MEET THE PROMISE OF CONTENT STANDARDS:

PROFESSIONAL LEARNING REQUIRED

learningforward

TRANSFORMING PROFESSIONAL LEARNING

Learning Forward
504 S. Locust St.
Oxford, OH 45056
513-523-6029
800-727-7288
Fax: 513-523-0638
E-mail: office@learningforward.org
www.learningforward.org

Author and project director: Joellen Killion
Editor: Tracy Crow
Designer: Brian Deep
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Learning Forward's *Transforming Professional Learning to Prepare College- and Career-Ready Students: Implementing the Common Core* is a multidimensional initiative focused on developing a comprehensive system of professional learning that spans the distance from the statehouse to the classroom. The project will reform policy and practice and apply innovative technology solutions to support and enhance professional learning. With an immediate focus on implementing Common Core State Standards and new assessments, the initiative provides resources and tools to assist states, districts, and schools in providing effective professional learning for current and future education reforms.

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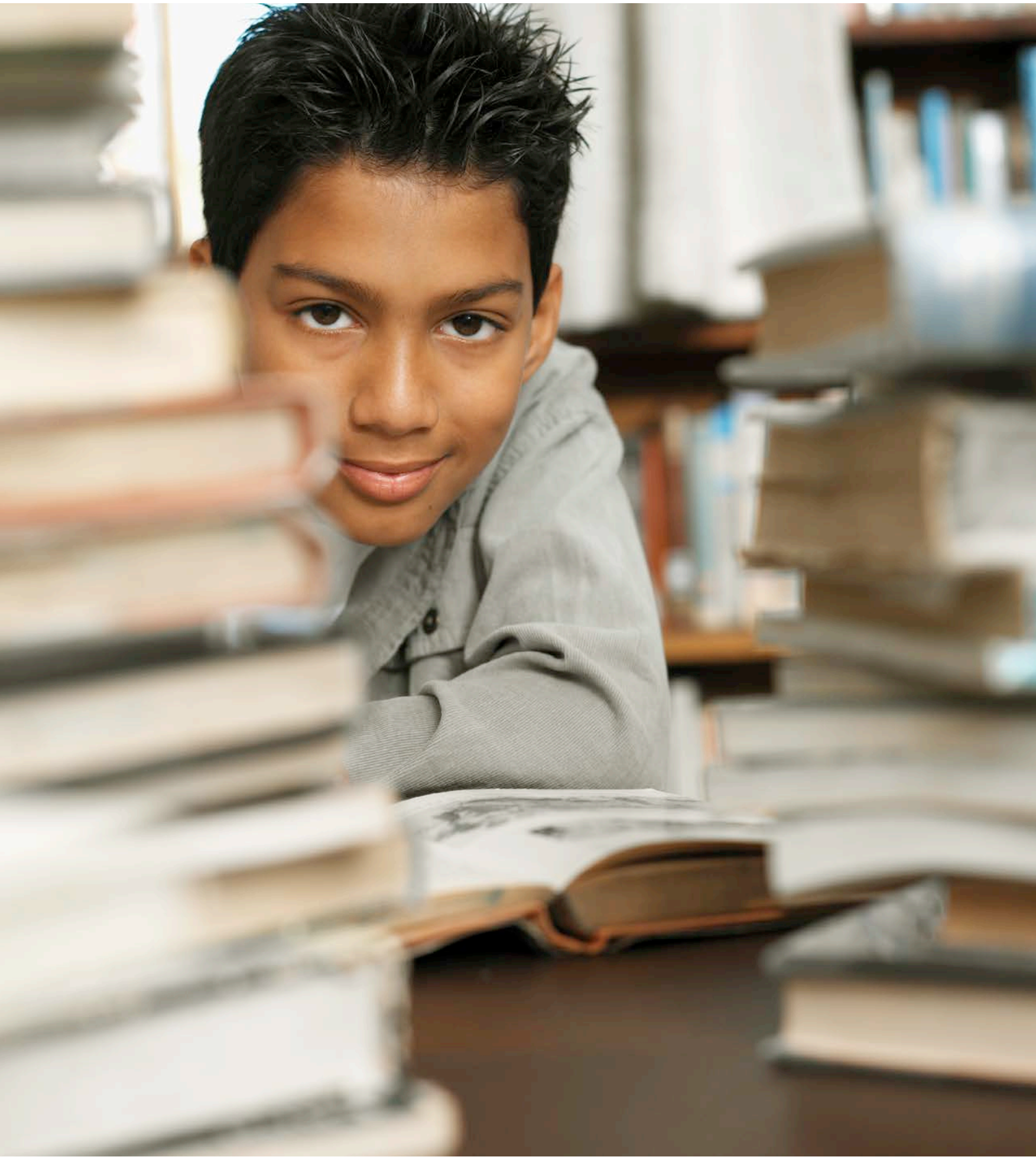

Jorge walked slowly toward the front door of Jackson Middle School for the first day of school. It was his fourth school since he began school as a third grader. The bell rang, and along with nearly a thousand others, Jorge began another school year. He knew he hoped he would fit in, do okay in his classes, and stay out of trouble. He hoped his teachers would be helpful. So far, his experience didn't give him much hope.

He walked down the long hallway, up the stairs, and into Mr. Schultz's homeroom. Schultz greeted him with a hearty welcome and invited Jorge to choose a seat. Soon the room filled with the noisy presence of 27 other 7th graders.

Mr. Schultz called the group of students to attention and began to tell them that middle school would be both fun and challenging. "My mission as your advisor," said Schultz, "is to be sure that every single one of you finishes school ready for a career or college, whichever you choose. I expect every one of you to get nothing less than a B in every class. If your grades are lower, I will personally tutor and support you until the grade comes up." This didn't sound like what other teachers had said to Jorge before.

Mr. Schultz asked students to write down what they wanted to accomplish in 7th grade and to prepare to read it aloud. Panic struck Jorge. Write and read aloud. Soon everyone would realize how much he struggled with English. After about five minutes, Mr. Schultz announced it was time to begin. He indicated that goals change over time so students could change theirs if necessary. He also said they were responsible for helping one another achieve their goals so they were to listen carefully to the goals other students wrote. Lastly, he said, students would be accountable for their goals and that he expected them to report in at least every three weeks about how they were meeting their goals.

Next, in a complete surprise, Mr. Schultz repeated what he said in broken Spanish. He them invited Jesmilla to share her goals in español. Jorge, whose eyes were already wide open, looked across the room as Jesmilla stood and read her goals in Spanish and then repeated them in English. Mr. Schultz took notes, smiled at Jesmilla encouragingly, and assured her that her goals were both lofty and doable if she committed to work hard this year. Next Schultz called Jorge. With some hesitation, Jorge stood, as Jesmilla had, and read his goals in English. Mr. Schultz nodded, smiled, and responded in Spanish congratulating

him for using English and letting him know that is was okay to speak in Spanish wherever he wanted. "I might not understand you at first, however, if you help me, I'll be able to understand everything you said. My Spanish is not as good as your English. I hope I can learn from you."

Richard Schultz was a 20-year veteran teacher of social studies. Over the length of his career, students in his school were increasingly more diverse than they had been when he began in the school. The previous year, the state required all school districts to implement the new state college- and career-ready academic standards. Most of Schultz's colleagues in the social studies department were shocked to learn that they would be expected to embed more literacy into their curriculum and instruction especially since social studies was not a tested subject. Their surprise was coupled with frustration when the new educator effectiveness system was introduced and student performance on state assessments, even in subjects not tested in the past, would be a portion of the criteria for each teacher's performance review.

