

HOW THE WORLD'S BEST SCHOOLS STAY ON TOP

STUDY'S KEY FINDINGS PINPOINT PRACTICES THAT ALIGN WITH LEARNING FORWARD

By Joellen Killion

Teacher professional learning drives school improvement, according to a new study from Learning First commissioned by the Center on International Education Benchmarking of the National Center on Education and the Economy, with support from the Bill & Melinda Gates Foundation.

Based on the premise that continuous professional learning is fundamental to teacher and student success, *Beyond PD: Teacher Professional Learning in High-Performing Systems* (Jensen, Sonnemann, Roberts-Hull, & Hunter, 2016) is a cross-case analysis that examines teacher professional learning practices in four high-performing school systems — Singapore, Shanghai, Hong Kong, and British Columbia — and identifies common practices across the

four systems. These four systems have retained positions at or near the top of international student assessments and are systems in which policymakers and educators leverage teacher professional learning as a driver in student success.

The research study describes how schools and school systems leverage professional learning for improving teaching and student learning. The study examines how the school systems employ common practices of teacher learning in contextually different ways to achieve high levels of practice among professionals and results for students. In addition, authors Ben Jensen, Julie Sonnemann, Katie Roberts-Hall, and Amélie Hunter provide specific descriptions with accompanying web-based tools from the four school systems to guide others in reforming their professional learning practice. These tools are available at www.ncee.org/beyondpd.

This article has two purposes. The first is to share key findings from the study so that educators might apply them





to strengthening professional learning in their schools and school systems. The second purpose is to compare the findings from the study to Learning Forward’s long-standing position about professional learning grounded within its definition of and standards for professional learning.

STUDY BACKGROUND

Learning First, applying qualitative research methods, conducted the study by tapping into OECD’s global evidence database, analyzing documents from the school systems, and interviewing education agency and school and school system staff, policymakers, providers, and other relevant stakeholders within each school system. This study compiles descriptions about how each of the school systems organizes professional learning for teachers within the school, system, and ministry context in which professional learning occurs. It seeks to unpack the role of professional learning in major education reforms within each system over the multiple years.

The findings from the study provide both insight into and guidance for schools and school systems related to professional learning. Major findings are described briefly below.

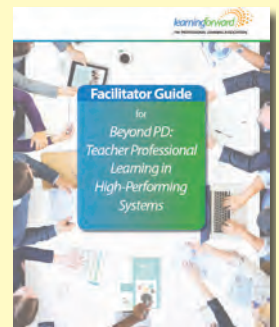
FINDING 1:

“The strategic approach adopted in these systems requires all professional learning to be developed around an improvement cycle in schools that is always tied to student learning” (Jensen et al., 2016, p.4).

According to researchers, “High-performing systems transform the improvement cycle into a culture of continuous professional learning that, in time, turns schools into true learning organizations” (Jensen et al., 2016, p. 4). They add, “In other words, high-performing systems tend to be prescriptive about what constitutes effective professional learning in schools. Rather than being ‘tight’ on the specific professional learning programs that schools offer (learning communities, mentoring, courses, and so forth), effective systems establish the expectation that quality professional learning will proceed within an improvement

TOOL KIT FOR TEAM STUDY

Facilitator Guide for Beyond PD: Teacher Professional Learning in High-Performing Systems, by Joellen Killian, offers ways to unpack and apply findings from the study to assist education leaders, policymakers, and decision makers in improving the quality of professional learning in schools. With more than 35 tools, the guide offers multiple entry points into the latest knowledge from the field, focusing stakeholders on practical implications and next steps. Access the guide at www.learningforward.org/publications/beyond-pd-resources.



COMPARISON BETWEEN LEARNING FIRST'S IMPROVEMENT CYCLE AND LEARNING FORWARD'S CYCLE OF CONTINUOUS IMPROVEMENT	
LEARNING FIRST'S IMPROVEMENT CYCLE	LEARNING FORWARD'S CYCLE OF CONTINUOUS IMPROVEMENT
Assess students' learning to identify what they are ready to learn next.	Analyze student, educator, and school data to determine student and educator learning needs.
	Define educator professional learning goals based on student learning needs.
	Develop educator professional growth/learning goals.
Develop the teaching practices that will provide for the next stage of student learning (and be clear what evidence supports this).	Select and implement evidence-based professional learning to achieve professional learning goals.
	Provide job-embedded coaching and other forms of assistance to support transfer of learning.
Evaluate the impact.	Assess and evaluate the effectiveness of professional learning.
	Inform ongoing improvement in teaching, leadership, and learning.
	Tap external assistance when necessary.

cycle, with student learning as the organizing principle” (Jensen et al., 2016, p. 12).

