

Beyond PD

Teacher Professional Learning in High-Performing Systems

Teacher Quality Systems in Top Performing Countries



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Executive Summary

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At the end of the school year in the Surrey School District in British Columbia, a school principal prepares for his school's biennial performance conversation. The school principal knows what the focus of the conversation will be. The District superintendent, Jordan Tinney, is clear that school improvement must focus on specific structures of teacher professional learning. The school principal heads to his annual performance conversation knowing it will all focus on how much the school's improvement plans, resourcing, and school organization have increased the effectiveness of professional learning.

In Singapore, a school professional learning leader works with classroom teachers to ensure that their professional learning programs are actually improving classroom teaching so they can meet objectives set by their school principal.

At the same time, teachers in Hong Kong have spent the year following subject-specific improvement strategies that have required extensive collaborative work and frequent classroom observations.

At the start of the year, a new teacher in Shanghai is nervous as she prepares to face her class of 45 students for the first time. Her learning curve over her first weeks, months and years will be steep. She is both challenged and supported by two mentors: one provides subject-specific guidance, the other more general pedagogical development. Her classroom teaching is observed on a regular basis and she observes her mentors' classes so she can learn and work on those aspects of her teaching




that are most critical for her students. In between classes, she regularly attends research groups with other teachers to analyze specific research questions to improve teaching and learning in their classrooms. The new teacher quickly learns she must continually develop her teaching expertise. She will be supported through this process but she knows her career will only progress if she develops high-level expertise in her subject area.

For all of these people, 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 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.

The reasons for this are straightforward. High-performing systems focus on the professional learning practices that the evidence has consistently shown appreciably lifts teacher and student learning. (See Box 1 on page 8 for a discussion of the evidence on effective adult and professional learning).

This report draws lessons from education systems in British Columbia, Hong Kong, Shanghai, and Singapore on how to improve teacher professional learning. These systems are all high-performing systems. Figure 1 shows by how much students in these systems are ahead of students in the United States, Australia and the average of the European Union. For example, the performance of the

Figure 1 How Many Months Behind? Differences in PISA Performances, 2012

	U.S.			Australia			EU 21*			
	Read	Math	Sci.	Read	Math	Sci.	Read	Math	Sci.	
Shanghai	22	39	26	18	32	19	22	34	24	 < 1 year behind
Hong Kong	12	23	18	10	17	11	15	19	16	 1 to 2 years behind
Singapore	14	27	17	9	20	9	14	22	14	 > 2 years behind
British Columbia	11	12	15	7	5	7	12	7	12	

* Unweighted Average

Figures represent the difference in performance (expressed in the number of months of school education) between students in the U.S., UK, EU 21, and Australia and four high-performing systems. Source: OECD, 2013

average 15-year-old student in the United States is 22 months behind their peers in Shanghai in reading literacy. The gap is even wider for science and stretches beyond three years for mathematics, according to the OECD Program for International Student Assessments.

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. The cycle orients professional learning around the following steps:

1. Assess students' learning to identify their next stage of learning (at either an individual or school level),
2. Develop the teaching practices that provide for the next stage of student learning (and being clear what evidence supports this), and
3. Evaluate the impact of new practices on student learning so that teachers can refine their practice.

The improvement cycle is not new. It is based on the evidence of effective professional learning and has been successfully implemented in many school systems around the world. Professional learning programs in these systems are developed around this cycle, as explored in Part II.

But the improvement cycle has also failed many times. In isolation, it is insufficient for sustained reform. To make it effective requires a broad strategy with strong linkages between how leadership roles are structured, how resources are allocated, and the focus of evaluation and accountability measures.

High-performing systems transform the improvement cycle into a culture of continuous professional learning that, in time, turns schools into true learning organizations. At a school level this is achieved through a focus on the following key components:

1. School improvement is organized around effective professional learning (that reflects the principles of adult learning).

2. Distinct roles are created to lead professional learning in schools and throughout the system.
3. Schools and systems recognize the development of teacher expertise (with expertise regularly developed through school-based research of how to improve student learning and then shared and recognized across multiple schools and districts).
4. Teachers and school leaders share responsibility not only for their own professional learning but the learning of other teachers.
5. Collaborative professional learning is built into the daily lives of teachers and school leaders.

These components are clearly overlapping and cannot be easily isolated. Yet they provide an intuitive sequence to guide system-level policy development.

At a policy level, an explicit strategic focus on how professional learning should operate guides how schools are organized. This strategy provides a focus for key policies—such as leadership, evaluation and accountability, and resourcing that allows time for professional learning—that makes effective professional learning sustainable.

All of these factors create a shared responsibility for professional learning in schools, which is regularly reinforced by teacher evaluation and school accountability policies that have a focus on the quality of collaborative professional learning in schools. This ensures that collaborative professional learning is built into the daily lives of teachers and school leaders, which is reinforced by resourcing policies that free up teachers' time for collaborative professional learning.

There is considerable nuance to this strategy, which is discussed throughout this report. But it is clear that this significantly differs from many other systems around the world. A recent U.S. study found that teachers considered professional

collaboration as a separate activity, removed from daily teaching practice and not integral to improving student learning.² Internationally, the OECD found that, on average, more than 40 percent of teachers reported that they have never taught a class jointly, observed classes or provided feedback.³

Importantly, creating effective professional learning does not require a complete overhaul of education policy. High-performing systems developed effective professional learning in schools through incremental improvements. For example, Singapore did not implement all of its reforms in one go: it changed one aspect at a time over many years, pragmatically trying what worked and discarding what did not work until it achieved a finely balanced, interconnected approach.