During the summer before the official implementation, Schultz participated in curriculum remodeling, seven days of professional learning to experience firsthand the changes in classroom curriculum and instruction that included time for teachers to work to plan several units using the new curriculum. Schultz chose to work on the team of teachers who focused on meeting the needs of ELL students. One of the key principles underlying the work of Schultz's team was meeting students on a personal level. They created formative assessments, units, lessons, and adaptations to other teams' products. They screened print and electronic resources to select instructional resources that would meet various levels of language proficiency. They particularly stressed academic language for social studies and developed a list of key concept terms they wanted all students to master for reading and writing about social studies.

Schultz, like Jorge, felt apprehensive about what was ahead for the school year because so much was new and so much of it high-stakes change, for him and his students. Schultz was comforted in knowing he would have opportunities during weekly collaborative learning teams and monthly districtwide learning teams to learn with his colleagues as they revamped what they developed in the summer, added more lessons, units, and assessments, shared samples of student work, and continued to expand their knowledge, skills, and practices related to the new academic content standards and the requisite instructional shifts. He wanted to use his own experience to create the same level of comfort for his students as they started a new school year, one in which they too faced a good deal of change.

Jorge's and Schultz's stories play out in schools nationwide. Meeting the unique and diverse needs of students challenges educators daily. And, the demand for improvement increases at the same pace. Enormous efforts are underway in school systems and state agencies across the country to design and implement multiple, high-stakes changes in educator effectiveness systems, college- and career-ready standards, and assessments. These changes bring both anticipation for promising results for all students and anxiety about implementing such profound change in such a short time. Along with broad-based support for these changes are debates in schoolhouses and statehouses about the scope, speed, and costs of the changes.

From this landscape emerges a strong consensus about the importance of effective, well-prepared educators who have significant roles in the success of each reform effort. Nearly every conversation or presentation about implementing college- and career-ready standards, educator effectiveness systems, or new assessment systems quickly coalesces on this one premise: The success of these initiatives depends on the capacity of educators, particularly teachers and principals, who are fully responsible for implementing them as a routine part of their daily work.

Policy makers, decision makers, elected officials, and educators themselves agree that full implementation of the college- and career-ready standards, resulting new curricula, new assessments, and educator effectiveness systems requires extensive professional learning. It is clear that these changes cannot wait for a new generation of teachers and school administrators to emerge from teacher and principal preparation programs. Teachers and principals who are employed in schools need intensive and ongoing professional learning to develop and re-

fine their existing practices to meet their new responsibilities related to educator evaluation; Common Core State Standards or college- and career-ready standards; rigorous, more personalized education for every student; and new assessments.

Local, state, and federal leaders identify professional learning as a significant lever for change. The U.S. Department of Education (2010) recommends that U.S. schools and school systems prepare students for college and careers by "implementing a complete education through improved professional development and evidence-based instructional models and supports" (p. 1). "The most powerful strategy school systems have at their disposal to improve teacher effectiveness is professional development," asserts Stephanie Hirsh, executive director of Learning Forward. "It is available to almost every educator, and—when planned and implemented correctly—it ensures that educators acquire the knowledge and skills necessary to help more students meet standards" (Learning Forward, 2011, p. 4). The American Federation of Teachers' resolution on the rollout of Common Core standards includes 10 recommendations about professional development related to Common Core. Some recommendations in the resolution call for teacher and administrator engagement in planning professional learning, resources including time for professional learning, job-embedded professional learning, and effective models of learning (2011). In his plan for reform, Dennis Van Roekel, president of National Education Association, states, "To promote and nurture effective teaching, the profession should offer quality training, well-designed career paths, time to work together on the best ways to help students, quality evaluations that help teachers in their development, professional development based on identified needs, and fair accountability processes" (2011, p. 5). The National Governors' Association calls for states to use student achievement data to measure the effectiveness of teacher professional

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development, create research-based standards for professional development, use teacher evaluation and student achievement data to focus individual professional development, and establish systems to incentivize professional development (Grossman, 2009). The National Association of State Boards of Education (2011) asserts, "For the transition [to college- and career ready standards] to be successful, both horizontal and vertical alignment between education entities must occur. Current teachers must receive extensive professional development on the Common Core standards, curricular materials, and strategies on teaching these standards that now require students to delve deeper and develop critical thinking and analytical skills that previous standards did not adequately address. As an initial step, states have been holding educator academies, training sessions, and other information sessions throughout their states to inform current teachers about the new standards. Continuous professional learning must occur for all teachers on how to effectively teach the contents of the Common Core to diverse learners to provide students with the knowledge and skills to be successful upon high school graduation" (p. 18). "All of the high-performing countries have not only developed high academic standards and matching assessments, as well as first-rate curriculum to which the assessments are aligned, but they have also worked very hard to develop a high quality teaching force," concludes Marc Tucker (2012). "It will not matter what the mathematics standards for students are if many of their teachers cannot meet them. It will not matter what our writing standards are if many of our teachers cannot themselves write well. It will avail us nothing if we require our students to reason well, to be really good at synthesizing information from many sources in a creative way and to analyze complex data and come up with an original solution, but we have failed to make sure that their teachers can do these things. Implementing the standards cannot simply mean informing teachers about what the designers of the standards intended or providing them with videos of teachers teaching the standards well. If that is what it ends up meaning, we can expect very little from the implementation of the Common Core State Standards."

This call for extensive, high-quality professional learning comes at a time when teachers report a decline in opportunities for profes-

sional learning; time available for collaborating and planning with peers is minimal; teachers are challenged by less job security and sense of satisfaction; and they have fewer resources, programs, and services to access to support them (MetLife, 2012). In the extensive teacher survey *Primary Sources: 2012*, most teachers indicate that they are not ready to implement the Common Core. "While a majority of teachers (78%) are aware of the Common Core State Standards, many do not yet feel prepared to teach to these new standards" (p. 18). They especially note a strong need for professional learning focused on what the new standards require, how to teach aspects of the standards that are new to them, and how to address the needs of their diverse students, especially English language learners and students with disabilities. "Teachers tell us they need more 'tangible learning resources' like instructional materials, including workbooks, technology, software programs, textbooks, and mixed media content in classrooms, and many say they need teacher training to help them learn best practices and master strategies to differentiate their teaching practices to instruct and engage students in the best possible ways" (Scholastic & Bill & Melinda Gates Foundation, p. 50). Teachers also indicate that professional learning has a strong or very strong impact on improving student achievement. In addition, teachers call for supportive school leaders. Over 90% of the respondents indicated that supportive leadership has a strong impact on student achievement and teacher retention. Both principals and teachers have extensive learning needs.