Common in the school systems studied was the implementation of professional learning within schools that focused on teachers’ work and was supported by policies that enhance the quality of, responsibility for, and accountability for professional learning. The professional learning was not a random selection of programs disconnected from the daily work of teachers. Rather, professional learning is the implementation of the improvement cycle within learning communities at school in order to elevate and enhance teaching practice to achieve greater results for students.

The three-step improvement cycle drives professional learning and grounds it in improvement work at the classroom and school levels. The cycle includes:

1. Analyzing what students need to learn next;
2. Developing instructional practices to achieve the student outcomes; and
3. Evaluating the impact of new practices on student learning.

This cycle emphasizes that teacher learning, when related directly to their students’ learning, results in changes in professional practice. The content of and approach to professional learning varies within and across schools to respond to the needs of students teachers serve. All four systems used this improvement framework for guiding teacher learning and overall school improvement efforts. The improvement cycle sits on several foundational principles:

1. The quality and effectiveness of professional learning is

nonnegotiable and is more tightly monitored than other systems.

2. There is strategic alignment and focus with clear goals and expectations within the schools and school systems.
3. Teachers and principals are responsible for the quality of teaching and professional learning.

LEARNING FORWARD'S PERSPECTIVE

Learning Forward’s cycle of continuous improvement — delineated within its definition of professional learning and the foundation for books such *Becoming a Learning School* (Killion & Roy, 2009) and *Becoming a Learning System* (Hirsh, Psencik, & Brown, 2014) — is an expanded version of the improvement cycle found in the four high-performing school systems. The table above depicts the crosswalk among the components of each. In addition, Learning Forward advocates a similar process in the backmapping model for planning professional learning that begins with the end in mind — results for students and educators — as the first step in planning professional learning.

Several of Learning Forward’s Standards for Professional Learning — including Learning Communities, Data, Learning Designs, Implementation, and Outcomes — speak directly to the role of the improvement cycle and support the improvement cycle, as explicated within the cycle of continuous improvement.

FINDING 2:

“Distinct roles are created to lead professional learning in schools and throughout the system” (Jensen et al., 2016, p.

4) and purposely develop new leaders to assume these responsibilities.

Jensen, Sonnemann, Roberts-Hall, and Hunter identify teacher leaders, principals, and school system leaders as pivotal to the quality of professional learning and describe the various roles these leaders have within schools, school systems, and ministries of education.

Within schools, individual teachers, teacher leaders, and principals are responsible for the quality of professional learning, and school performance systems hold them accountable for providing evidence of its success. Teacher leaders, often called master teachers, senior teachers, school staff developers, or other titles, drive a school's professional learning. They earn their roles through demonstration that they have the skills and specialized expertise in pedagogy, content, and facilitating professional learning and mentor or coach directly within their school with individual novice and experienced teachers and facilitate or support learning communities.

Career pathways identify roles for teachers within schools, school systems, and ministries of education, and the school systems provide professional learning to develop master teachers' knowledge, skills, and practices to prepare them for and support them in the role of master teacher. The primary work of teachers within the advanced level roles is improving the quality of teaching by employing common professional learning programs or approaches — learning communities, mentoring and beginning teacher initiatives, and external expertise.

Principals lead the strategic planning and alignment of professional learning to school improvement efforts and the needs of teachers and students. Researchers note, "Professional learning cannot be effective in bringing about a learning culture in schools if it not aligned and firmly embedded in school strategic planning" (Jensen et al., 2016, p. 16). Principals are accountable to their supervisors for the quality and effects of professional learning within their schools.

School system master teachers with expert content and pedagogy knowledge and practice lead and facilitate professional learning within schools and within the school system. They help prepare and advance the next generation of master teachers. Specialized preparation and support is available to assist with leading professional learning for both principals and teachers on career advancement pathways to develop their understanding of effective professional learning.

