort. Establish learning communities for building and team leaders so that they can preview and experience the kinds of protocols they will be asked to facilitate for others. As they do so, they model their own commitment to continuous learning and improvement.

Conclusion

Great curricula combined with great teaching create a powerful synergy for addressing inequities and achieving excellence for all. Schools and districts will achieve this synergy when they commit the resources and energy toward ensuring educators are supported to do this work well.

References

Boser, U., Chingos, M., & Straus, C., (2015). *The hidden value of curriculum reform.* Washington, D.C.: Center for American Progress. Available at https://www.americanprogress.org/issues/education-k-12/reports/2015/10/14/122810/the-hidden-value-of-curriculum-reform/

Chingos, M. & Whitehurst, R.G. (2012). *Choosing blindly: Instructional materials, teacher effectiveness, and the Common Core.* Washington D.C.: Brookings Institution. Available at https://www.brookings.edu/research/choosing-blindly-instructional-materials-teacher-effectiveness-and-the-common-core/

Choi, J., Richman, S., & Dolfin, S. (2017). Transforming teachers' practice: The impact of EL Education's English Language Arts curriculum and professional learning on teacher practices, *In Focus,* Princeton, N.J.: Mathematica Policy Research. Available at https://eleducation.org/uploads/downloads/Final-In-Focus-Brief-to-EL-10-19-17.pdf

Davis, E.A. & Krajcik, J.S. (2005, April). Designing educative curriculum materials to promote teacher learning, *Educational Researcher, 34*(3). Available at http://www.project2061.org/research/ccms/site.archive/documents/Promote_Teacher_Learning.pdf

Davis, E.A., Palincsar, A.S., Smith, P.S., Arias, A., & Kademian, S.M.(2017, May). Educative curriculum materials: Uptake, impact, and implications of research and design, *Educational Researcher, 46*(4). Available at http://journals.sagepub.com/doi/pdf/10.3102/0013189X17727502

ESSA. (2015). Every Student Succeeds Act of 2015, Pub. L. No. 114–95 § 114 Stat. 1177 (2015–2016).

Gordon, R., Kane, T. J., & Staiger, D. O. (2006, April). Identifying effective teachers using performance on the job. *Hamilton Project Discussion Paper.* Available at https://www.brookings.edu/wp-content/uploads/2016/06/200604hamilton_1.pdf

Guskey, T.R. (2000). *Evaluating professional development.* Thousand Oaks, CA: Corwin.

Hiebert, J. & Stigler, J.W. (2017, May). Teaching versus teachers as a lever for change: Comparing a Japanese and a U.S. perspective on improving instruction. *Educational Reseacher, 46*(4). Available at http://journals.sagepub.com/doi/abs/10.3102/0013189X17711899

Hirsh, S. & Crow, T. (2017). *Becoming a learning team: A guide to a teacher-led cycle of continuous improvement,* Oxford, OH: Learning Forward.

Instruction Partners. (2017). *What does it take to implement a strong curriculum effectively: Part one; What do we know about the experience of schools implementing rigorous curricula?,* Nashville, TN: Instruction Partners. Available at https://static1.squarespace.com/static/589d1b9ebe65941098d57d14/t/5a25c092419202d42eb86600/1512423571971/IP+Curriculum+White+Paper+FINAL.pdf

Jensen, B., Sonnemann, J., Roberts-Hull, K., Hunter, A. (2016). *Beyond PD: Teacher professional learning in high-performing systems.* Washington D.C.: National Center on Education and the Economy. Available at http://www.ncee.org/wp-content/uploads/2015/08/BeyondPDWeb.pdf

Kane, T., Owens, A., Marinell, W., Thal, D., & Staiger, D. (2016, February). *Teaching higher: Educators' perspectives on Common Core implementation.* Cambridge, MA: Center for Educational Policy Research, Harvard University. Available at https://cepr.harvard.edu/files/cepr/files/teaching-higher-report.pdf

Learning Forward. (2011). *Standards for Professional Learning.* Oxford, OH: Learning Forward.

Modern Teacher. (2012). *Cognitive Growth Targets: Questioning.* Washington, D.C.: Modern Teacher Press.

Opfer, V. D., Kaufman, J.H., & Thompson, L.E. (2016). *Implementation of K–12 state standards for Mathematics and English Language Arts and Literacy: Findings from the American teacher panel.* Santa Monica, CA: RAND Corporation. Available at https://www.rand.org/pubs/research_reports/RR1529-1.html

Rivkin, S.G., Hanushek, E.A., & Kain, J.F. (2002). *Teachers, schools, and academic achievement,* University of Texas-Dallas Schools Project.

Spillane, J.P., Hopkins, M., & Sweet, T. (In press). School district educational infrastructure and change at scale: Teacher peer interactions and their beliefs about mathematics instruction, *American Educational Research Journal,* in press.

State Collaborative on Reforming Education & TNTP. (2017, September). *Early literacy implementation work: Annual report.* Available at https://lifteducationtn.com/wp-content/uploads/2017/11/LIFT-Education-Annual-Report-2017_FINAL.pdf

Steiner, D. (2017, March). *Curriculum research: What we know and where we need to go.* Washington, D.C.: StandardsWork. Available at https://standardswork.org/wp-content/uploads/2017/03/sw-curriculum-research-report-fnl.pdf

Steiner D., Berner A., & Hopkins, J., (2017, August). *Hiding in plain sight: Leveraging curriculum to improve student learning,* Washington, D.C.: Chiefs for Change. Available at http://chiefsforchange.org/policy-paper/4830/?utm_source=policy-paper&utm_medium=website&utm_campaign=hiding-in-plain-sight

Taylor, J.A., Getty S.R., Kowalski, S.M., Wilson, C.D., Carlson, J., & Van Scotter, P. (2015). An efficacy trial of research-based curriculum materials with curriculum-based professional development. *American Educational Research Journal.*

Tennessee Department of Education. (2017). *Educator insights: Takeaways from the 2017 Tennessee educator survey.* Available at https://tn.gov/assets/entities/education/attachments/data_survey_report_2017.pdf.

Toon, D. & Jensen, B. (2017). *Teaching our teachers: A better way: Using k–12 curriculum to improve teacher preparation,* Melbourne, Australia: Learning First. Available at http://learningfirst.com/wp-content/uploads/2018/03/2columnsITECoPPaper3CurriculumFINAL16Nov17.pdf

Wiener, R. & Pimentel, S. (2017). *Practice what you teach: Connecting curriculum and professional learning in schools.* Washington, DC: Aspen Institute. Available at https://assets.aspeninstitute.org/content/uploads/2017/04/Practice-What-You-Teach.pdf

Woodfin, L., & Plaut, S.N. (2017). *Your curriculum companion: The essential guide to teaching the EL Education K–5 language arts curriculum,* New York: EL Education.

THE PROFESSIONAL LEARNING ASSOCIATION

Learning Forward is a nonprofit, international membership association of learning educators committed to one vision in K–12 education: Excellent teaching and learning every day. To realize that vision Learning Forward pursues its mission to build the capacity of leaders to establish and sustain highly effective professional learning. Learning Forward's Standards for Professional Learning, adopted in more than 35 states, define the essential elements of professional learning that leads to changed educator practices and improved outcomes for students. Information about membership, services, and products is available from:

Learning Forward
504 S. Locust St.
Oxford, OH 45056
Tel: 800-727-7288
Fax: 513-523-0638
www.learningforward.org