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The importance of effective professional learning is evident in successful reform efforts. In study after study of schools or school systems that have made substantive improvements, professional learning emerges as one of several core factors contributing to success (Bryk, Sebring, & Allensworth, 2010; Silva, 2008; Charles A. Dana Center, 2009). "The quality of an education system," state Sir Michael Barber

and Mona Mourshed, "cannot exceed the quality of its teachers" (2007, p. 16). Without continuous learning of those who work in them, systems cannot learn and improve. A decade ago, Richard Elmore wrote about the move to new standards:

> "With increased accountability, American schools and the people who work in them are being asked to do something new—to engage in systematic, continuous improvement in the quality of the educational experience of students and to subject themselves to the discipline of measuring their success by the metric of students' academic performance. Most people who currently work in public schools weren't hired to do this work, nor have they been adequately prepared to do it either by their professional education or by their prior experience in schools. Schools, as organizations, aren't designed as places where people are expected to engage in sustained improvement of their practice, where they are supported in this improvement, or where they are expected to subject their practice to the scrutiny of peers or the discipline of evaluations based on student achievement. Educators in schools with the most severe performance problems face truly challenging conditions, for which their prior training and experience have not prepared them—extreme poverty, unprecedented cultural and language diversity and unstable family and community patterns" (2002, p. 2).

These words ring as true today as they did in 2002. The advantage in 2012 is that researchers and educators have coalesced around a common understanding about effective professional learning that emanates from research and evidence-based practices. Today, unlike a decade ago, educators are equipped with a deeper understanding of what distinguishes effective professional learning that results in changes in teacher practices and student achievement from less effective forms. Educators know that past practices of professional learning will do little to prepare them to meet the demands of new initiatives. They can look at common practices of episodic educator learning, such as one-size-fits-all, short-term workshops that happen away from schools without school-based follow-up support and they understand the related paucity of evidence about the impact of professional learning on practice or student achievement.

Nearly two decades ago, Judith Warren Little (1993) suggested that the traditional, training model of professional learning so much in practice then and still today, was based on the wrong assumption—that a discrete, clearly defined body of knowledge and skills could be transferred from trainer to teacher. While we have research-based evidence about what constitutes effective teaching practices and are far better able to identify them in practice, the mere transfer of knowledge and skills is inadequate to address the complexity of the task of teaching, especially the teaching essential to bring all students to high academic standards. She called then for a variety of approaches that reached well beyond training to help teachers understand the difficulty and complexity of implementing new practices. She also questioned whether externally developed solutions would produce results in every classroom.

As educators and policy and decision makers face the challenge of providing professional learning to ensure full implementation of the changes in content standards, assessment, and educator evaluation, they need to look back over past efforts in training and development to realize that those practices will not achieve the deep transformation in classrooms and schools nationwide. The challenge now is to implement what educators know about effective professional learning so that the promise of Common Core State Standards, new assessments, and educator effectiveness systems can be realized.

Schools, school systems, and state agencies must look anew at their approach to professional learning and ask some difficult questions about what drives their decisions about professional learning.

- Are we structuring professional learning as we currently are because it allows us to say we have provided professional learning or do we have confidence that our current approach and theory of change is a research-based pathway to deep transformation in educator practice leading to increased student achievement?

- To what degree does our professional learning establish a long-term plan for continuous learning, ongoing refinement of educator practice, classroom- and school-based support to move from

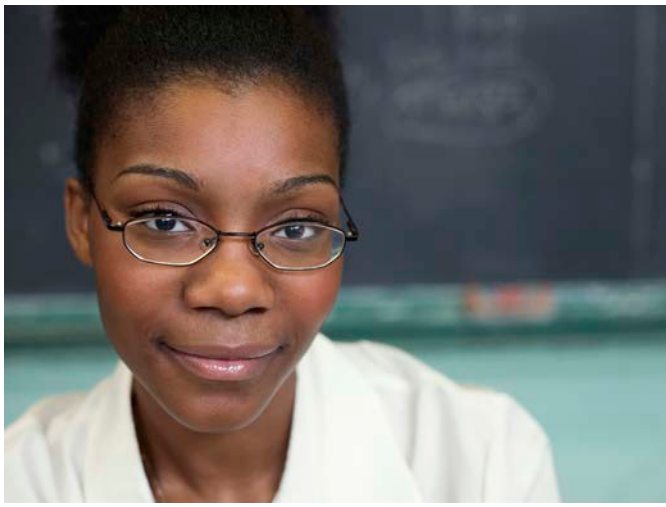
"knowing about" to full and refined implementation of Common Core State Standards to provide each student equitable opportunity for academic success?

- How will we use professional learning and professional collaboration to reduce variance in opportunity to learn from classroom to classroom, school to school, district to district, and state to state?
- How does our current professional learning contribute to building a school culture of collective responsibility and shared accountability for student achievement?
- How does our current professional learning system address equity for student and educator learning through resource allocation, design of professional learning, and high expectations and support for implementation of learning?
- How does our current or emerging educator effectiveness system integrate professional learning supports to strengthen individual teachers at various career stages and with differentiated needs and to support school and district goals and program implementation?

Current state and district approaches to professional learning vary widely. Most can be best described as awareness. While these efforts establish the foundational knowledge, knowledge building falls far short of providing the extensive and transformative professional learning required for full implementation of the new standards and assessments. Research confirms that little will change with awareness building alone. Moving new learning to practice with fidelity and regularity, according to Bruce Joyce and Beverly Showers (2002), requires five dimensions of professional learning—theory building, demonstration, low-risk practice, feedback, and coaching.

With the timeline narrowing for full implementation, the degree of change expected substantial, and the pace of implementation efforts accelerating, schools, districts, and states must move quickly and decisively beyond awareness building into practice changing professional learning to prepare and support educators for the transformation.

ASSUMPTIONS ABOUT EFFECTIVE PROFESSIONAL LEARNING



A number of principles underlie the call for professional learning as a driver for full implementation of Common Core State Standards, new assessments, and educator effectiveness systems.

Change requires learning. Change means that people think and act differently. For change to occur, people need information, skills, and dispositions to sustain their effort, and consistent practices that align with the intended change. Implementation of Common Core State Standards, new assessments, and new evaluation systems require significant learning. For teachers alone, the new content standards require more extensive use of certain, less familiar instructional practices; deep content knowledge; multiple strategies for formative assessment; extensive infusion of technology to personalize learning; and expanded ways to access and use resources. The table below provides a summary of how instruction will change with implementation of Common Core.

Content standards and new assessments necessitate different kinds of learning experiences and environments for students. In a recent study, William Schmidt of Michigan State University reported on how prepared teachers feel to address the topics included in the new mathematics standards. The range is about 50% of elementary teachers, about 60% of middle school teachers, and about 70% of high school teachers report feeling prepared to meet the new standards. Yet parallel findings send up some alarms. Eighty percent of teachers find the

Instructional Practices Called for in the Common Core

English Language Arts/Literacy	Mathematics
Balance exposure and study of information and literary text.	Focus on narrower set of mathematics concepts.
Build knowledge in the disciplines through literacy experiences in domain-specific texts.	Connect mathematics concepts within and across grade levels to build coherence.
Integrate a staircase of complexity with careful scaffolding of instruction and text for progress toward career- and college-ready literacy.	Develop fluency in mathematics operations for speed and accuracy.
Use text to formulate answers to inquiries about the text using evidentiary arguments in conversation and writing.	Develop deep understanding to approach concepts from multiple perspectives and apply them in new situations.
Write using sources to inform and make and support arguments.	Apply math concepts within and outside of the study of mathematics.
Study academic vocabulary that transcends the disciplines to access learning.	Experience dual intensity to build understanding and to practice.

Adapted from **http://engageny.org/wp-content/uploads/2011/08/instructional_shifts.pdf**.