Principals' evaluation, for example, emphasizes accountability for the quality and effectiveness of professional learning and, in turn, teacher evaluation does the same. Through the efforts of professional learning leaders, the climate and culture of a school improves and the purpose and content of professional learning remains tightly focused on teaching and learning.

■ LEARNING FORWARD'S PERSPECTIVE

Learning Forward acknowledges and places significance

emphasis on leadership for professional learning and incorporates into its efforts support for administrators with direct and indirect responsibilities for professional learning as well as teacher leaders who are directly responsible for the professional advancement of their peers.

One of Learning Forward's fundamental beliefs states, "Successful leaders create and sustain a culture of learning" (Learning Forward, n.d.). In addition, Learning Forward includes a specific priority within its strategic plan focused on leadership:

- "Leadership and practice: Learning Forward builds the capacity of its members, clients, partners, and staff to establish and sustain effective professional learning" (Learning Forward, n.d.).

Since their inception in 1994, Learning Forward's standards have addressed the role of leaders of professional learning. Its current Leadership standard states that leaders "develop capacity for, advocate for, and create support systems for professional learning" (Learning Forward, 2011). Through its Innovation Configuration maps (Learning Forward, 2012, 2013, 2014) that specify what leaders in 12 distinct roles do to support implementation of effective professional learning, as well as its publications, conferences, and resource materials, Learning Forward has long advocated strong leadership at all levels of a school system for effective professional learning. Without leadership, professional learning loses the potential for sustained and deep change in teaching, leading, and student learning.

FINDING 3:

High-performing school systems leverage both accountability and evaluation for effective professional learning.

Jensen et al. noted that high-performing systems establish expectations and procedures for accountability for effective professional learning and integrate responsibility for professional learning as an essential criterion within performance management systems for schools, leaders, and teachers.

"Ensuring that quality professional learning is supported through evaluation and accountability mechanisms starts — in these high-performing systems — with system leaders setting strategic directions for quality professional learning. From this point, evaluation and evaluation systems can measure how they are being implemented in both external (e.g. courses and workshops) and internal professional learning programs (e.g. learning communities and mentoring programs)" (Jensen et al., 2016, pp. 17-18).

In other words, principals are held accountable for the effects of professional learning within their schools and are expected to apply the improvement cycle in individual, team, and schoolwide professional learning. School reviews or inspections emphasize the quality of professional learning as a priority in the review process, and broader accountability focuses on student performance, the quality of instruction, and the quality of professional learning.

Ongoing performance management of staff at all levels — including teachers, principals, district office, and ministry staff as well as external consultants — addresses the degree to which individuals are continuing to grow professionally and contributing productively to the professional learning of others. Career pathways for teachers are based on capacity to contribute to professional learning of others.

Mentors and master teachers, for example, are evaluated on how well their teachers improve their instructional practice, they contribute to their peers' professional learning, and their students perform. Accountability for the quality of teaching practices leads naturally to accountability for student success, not just achievement on tests. When the improvement cycle is used, teachers and principals know if student learning is occurring and expand their learning to address gaps that may occur.

■ LEARNING FORWARD'S PERSPECTIVE

Learning Forward advocates establishing federal, state or ministry, and local policy about quality professional learning and provides the leading resources to support accountability at all levels. Its Standards for Professional Learning, first developed in 1994 and now in their third edition to reflect current research, are integrated into policy in more than 35 states and numerous school districts.

Learning Forward's affiliate leaders are active advocates of state and local adoption of the standards to provide guidance and accountability for the quality of professional learning. The Standards Assessment Inventory, first developed in 2003 and revised since then to align with the most recent edition of the standards, is a highly reliable and valid electronic survey that measures teachers' perspectives about the quality of their professional learning through implementation of the standards.

The definition of professional learning integrated into the Every Student Succeeds Act specifies that professional learning means activities that "(A) are an integral part of school and local education agency strategies for providing educators (including teachers, principals,

other school leaders, specialized instructional support personnel, paraprofessionals, and, as applicable, early childhood educators) with the knowledge and skills necessary to enable students to succeed in the core academic subjects and to meet challenging State academic standards; and

(B) are sustained (not stand-alone, 1-day, and short-term

workshops), intensive, collaborative, job-embedded, data-driven, classroom-focused ... and may include activities that ..." support a wide range of learning designs.