Common Core math standards "pretty much the same" as what they currently teach and only one fourth would drop a topic from their current classroom curriculum if a topic appears at a different grade level in the new standards (Schmidt, 2012). These findings suggest that classroom practices may not change to the degree necessary to fully implement the new standards if the perception exists that they are similar to existing curriculum. In an analysis of state standards, Schmidt identified a wide-range alignment (66%-83%) with existing state standards.

The standards focus on students' construction of new understanding and application of that understanding in authentic situations. Teachers will need to employ instructional strategies that integrate critical and creative thinking, collaboration, problem solving, research and inquiry skills, and presentation or demonstration skills. These instructional practices are not a routine part of all classrooms currently. To create dynamic, engaging, high-level learning for students, teachers' expertise must expand well beyond basic content knowledge and pedagogy. As teachers make the shift to integrate more instructional practices and learning tasks that engage students in constructing and applying learning, they will benefit from clear expectations about the degree of implementation, firm understanding of what it means to implement these instructional practices, and intensive professional learning that includes modeling and coaching with constructive feedback. Schmidt (2012) acknowledges that the relationship between standards and student achievement is influenced by three factors, one of which is professional development sponsored or authorized by states.

Principals too need to understand the instructional practices aligned with the Common Core standards as well as be prepared to manage the change process, communicate expectations, build support systems that differentiate support, monitor and measure implementation and results, execute fair and reliable evaluations, provide appropriate interventions, and realign resources. Central office leaders need similar change management competencies in addition to expertise in instruction, assessment, curriculum, communication with multiple stakeholders, monitoring and evaluation implementation and results, and providing differentiated support to schools.

Standards drive effective professional learning. Over the last 10 years, multiple studies provide a solid foundation of the attributes of effective professional learning (Blank & de las Alas, 2009; Blank, de las Alas, & Smith, 2008; Borko, 2004; Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, Porter, Desimone, Birman, & Yoon, 2001; Jacquith, Mindich, Wei, & Darling-Hammond, 2010; Putnam & Borko, 2000; Saunders, Goldenberg, & Gallimore, 2009; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009; Wei, Darling-Hammond, & Adamson, 2010; Yoon, Duncan, Scarloss, & Shapley, 2007).

The attributes of effective professional learning are summarized in the Standards for Professional Learning, a consensus document based on this body of research and developed through the collaboration of 20 professional associations and more than 15 experts in the field of professional learning (Learning Forward, 2011). The standards highlight the seven core characteristics of professional learning that results in changes in educator practice and student achievement. The standards are "the essential elements of professional learning that function in synergy to enable educators to increase their effectiveness and student learning. All elements are essential to realize the full potential of educator professional learning. The Standards for Professional Learning describe the attributes of effective professional learning to guide the decisions and practices of all persons with responsibility to fund, regulate, manage, conceive, organize, implement, and evaluate professional learning" (p. 14).

Professional learning addresses multiple purposes. Professional learning serves three distinct functions: to improve individual performance; to improve school performance; and to implement new initiatives. In an analysis of the functions of professional learning, Michael Garet, Meredith Ludwig, Kwang Yoon, Andrew Wayne, Beatrice Birman, and Andrew Milanowski (2011) framed a conceptual model for professional learning building on earlier work by Rowan, Correnti, Miller, & Camburn (2009) that identifies three purposes for professional learning. Each purpose has a distinct role in a comprehensive approach to professional learning, yet often are imbalanced in practice, resourced differently, and clearly produce uneven results. Full imple-

mentation of any major initiative requires a delicate balance of all three purposes as a part of a comprehensive system of professional learning. How a district or state balances its approach to these purposes will likely influence the results they achieve.

Individual teacher effectiveness. Improving individual performance is one approach to professional learning. It is the core of most states' educator effectiveness systems. "This strategic approach places particular emphasis on aligning PD with the teacher evaluation and compensation system. . . This strategic approach requires evaluating the strengths and weaknesses of the performance of individual teachers, identifying PD opportunities to address weaknesses or build on strengths, and monitoring the results to determine whether expected improvements occur" (Garet et al., 2011, p. 16). Alone, this approach is insufficient to achieve implementation of new initiatives in an effective and efficient manner.

School capacity building. To improve a whole school requires a cohesive, collaborative effort of the staff within the school. "A second approach a district may include in its overall strategy for PD is to focus PD activities at the school level. This strategic PD approach stresses improving each school's capacity to use data to identify areas of weakness and to build each school's capacity to provide schoolwide support to improve performance in identified areas. The approach requires the school to be active in the development and use of data and to be a partner with the district, working within the overall district plan for PD and improvement" (Garet et al., 21). Individual efforts many contribute to further fragmentation and either derail efforts to achieve schoolwide goals or substantially slow down the process.

Program implementation. "A third strategy for deploying PD emphasizes the role of PD in supporting the implementation of specific curricula, instructional approaches, school reform programs, assessments, or technologies. . . From this perspective, the focus is on instructional or curricular materials being implemented district or schoolwide and on the instructional strategies underlying these materials, under the assumption that the materials will support improved student achievement. In this approach, PD is a strategy designed to facilitate high quality and consistent implementation of the adopted programs, curricula, or materials across adopting schools and teachers within the schools" (Garet et al., p. 24). Implementing innovation requires a systemwide

effort to achieve full and faithful use of the innovation. Without a systemwide approach to professional learning, inequities in opportunity to learn and inconsistency in practice are likely to emerge.

Commitment to equity ensures success for all students. Those responsible for professional learning must consider the learning needs of students as the primary driver for professional learning. While educators in high-poverty schools and districts tend to have more opportunity for professional learning (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009; Wei, Darling-Hammond, & Adamson, 2010), the kind of professional learning they experience is fundamentally different. It is often more traditional in the form of courses or workshops frequently away from school, provided by external agencies, and includes less opportunity for collaborative, informal learning among peers. For all students to achieve college- and career-readiness, more professional learning and the resources to support it will be needed in some schools and districts and for some educators who work with students who are English language learners, have special needs, or have academic challenges.

- **Effective professional learning is a shared responsibility.** Individual educators, school and district leaders, regional and state education agencies, institutes of higher education, federal government, private and public foundation, and nonprofit and for-profit education organization share responsibility for effective professional learning. Practices of professional learning vary widely when authority and responsibility are undefined. To minimize inequity in quality, access to, and results from professional learning, educators and other governing agencies must collaborate to advocate, implement, and monitor the quality and results of professional learning. Fundamentally, if professional learning is to be a significant lever in implementing Common Core State Standards, new assessments, and educator effectiveness systems, it is essential that policy and practice align with research about effective professional learning. Educators must also take an active role in monitoring professional learning, advocating standards for quality, and demanding results in student achievement, not merely in satisfaction with the learning experience. This becomes both a practice and ethics challenge to participants, managers, and providers of professional learning.

EFFECTIVE PROFESSIONAL LEARNING

For nearly two decades, the consensus has been building about effective professional learning. Two resources provide summaries of these attributes. The first is Learning Forward's definition of professional learning that acknowledges that professional learning includes both formal and job-embedded components and is closely tied to the expected outcomes for student learning. The second resource is Standards for Professional Learning. Both offer guidance to schools, school systems, and state agencies on shaping a comprehensive system of professional learning.

Professional development, in the consensus view, should be designed to develop the capacity of teachers to work collectively on problems of practice, within their own schools and with practitioners in other settings, as much as to support the knowledge and skill development of individual educators. This view derives from the assumption that learning is essentially a collaborative, rather than an individual activity—and that the essential purpose of professional development should be the improvement of schools and school systems, not just the improvement of the individuals who work in them" (Elmore, p. 8).