Learning Forward's advocacy influenced the change in the definition that now emphasizes the collaborative, job-embedded, sustained, classroom-focused, and data-driven nature of professional learning, much as it is practiced in the high-performing systems studied. Between 2009 and 2011, Learning Forward commissioned a series of studies on the state of professional learning. The reports are available at www.learningforward.org/publications/status-of-professional-learning.

Linda Darling-Hammond and a team of researchers at the Stanford Center for Opportunity Policy in Education led the studies, which examined teacher professional learning practices and policies with a deep analysis of four states that had indicators of strong professional learning and simultaneously improving student achievement on NAEP assessments. These studies informed Learning Forward's position about the role of state policymakers in professional learning.

In recent years, Learning Forward has actively engaged in transforming state policy related to professional learning through Transforming Professional Learning, a multistate initiative funded by the Sandler and Bill & Melinda Gates Foundations. These reports are available at www.learningforward.org/publications/implementing-common-core.

Through this initiative, Learning Forward, in collaboration with other professional associations and education agencies, developed numerous resources to assist states and districts in creating comprehensive professional learning systems and policies to ensure that state and local conditions such as evaluation for professional learning, standards for quality, clearly defined roles and responsibilities, and adequate resources are available for educators' ongoing learning. Learning Forward's Learning Communities, Leadership, and Resources standards specifically address the need to establish policies and conditions for effective professional learning.

FINDING 4:

"What is needed is more time for effective professional learning practices that are incorporated into daily school life" (Jensen et al., 2016, p. 28).

Jensen et al. (2016) state, "... [P]rofessional learning is effective when it becomes a normal part of daily work life in schools. Separating professional learning from daily teaching routines is counterproductive, and limits the benefits for teachers and students alike" (p. 28). They stress that teachers in the high-performing school systems have fewer hours of daily teaching responsibilities, giving them more time to enhance their teaching practice and student results. They note that the time available for professional learning within the systems studied are not "ring-fenced around specific activity that is separated from teaching and learning" (Jensen et al., 2016, p. 28), but rather

Learning Forward has actively engaged in transforming state policy related to professional learning through Transforming Professional Learning, a multistate initiative funded by the Sandler and Bill & Melinda Gates Foundations.

integrated into teachers' routine work and connected intimately to their teaching responsibilities.

Researchers note that teachers do not have more time designated for professional learning, yet that the time is fully integrated into what teachers do each day. This time is the result of a different timetable for teacher workdays. According to researchers who used OECD and interview data, U.S. teachers teach on average 27 hours per week, while teachers in other high-performing school systems directly interact with students in classrooms fewer hours per day and, in some cases, with larger numbers of students.

British Columbia teachers, with the closest amount to their U.S. counterparts, teach 22 to 23 hours per week. Singapore and Hong Kong teachers teach 17 hours per week, and Shanghai teachers teach 10 to 12 hours per week. Researchers note that “teachers are ... relatively free to pursue professional learning opportunities through the working week and not as an out-of-hours extra” (Jensen et al., 2016, p. 28).

Even in British Columbia, where teachers teach approximately 10 hours more per week than those in other high-performing systems, teachers are allocated one to two periods per week for formal professional learning: “Professional learning time is embedded in daily work life; and teachers have time throughout the school week to improve their teaching” (Jensen et al., 2016, p. 29).

The high-performing systems discovered through their reform efforts that “being ‘tight’ on the number of hours is not in itself an effective strategy on making the most of professional learning. Rather, what will make the difference to student outcomes is the quality of professional learning, and the alignment of structures within and between schools to ensure that teachers have the time to make the most of professional learning opportunities” (Jensen et al., 2016, p. 29).

■ LEARNING FORWARD'S PERSPECTIVE

When Learning Forward's definition of professional learning was initially developed and recommended for inclusion in federal legislation, it included a phrase that some questioned. That phrase — “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” — frequently surprises education policy and decision makers and educators.

For most who view and experience professional learning as an episodic event occurring occasionally on designated days at the beginning or end of or throughout the school year, the concept of ongoing time for continuous learning several times per week remains incomprehensible. One can only guess at the response to the concept of several hours each day devoted to collaborative professional learning might generate.