Definition of professional learning. The definition provides structure to job-embedded professional learning by defining the process of continuous improvement that serves as the basis for the work in communities of practice or professional learning communities within schools. The definition also recognizes that, while the school is the primary center of learning, added support for school-based learning comes from external agencies, frequently state departments of education in the case of Common Core.

PROFESSIONAL DEVELOPMENT

—The term "professional development" means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement—

- Professional development fosters collective responsibility for improved student performance and must be comprised of professional learning that:
  - is aligned with rigorous state student academic achievement standards as well as related local educational agency and school improvement goals;
  - is conducted among educators at the school and facilitated by well-prepared school principals and/or school-based professional development coaches, mentors, master teachers, or other teacher leaders;
  - primarily occurs several times per week among established teams of teachers, principals, and other instructional staff members where the teams of educators engage in a continuous cycle of improvement that —
    - evaluates student, teacher, and school learning needs through a thorough review of data on teacher and student performance;
    - defines a clear set of educator learning goals based on the rigorous analysis of the data;
    - achieves the educator learning goals identified in subsection (A)(3)(ii) by implementing coherent, sustained, and evidenced-based learning strategies, such as lesson study and the development of formative assessments, that improve instructional effectiveness and student achievement;
    - provides job-embedded coaching or other forms of assistance to support the transfer of new knowledge and skills to the classroom;
    - regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging state academic achievement standards;
    - informs ongoing improvements in teaching and student learning; and
    - that may be supported by external assistance.
- The process outlined in (A) may be supported by activities such as courses, workshops, institutes, networks, and conferences that:
  - must address the learning goals and objectives established for professional development by educators at the school level;
  - advance the ongoing school-based professional development; and
  - are provided by for-profit and nonprofit entities outside the school such as universities, education service agencies, technical assistance providers, networks of content-area specialists, and other education organizations and associations.

The definition highlights the importance of school-based professional learning focused on teaching and learning aligned with student content standards. School-based professional learning promotes greater consistency in instruction, taps the expertise within schools, contributes to vertical alignment of a curriculum, and offers sustained support over time for continued refinement of instruction that leads to increased student achievement.

Little doubt exists that Common Core State Standards and their new assessments call for a dramatic shift in instruction and will require extensive work in content development and content-specific pedagogy, as well as pedagogical content knowledge, understanding how students learn a discipline. To provide such extensive professional learning, school systems and state education agencies need to build a comprehensive system of professional learning that addresses both externally driven professional learning as well as substantive job-embedded learning to support application of new learning in practice. In addition, implementation of educator effectiveness systems call for individually focused professional learning to address educators' unique learning needs. Districts and state agencies need to establish policy, practices, and support systems to assist leaders to build and implement systems with adequate resources, ensure that resources and quality systems are equitably distributed, monitor them for quality and results, and ensure continuous improvement of the professional learning system.

Standards for professional learning. Just as the Common Core State Standards establish rigorous expectations for the learning of all students and define the expected outcomes, the Standards for Professional Learning describe what effective learning for educators looks like and what its core components are. Standards provide guidance for planning, implementing, and evaluating professional learning. Revised in 2011, the standards have guided professional learning since they were first introduced in 1994. Nearly 35 states adopted or adapted the standards. The standards provide indicators of quality to help both facilitators of professional learning, those who manage it, and those who engage in it advocate and implement effective practice.

Learning Communities

Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

Professional learning that intends to change practice and increase student achievement occurs within communities of learners who share goals aligned with the school and school system and aligned with state priorities. Community members engage in collaborative learning to inform the shared work that is frequently a part of the community. They create a culture of collaboration and collective responsibility that holds all members of the community responsible for the success of all students represented by the community members.

Leadership

Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

Leaders matter. Conditions in which professional learning occurs matter. Leaders shape the conditions within their schools and school systems. They both model and advocate effective professional learning and the conditions in which it exists. They take an active role in supporting learning and in developing the capacity of teachers to facilitate professional learning among their peers. Leaders have a fundamental responsibility to provide intellectual stimulation and rigorous learning experiences for their staff (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Leaders, both administrators and teacher leaders, are vital to the success of continuous improvement.

Resources

Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.

Few educators agree that there are adequate resources (time, staff, technology, funding, and materials) for professional learning. Elmore (2002) writes,

> [The] "discipline of improvement requires major changes in the way schools and school systems manage the resources they already have: the time of teachers and administrators; the practices reflected in existing staffing patterns; administrative overhead; and, the resources already being spent, largely ineffectively, on professional development—before we can tell how much additional money is needed to engage in large-scale improvement. This is more than a low-level accounting exercise; it is fundamental to the entire process of improvement. Adding money to a system that doesn't know how to manage its own resources effectively

means that the new money will be spent the same way as the old money" (p. 31).

Both states and school systems can take immediate action to improve resources for professional learning by analyzing what resources are available, assessing how the available resources are used, and realigning those resources to support high-priority areas.

Data

Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

Data drive the content and inform the measurement of professional learning. Data about students, teachers, principals, and systems inform decisions about the purpose and content of professional learning. When professional learning starts with an analysis of data about students and educators, it will more closely meet the unique needs of educators and their students by personalizing learning for individual and teams of educators. Data also provide evidence of progress and effects of professional learning. Formative and summative evaluation of professional learning fosters continuous improvement to strengthen results.

Learning Designs

Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.

The instructional shifts called for in Common Core State Standards require a different kind of professional learning—one that immerses educators in learning experiences that mirror what they are expected to create for their students. Too infrequently, the design of learning for adults fails to consider its intended outcomes, the learning preferences of adult learners, and the conditions in which their learning occurs. Too much professional learning depends on one-size-fits-all, short-term, pull-out, knowledge-focused, expert-led learning experi-

ences such as workshops or courses taught with one or two instructional methodologies. These learning experiences leave educators to manage independently the harder part of the learning process—transferring the knowledge to practice within their workplaces. Learning cannot be bound by the length of a workshop or course. It is a continuous process of examining data, setting goals, identifying learning foci, engaging in learning, implementing the learning, analyzing the results of implementation, evaluating the learning process, and repeating the cycle again multiple times within a single school year. Engaging in this cycle of continuous learning at school, in collaborative teams, focused on student learning is increasingly proving to be an effective approach to professional learning (Saunders, Goldenberg, & Gallimore, 2009). School-based learning is enhanced when paired with periodic externally driven professional learning that aligns with the identified needs of students and educators. Effective professional learning incorporates both macro learning, learning focused on knowledge and skills acquisition, and micro learning, learning emerging from application and reflection on practice (Curry & Killion, 2009).

Implementation

Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.

Participating in professional learning has traditionally meant attending a learning event often outside the school or outside the school day. Today, evidence-based practice and research recognize that learning continues through implementation and refinement of practice. All too often, though, the support for implementation, a significant part of the learning process, is absent. Professional learning only produces effects in educator practice and student learning when the learning is fully and accurately implemented into routine practice. Yet, despite

nearly three decades of research to the contrary (Joyce & Showers, 2002; Hall & Hord, 2011), professional learning is viewed as a series of learning events rather than a system of continuous learning that includes substantial support for implementation with constructive feedback to refine and strengthen practice. Without implementation support, educators may have insufficient knowledge and will to solve problems of practices and will resort to what they know and find comfortable.

Outcomes

Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.