Too many schools and school systems across North America and around the world have discovered ways to integrate profes-

sional learning into the routine school day for this mystery to continue. Yet, given time without clear accountability for improving instruction and student learning, increasing consistency in the quality of professional learning, and restructuring the responsibilities of teachers to minimize noninstructional tasks, the additional time will not result in strengthened professional practice and student success.

The first in the series of State of Professional Learning studies compared time available for professional learning in U.S. schools with those in other countries. Like this current study, researchers reported that teachers in the U.S. have more teaching responsibilities and less time for collaborative professional learning. This study strengthened Learning Forward's advocacy for effective professional learning embedded into the school day rather than an extra duty, particularly in the midst of sweeping reforms in content standards, pedagogy, and performance evaluation that systems in states and local school systems were undertaking.

Among the resources that emerged from the Transforming Professional Learning initiative is *Establishing Time for Professional Learning* (Killion, 2013b). In addition, Learning Forward provides practical examples of schools and school systems that are creating collaborative time for professional learning and highlights practices in its weekly news update, *Professional Learning News* (<http://multibriefs.com/briefs/lf>) and reviews research in *JSD* that links professional learning to educator effectiveness and student success.

Becoming a Learning School (Killion & Roy, 2009) and *Becoming a Learning System* (Hirsh, Psencik, & Brown, 2014) offer concrete and specific tools and processes for establishing productive collaborative learning teams and supporting and monitoring their success.

FINDING 5:

Implementing professional learning programs that align closely to school, educator, and system needs and monitoring the quality of those programs lead to educator and student success.

The research team studied how the high-performing systems implemented professional learning and found three predominant programs or approaches to professional learning common across all systems. They are learning communities, mentoring and beginning teacher initiatives, and external experts. While each system approached each program in unique ways, the programs have strong similarities and are grounded in the improvement cycle.

Learning Forward provides practical examples of schools and school systems that are creating collaborative time for professional learning.

In Part II of the research report, researchers describe how systems implemented the programs. Learning communities, which they state have emerged as “a cornerstone program for effective professional learning” (Jensen et al., 2016, p. 33), are not “simply platforms for exchange and coordination of teaching plans and materials. Rather, when well-organized, learning communities help to initiate a cultural shift towards creating expectations for improvement within schools and teachers” (Jensen et al., 2016, p. 33).

Within the spiral of inquiry in British Columbia, research and lesson groups in Shanghai, professional learning groups in Singapore, or collaborative lesson planning in Hong Kong, lesson observations add opportunities for teachers to cultivate an open-door policy that deepens and expands professional practice and provides a vehicle for measuring the effects of professional learning on students.

While the programs of professional learning are neither unknown nor novel to educators as individual efforts, what is remarkable in the systems studied is the depth of systemic implementation and the deliberate coherence among the programs. Each weaves together with the others in an interdependent system of professional learning that begins with teacher preparation and continues through a career-long pathway of role advancement, keeping an intense vision on cultivating teacher expertise in pedagogy and content.

This study makes it clear that the changes are not light switches to flip.

The research team selects examples of practice from each school system studied to describe the individual types of professional learning, yet continues to emphasize the role of leaders in establishing and evaluating the ability of the system to design and implement a professional learning system and be accountable for its results.

Mentoring and beginning teacher initiatives in all four high-performing systems acknowledge the complexity of the teaching professional and integrate systemic programs for continuous development of teaching professionals from their earliest stages and continue through career advancement. “High-performing systems use mentoring in their professional learning packages to enrich the teaching professional and improve student performance. In these systems, mentors encourage teachers to measure the impact of their teaching practices on student learning” (Jensen et al., 2016, p. 41) and use observation and feedback routinely to support teacher development.

Mentoring is intensive support within the classrooms, and it continues for multiple years. In addition, mentors, master teachers, school-based teacher leaders, and others with responsibilities for teacher development share responsibility for the success of the students of teachers they support.

Some high-performing systems provide subject-specific

as well as pedagogy-focused experts to support teacher development. These experts are culled from the most successful teachers and participate in intensive development programs to achieve the status of mentor, master teacher, or principal master teacher. A key function of the expert teacher is developing teachers’ capacity to conduct classroom research on improving student learning.