When professional learning is disconnected from the goals of school systems, schools, and educators it has little opportunity to improve results. Aligning the outcomes of professional learning with the outcomes expected for students and educators and weaving strong coherence into the system through this alignment means that efforts are all focused on the same end results—effective educators and successful students. What constitutes an effective educator is defined in state and district educator effectiveness systems, states' licensure standards, and national model standards such as InTASC and ISLLC. Professional learning becomes the vehicle for supporting educators in meeting these standards early in their career and in extending and refining practice throughout their career to achieve high levels of performance and advance along career pathways. Yet, professional learning cannot be focused only on educator performance standards. It must develop capacity for educators to use the knowledge, skills, and dispositions to support students in achieving college- and career-ready standards. The seamlessness of a fully integrated system of professional learning weaves both student and educators standards into a coherent whole.

Effective professional learning in practice

Two real-life examples of professional learning described here weave together some of the elements of effective professional learning described above. These examples demonstrate professional learning moves well beyond "knowing about" to "implementing fully," where leaders provide ongoing support to teachers to support them in implementing the standards. The professional learning blends a combination of expert-led and teacher-driven professional learning.

Collaborative work towards the Common Core

Mark Baumgartner, director of professional issues for the Cleveland Teachers Union, writes in a blog about how the Cleveland Metropolitan School District and the Cleveland Teachers Union approached professional learning for Common Core State Standards. They made a decision to integrate Common Core into all the existing training to help teachers understand that Common Core was not something added on to their existing work, but rather what they would do as their normal work. Secondly, they approached support for teachers in grade-level bands to focus on developing understanding and supporting implementation. The first band of grades to implement Common Core was K-2. Teachers of these grades experienced a combination of formal training during the school day, collaborative work in teams to plan instructional units, ongoing professional learning to address challenges, and instructional coaching. In addition, the same group of teachers worked together to revise the district's scope and sequence to integrate Common Core standards. In addition, working together, the school's union chapter chair and principal identified an advocate who received additional training to serve as an in-house expert to provide peer support (Baumgartner, 2012).

An avowed skeptic of Common Core State Standards, Kaye Thompson Peters, a veteran St. Paul, Minnesota teacher, writes about her experience in professional learning and how it shifted her view about Common Core. She joined a district work team to be sure the standards "did no harm." The team of teachers began "with what is called a 'gap analysis' where we compared the standards we had been governed by to the new standards. "The group of teachers met over the summer to "decide how we would sequence what were initially called 'products' required by the Common Core (narrative, literary, argumentative, and informative essays and research and media projects) and to begin writing sample lesson plans. We tethered the standards to the products and created supporting units that ensured all of the standards were addressed. . . We disagreed and debated over how much weight to give to informational text and whether literary non-fiction, such as memoir, counted as non-fiction under the new guidelines." (Peters, 2012, March 19)

Peters continues the description of her learning process. She participated in a conference session the next fall led by David Coleman, an often-criticized writer of the ELA standards. "Coleman led a group of teachers through an exploration of two poems that trumped any previous workshop experience I have known. It was a masterful example of the power of text-based learning. He did not tell anyone what anything meant. He asked us to think. . . [T]hat afternoon in November, he had a room of 100+ educators joyfully explicating Dylan Thomas and learning from a poem they thought they knew. Science teachers joined in to help us understand the significance of the light imagery. It was a perfect moment where teachers experienced the joy of learning, the experience we hope to bring to every child" (2012, March 20).

These examples demonstrate many features of effective professional learning. Teachers were actively engaged in the learning from experts focused on implementing the Common Core standards in their

classrooms rather than just understanding how the standards differ from earlier ones. In addition, they had a substantial role in leading their own learning. They met in small groups over time to translate their learning into instructional units, formative assessments, student assignments, and other instructional resources to support student learning. In addition, they reflected on the use of these newly developed resources. Most importantly, they experienced intellectual stimulation and instructional practices that modeled what they were expected to practice in their classrooms.

Kentucky Content Leadership Networks

To build capacity for implementing its Core Academic Standards, Kentucky, the first state to adopt the Common Core State Standards, established Content Leadership Networks organized by regions and disciplines, and district leadership teams to focus on implementation at the school and classroom level. Each network becomes a professional learning community focused on developing its own content and pedagogical expertise and the leadership skills necessary to work within their districts and schools to support implementation of Kentucky Core Academic Standards and the state-adopted characteristics of highly effective teaching and learning. Networks for school and district leaders are also in place to support the crucial work of change management. Networks address their own regional implementation needs and support the establishment of district leadership teams that provide districtwide planning and implementation support in each of Kentucky's 174 school districts. As specified in Unbridled Learning, Kentucky's Senate Bill 1, the Leadership Networks are designed to implement the changes specified in the bill to ensure that more students are college- and career-ready and prepared for the future. The purpose of the Leadership Networks is "Every school district in the Commonwealth of Kentucky has a knowledgeable and cohesive leadership team that guides the professional learning and practice of all administrators, teachers, and staff so that every student experiences highly effective teaching, learning, and assessment practices in every classroom, every day" (Kentucky Legislature, 2009). Leadership Networks in their third of three years focus on four pillars to successful implementation: Kentucky's Core Academic Standards; assessment literacy; characteristics of highly effective teaching and learning; and leadership. By engaging in statewide and regional meetings, Leadership Network members build their own and their colleagues' expertise related to the standards, assessment, and instruction, and share their learning throughout their region and state through state-supported web resources.

Kentucky is also the demonstration state for Learning Forward's Transforming Professional Learning to Prepare College- and Career- Ready Students: Implementing the Common Core. Working in partnership with six Critical Friend States (Georgia, Illinois, New Jersey, New Hampshire, Utah, and Washington) Kentucky is constructing a comprehensive system of professional learning that weaves together policy and practice to support implementation of Common Core standards, as well as future initiatives that depend on effective professional learning for their success. Learning Forward, working with its primary partner, Council of Chief State School Officers, and secondary partners American

Association of College of Teacher Education, National Governors Association, and National Association of State Boards of Education, is facilitating a statewide policy review on professional learning, a review of all state-supported initiatives that include professional learning, a financial review of professional learning investments, and creating a comprehensive system of professional to support teaching, leading, and student learning. The work is supported with

grants from the Sandler Foundation and the Bill & Melinda Gates Foundation.

Kentucky is leveraging Bill & Melinda Gates Foundation funding to support to development of tasks, modules, and courses to share across schools and districts within Kentucky. In collaboration with Colorado, Georgia, and Louisiana, and built on the premise that "with the Common Core of Standards, many things now become possible. Because states will be working from the same core, we can create broad-based sharing of what works but, at the same time, provide local flexibility to decide how best to teach the core (Phillips & Wong, 2010). In the Collaboratives, teachers are developing their capacity and the instructional resources necessary to implement more engaging, problem-focused, and collaborative learning activities that focus on reaching beyond answer-getting in math and incorporate productive struggle, inquiry-based instruction, group discussion and critical reasoning. In literacy teachers engage in using task templates that engage students in rigorous learning and integrate higher order thinking across the disciplines. In Collaborative professional learning, teachers learn with peers how to design instruction and learning tasks aligned with the Common Core and design or study formative assessment tasks or task templates designed to promote learning. They then try the tasks in their classrooms and return with samples of student work and notes about their challenges, successes, questions, and reflections. By engaging in authentic classroom-focused work in collaborative settings and using authentic student work, teachers acquire knowledge and skills, analyze their practice, generate instruction and assessment, and evaluate their progress to determine future learning needs.

Kentucky's intentional efforts to work at the classroom and school levels with teacher leaders, at the district levels with leadership teams, at the regional level with content networks, and at the state level with its focus on a comprehensive system give it significant leverage to provide a system of professional learning accompanied by added classroom resources to prepare all its students for college and careers when they leave high school.

RECOMMENDATIONS FOR ACTION

Federal agencies

- Establish guidelines for and monitor professional learning for changes in educator practice and student achievement for all professional learning provided as a part of federally funded initiatives.
- Provide incentives to states demonstrating effective professional learning that results in student achievement.
- Invest in rigorous research on professional learning to strengthen the field's knowledge and inform practice.
- Use multiple communication vehicles to disseminate information about the role of professional learning in improving educator effectiveness and student achievement.
- Use equity as a criterion for distribution of federal resources for professional learning.

State education agencies

- Establish clear goals focused on student success to build strong alignment among regional agencies, higher education, community colleges, technical schools, early childhood, and K-12 schools.

- Establish a comprehensive system for professional learning that includes:
  - A statewide vision and definition for professional learning that aligns with research and evidence-based practice;
  - Clear lines of authority and responsibility among stakeholders;
  - Standards for quality and expectations for results of professional learning to govern school system and school professional learning;
  - Indicators and measures of quality to monitor the quality and results of state, school system, school, and partner or vendor professional learning; and
  - An analysis of current policies and practices to identify fragmentation and inconsistencies, current expenditures in professional learning, equity of access to professional learning systems, and evidence of effectiveness.
- Set guidelines for adequacy of resources, including funding, time, technology, staff, and materials, to support professional learning and sustaining resources for continuous improvement that ensure equitable distribution of resources
- Build the communities' understanding and appreciation for the importance of professional learning as a core function of effective schools and student achievement.
- Use formative and summative evaluation to monitor and improve access to and the quality and results of professional learning.
- Link educator, student, and professional learning data systems to strengthen their coherence and interdependence.
- Align school and district accountability, licensure, relicensure, educator effectiveness, and professional learning policies into a seamless system focused on improving student achievement.
- Coordinate purchasing, access to, and quality control of resources to support professional learning statewide including technology solutions, not-for-profit and for-profit vendor services, and partner agencies such as higher education institutes and regional agencies.

- Ensure equity of access to and quality of professional learning by equitably distributing state resources to ensure each student has effective educators throughout their school experience.
- Support the development of academies to develop school leaders, teacher leaders, and coaches to lead change and support school-based professional learning.

School systems

- Create a comprehensive system of professional learning for all employees with particular emphasis on teachers and school leaders that includes:
  - A clear vision for professional learning;
  - Standards for effective professional learning;
  - Resources for professional learning (time, funding, staff, technology, and materials);
  - System to monitor and evaluate the effectiveness and results of professional learning;
  - Balance among three key purposes of professional learning—individually focused, school, and program implementation; and
  - Policies that align professional learning with district priorities and sustain and protect resources for professional learning to support full implementation.
- Provide resources to support schoolwide, team, and individual professional learning by:
  - Creating a school day schedule that permits regular collaboration among peers multiple times per week; and
  - Providing classroom and team-based support for transferring professional learning into practice and constructive feedback to refine and sustain practice.
- Develop skillful facilitators to support school-based and team-based professional learning.

- Coordinate purchasing, use of, and equitable access to resources to support effective schoolwide, team, and individual professional learning, including technology solutions.
- Collect and use data about the effectiveness and results of professional learning to make ongoing improvements in practice.
- Provide professional learning for principals, teacher leaders, and school coaches to lead change and support effective professional learning within their schools.

Schools

- Provide resources to support schoolwide, team, and individual professional learning by:
  - Creating a school-day schedule that permits regular collaboration among peers multiple times per week; and
  - Providing classroom and team-based support for transferring professional learning into practice and constructive feedback to refine and sustain practice.
- Identify skillful facilitators to support teams in collaborative learning.
- Monitor and evaluate the quality and results of individual, team, and schoolwide professional learning.
- Align individual, team, and schoolwide professional learning with school and district goals for student achievement.
- Create the culture and structures to support collaborative learning.
- Align the efforts of school resource personnel such as coaches, literacy specialists, ELL specialists, etc., to support high-priority student learning needs by developing the capacity of teachers to meet those needs within regular classrooms and including school resource personnel on learning teams.

- Collect and use data about the effectiveness and results of professional learning to make ongoing improvements in practice.

Individuals

- Commit to career-long continuous learning as a professional responsibility and career progression to meet the needs of each student.
- Engage actively with colleagues to construct knowledge, acquire skills, refine practice, and examine dispositions.
- Demonstrate collective responsibility for the success of each student by learning with and from colleagues, sharing and receiving constructive feedback, engaging with colleagues in collaborative inquiry to refine individual and peer performance, reflecting on individual and collective performance, and challenging one's own and colleagues' assumptions that create barriers to sharing responsibility and accountability for the success of all students.

External partners

External partners include regional agencies, higher education institutions, vendors, and other providers of professional learning.

- Consult districts and schools to identify needed support.
- Demonstrate how products and services align with college- and career-ready standards, district-adopted curricula, state assessments, and educator effectiveness system.
- Provide services aligned directly to a school's or school district's identified student achievement and educator learning needs.
- Use data from clients to monitor and evaluate the quality and effects of professional learning.

CHALLENGES TO EFFECTIVE PROFESSIONAL LEARNING

The challenges to ensuring effective professional learning may seem daunting, yet most can be overcome.

Perceived value of professional learning. Federal, state, school systems, schools, and external agencies struggle with the role of professional learning in student achievement. Frequently embedded in state policy as a means to relicensure, it becomes a compliance process of collecting enough hours of seat time to meet a state policy to maintain a license to practice. Choice of learning options typically is the individual educator's to make. When viewed as a school improvement process, professional learning focused on the knowledge, skills, practices, and dispositions educators need to implement the defined improvement efforts. As such, they may be viewed as irrelevant to individual educators who may or may not be responsible for the improvement efforts.

These dichotomous perceptions are at odds with one another and create tensions about who makes decisions about and governs professional learning. Yet states are now beginning to question their policies in each area and to explore performance-based professional learning, based on school, team, and individual professional learning plans that align with school and school system goals. Eliminating the dichotomy and focusing professional learning, especially that funded with school and school system resources, on the goals of the school and school system will strengthen the value of professional learning as means to school improvement, educator effectiveness, and student achievement.

Time and Funding. Chief among the challenges frequently identified are funding and time. Yet too many schools and school systems have overcome these challenges by revamping the school-day schedule and the annual calendar to provide time for professional learning within teachers' contract days to hold this challenge high on the list of difficulties. Substantial funding, especially from federal and state programs and from private and public external sources such as foundations, makes it difficult to cite lack of money. More equitable distribution of resources, especially to educators who work with underserved students, can improve opportunity and access to highly effective professional learning. Also needed is a better system for communicating and sharing successful examples of time and resource use that others may analyze to establish their own solutions.

Perhaps the real challenge is identifying the appropriate use of existing resources including time, funding, staff, technology to align professional learning with high-priority student and educator learning needs. Too often professional learning is viewed as a cost rather than an investment. When woven deeply into the fabric of all systems that support student learning and when it meets standards of quality, it is an essential function to improve student learning. Professional learning becomes indispensible when it produces results; results require the investment of resources.