A third program is the use of external expertise. External support comes from agencies within and outside of the education arena, such as universities, consultants, research institutions, government departments, teacher organizations, and other organizations to schools and systems.

For example, in Singapore, the Academy of Singapore Teachers and the National Institute of Education provide professional learning courses and direct support to schools. In Hong Kong, Education Bureau school-based support services offers teaching consultants for in-school support. In Shanghai, principal master teachers and subject researchers support schools and teachers and support teacher research. British Columbia uses district-level subject experts to support professional learning at the school site.

In addition to support provided at local schools, external experts provide a suite of courses and workshops that teachers may elect to attend. “[H]igh-performing systems encourage teacher uptake of both in-school programs and external courses, workshops, and further certifications in order to expose teachers to the fullest range of innovative and effective teaching practices” (Jensen et al., 2016, p. 48). External agencies, in turn, work closely with systems to align to the needs and context of the systems and schools they serve.

High-performing systems still grapple with how to ensure that the quality and relevance of courses and workshops remains high. “Efforts are made to ensure that it is tied into within-school professional learning that always requires professional learning to start and end with student learning in the school” (Jensen et al., 2016, p. 49). Some accountability measures are being undertaken to increase the quality and effectiveness of externally provided professional learning.

■ LEARNING FORWARD’S PERSPECTIVE

The Standards for Professional Learning are specifically designed to guide both educators and external agencies toward high-quality professional learning. External experts — whether working with broader school systems and providing support to schools within that system or working outside the education system — share responsibility and accountability for the effectiveness and results of professional learning.

Learning Forward standards and resources support implementation of this finding. The Learning Designs, Data, Implementation, Outcomes, and Resources standards speak directly to how external expertise can be tapped to support reform efforts. *Standards Into Practice: External Roles: Innovation Con-*

figuration Maps for Standards for Professional Learning (Learning Forward, 2014) describes in detail the responsibilities of external partners, education agencies, professional associations, and institutes of higher education in ensuring effective professional learning.

The companion volumes, for school-based roles and system-based roles, delineate responsibilities of those within school systems in leading effective professional learning and guiding external partners. *Meet the Promise of Content Standards: The Role of Third-Party Providers* (Killion, 2013c) guides school and system leaders in working effectively with external experts to support professional learning. *Comprehensive Professional Learning System: A Workbook for States and Districts* (Killion, 2013a) describes the components of a system of professional learning, outlines the steps to achieve the system, and provides tools and resources to support states and districts in remodeling their existing system. *Powerful Designs for Professional Learning* (Easton, 2015) offers guidance on implementing 24 different learning designs.

STRONG SUPPORT FOR PROFESSIONAL LEARNING

Beyond PD: Teacher Professional Learning in High-Performing Systems provides specific examples of effective professional learning practices and policies in four high-performing school systems that advance professional practice and student success. The findings of the study reinforce the consensus emerging from qualitative research that professional learning is the primary vehicle for strengthening educator practice and student results.

Multiple previous studies have offered evidence about effective professional learning practice. Jensen et al. provide rich insights about the nuances of professional learning as an improvement strategy and illuminate common professional learning practices across systems renowned for their student performance.

This study makes it clear that the changes are not light switches to flip, but rather are the result of persistent and focused efforts of committed leaders who understand that schools are only as effective as their teachers and who build structures, dedicate necessary resources, and leverage accountability and evaluation policies to ensure that effective professional learning leads to results for students.

As states, school systems, and individual schools read and analyze this contribution to the field, they will discover that, for educators in high-performing systems, “professional learning is central to their jobs. It is not an add-on. It is not something done on Friday afternoons or on a few days at the end of the school year. Teacher professional learning is how they all improve student learning; it is how they all improve schools; and it is how they are evaluated in their jobs. They work in systems that are organized around improvement strategies explicitly anchored in teacher professional learning” (Jensen et al., 2016, p. 3).

In studying the implications of this research study find-

ings for application to their own professional learning work, educators, policymakers, and stakeholders will find the coherence between these findings and Learning Forward’s available resources and advocacy and for professional learning policies, additional research and resources, and effective practices compelling and convincing. What this study, its predecessors, or Learning Forward cannot provide is the will to act on these findings. That remains the sole responsibility of those who truly want to improve student learning.

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