Balancing purposes of professional learning. Another frequent challenge is balancing individual, school, and program professional learning. This challenge will grow even more difficult to address with the implementation of educator effectiveness systems that integrate individually focused professional learning as a core part of the system. Virginia Richardson (2003) acknowledges the importance of a collective approach for program implementation, yet acknowledges that other outcomes of professional learning may require different approaches. In reality, nearly every individual learning need is shared by others within that individual's sphere of influence. And, perhaps the most expedient way to strengthen individual performance is through collaborative support within a team of peers in which all members of the learning community benefit from the individual's learning. Through individual and collective accountability, all members of the community benefit from the learning acquired by any one member. This process builds a social architecture of accountability and responsibility, increases the social capital, and strengthens the results for students in every member's

classroom (Jackson & Bruegmann, 2009). No amount of individual professional learning will accomplish full implementation of Common Core State Standards, the resulting new curricula, new assessments, or full and fair implementation of educator effectiveness systems. These programmatic changes require an artful blend of macro and micro learning at the system, school, team, and individual level to achieve efficient and effective successful implementation.

Evaluating effectiveness and results. How to monitor and measure the effectiveness of professional learning eludes those responsible for it. Yet, evaluation processes, tools, and strategies exist that haven't been rigorously applied. Often identified as a challenge, evaluating the quality and effects of professional learning has been ignored in practice because it requires effort and resource investment. Schools, school systems, state and federal agencies, and external partners can no longer complain that this form of evaluation can't be done. Rather they must commit to this key step and establish a manageable system of program evaluation as they balance their efforts and resources and use proven evaluation methodologies and tools to improve accountability, quality, decision making, and results.

Leadership for professional learning. Knowing who has authority and responsibility for professional learning is often unclear. The good news is that many stakeholders share responsibility for effective professional learning and student achievement; the bad news is that who holds responsibility and accountability for which aspects is frequently unclear, typically leaving no one with either responsibility or accountability. Yet, gaining clarity about responsibility and accountability will open the door to stronger alignment between professional learning and high-priority student learning needs, better use of resources, stronger conditions to support learning and implementation of learning, and ultimately better results. Preparing those who are responsible to understand what effective professional learning is, manage individual and system change, and monitor quality and results is an important part of establishing clear accountability and responsibility.

CONCLUSION

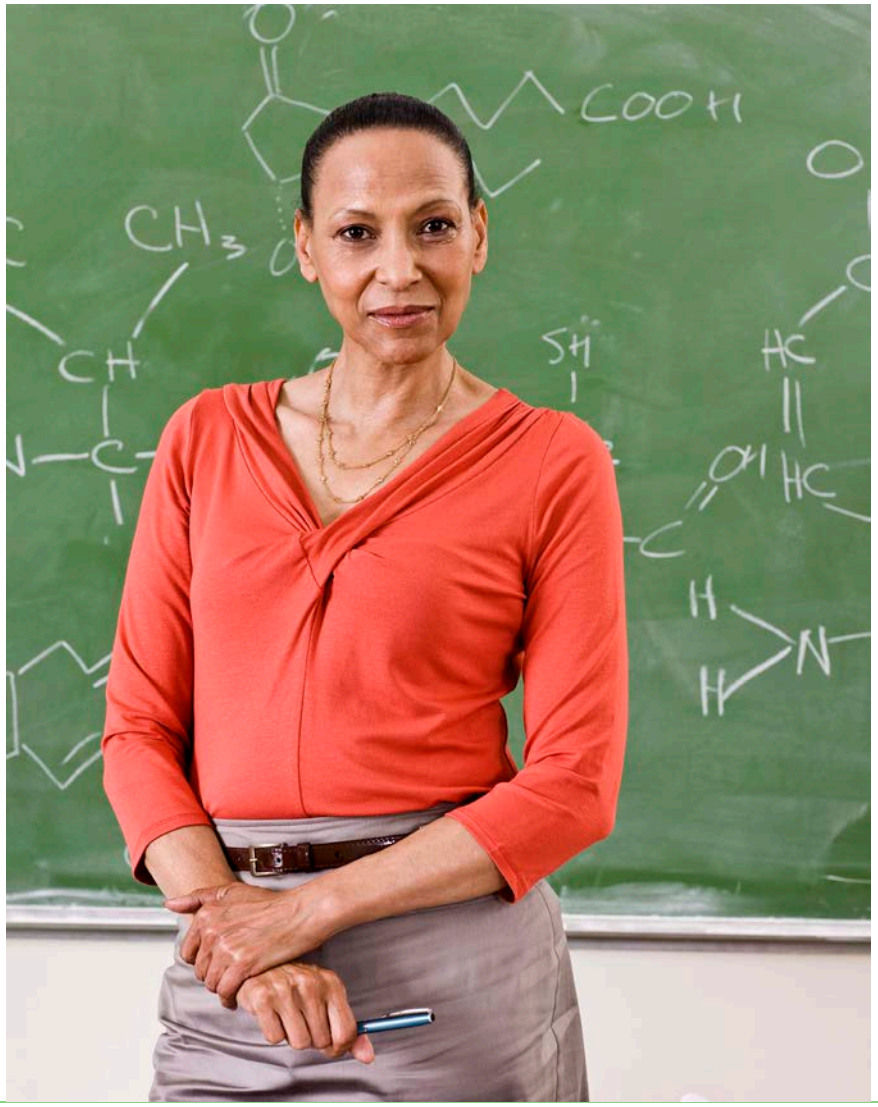
Richard Elmore, examining the transition to standards-based education, asserted, "Change, as it has been conceived and carried out in the past, is not an option in responding to these problems. Large scale, sustained, and continuous improvement is the path out of these problems. . . In short, we must fundamentally redesign schools as places where both adults and young people learn" (Elmore, 2000, p. 35).

With multiple significant changes facing them, educators and policy and decision makers stand at a perilous precipice looking ahead at what they want to accomplish. The choices they make about how to prepare and support educators for implementation may restrict them from achieving the results they desire. As a key lever for moving forward and achieving success, professional learning must change. Educators can no longer rely on the practices employed in the past and the goodwill of voluntary learners. Indeed, educators have abundant information about what to do in professional learning. Now they need the courage to leave what is convenient and step into the messier work of deep transformation, frequently accompanied by emotional, physical, and cognitive dissonance, to provide all students the learning opportunities necessary to leave pre-K-12 education ready for success in college and careers.

The promise of college- and career-ready standards, educator effectiveness systems, and new assessments of student learning depend on the capacity of educators to fully implement them. Past efforts at school reform have left gaping holes in student learning, despite the enormous investment in improvement efforts. Students today cannot wait for a new generation of better-prepared educators to facilitate their learning. The only vehicle available to all schools and school systems is professional learning for educators currently in service and those who are entering the profession. Yet professional learning as it has been

practiced too frequently in the past cannot meet the demands to prepare and support all educators to their learning.

Today we know that student achievement depends on continuous and collaborative professional learning, intimately linked to educator and student standards, driven by data about students and educators, and system performance, guided by strong leaders, designed to support active engagement and to model the instructional and leadership practices expected of educators, sustained over time to achieve full implementation, and supported by sufficient resources to realize results. To meet the promise of professional learning, educators, policy makers, decision makers, elected officials, and community members must share responsibility for its effectiveness and results.



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