Developing new professional learning leaders

In these high-performing systems, new professional learning leaders are developed at the school and system level. They are regularly trained alongside school principals so each school has multiple leaders to continually improve professional learning. In schools, they work closely with school principals and ensure that teachers' individual and collective professional learning is meeting school objectives.

While job titles vary across systems – they are school staff developers in Singapore and coordinators of inquiry in British Columbia – what is common is that they are peer leaders, chosen from the teaching force and sometimes remaining one of the teachers in a school. Individual teachers make behavioral shifts when they see colleagues – not just official leaders – role-modeling effective practices.

Numerous system-level leaders increase the effectiveness of professional learning. For example, a select cohort of master teachers in Shanghai and Singapore develops professional learning in their subject area.

Every other profession has a level of master practitioner. It is fundamental that high-performing school systems recognize specialist expertise among

their teachers. These leaders are champions of the profession and of proven teaching practices. They set objectives, develop programs and train experienced teachers who hold key roles in developing other teachers in schools.

For example, the principal master teacher in English language in Singapore is the pre-eminent English language teacher in the system. She sets the standard for pedagogical expertise and leads the network of English language teachers, designing the professional learning that all teachers receive.

Evaluation and accountability that improves professional learning

Too often, policy reform debates are compartmentalized, falling either under the umbrella of school and teacher development or under school and teacher accountability. This is a false dichotomy: it reflects an outdated interpretation of both development and accountability.

In high-performing systems, evaluation and accountability are integral to the success of professional learning in schools. This is because evaluation and accountability focus not only on student performance, but also on the quality of instruction and professional learning.

A broader focus on accountability does not mean that repercussions are reduced. On the contrary, teachers in Shanghai will not be promoted unless they can demonstrate that they are collaborative. Similarly, mentors will not be promoted unless the teachers they mentor improve.

As teachers and school leaders move up their distinct career tracks in Singapore, the weighting placed on how they develop other teachers' skills in their performance review increases. In Shanghai, 360-degree performance management where teachers' peers and people above and below them in the school hierarchy have input to their performance places a strong emphasis on collaboration and professional learning. In addition, school accountability for professional learning is closely linked to the degree of autonomy the school can

exercise. If a district considers professional learning programs in Shanghai schools are considered to be of low quality then the district will take over much of the school's professional learning.

In each of these high-performing systems, evaluations of the quality of professional learning require data to be collected on which to base these judgments. Focus groups, surveys, and interviews of school leaders, teachers, parents and students provide a wealth of qualitative data that complements traditional student performance and input data. These are largely collected at the District level depending on the specific program being examined. The data embodies the professional judgment of people at different levels of the system. Educators are trusted to evaluate the quality of professional learning, make decisions accordingly and are then held accountable for those decisions. For example, district leaders and officials use their professional judgment to evaluate professional learning in schools and are then held accountable for its impact on instruction and student learning. They have the autonomy to make professional judgments on quality professional learning, but are always held accountable for these decisions.

Creating time

A common problem preventing the development of effective professional learning in many systems is a lack of time. Teachers simply do not have sufficient time in the day for taking up effective professional learning. Much has been made of how this experience contrasts with high-performing systems, with Shanghai providing the clearest example of a system that commits a large amount of resources to teacher professional learning.

The average teacher in Shanghai teaches for only 10-12 hours per week. Considerable time is allocated to professional learning. But Shanghai is an outlier even amongst high-performing systems. For example, in British Columbia only 1-2 periods per week are allocated to formal professional learning. But much more professional learning is done, within and between classes during the school week.

These policies can be brought together in numerous ways to fit local context and the stage of development of education systems. To illustrate, Figure 2 provides a snapshot of the main policies in Singapore that continually develop and reinforce effective professional learning in schools. It highlights the policies detailed in this report and the linkages between different policy areas. School leaders and professional learning leaders work together to meet school objectives that reflect system objectives. These objectives are at the heart of the appraisal of teachers and school leaders. All of this ensures there is space and time made for effective professional learning in schools. More importantly, this strategy ensures that a professional learning culture exists in schools, especially around the five key components highlighted in Figure 2 (next page).

Singapore invests significantly in teachers as professional learning leaders, both at and above the school level. New leadership roles recognize excellence in professional learning, helping teachers to lead professional learning within their own schools and to align teacher needs and broader school objectives.

A select cohort of expert teachers—known as Master teachers and Principal Master teachers—leads professional learning across the system. This group is ultimately responsible for researching, designing and leading professional learning in their respective subject areas, and linking it to broader system objectives for education.

A rigorous system of teacher appraisal holds teachers accountable for collaborating and improving practice. Differentiated job descriptions encourage the promotion of highly effective teachers, and make them responsible for other teachers' professional development.

Finally, Singapore sets a deliberate policy for ensuring teachers have adequate time for their own development in everyday practice. While this is an expensive policy, requiring concessions in other areas, it is nonetheless an effective one. Schools receive additional funds so that teachers

can collaborate throughout the working week. This strategy targets the continual development of learning communities as the primary platform for professional learning in Singapore's schools, with teachers heavily involved in setting the framework for how these operate. Learning communities are shaped by four critical development questions⁴ that reflect the improvement cycle:

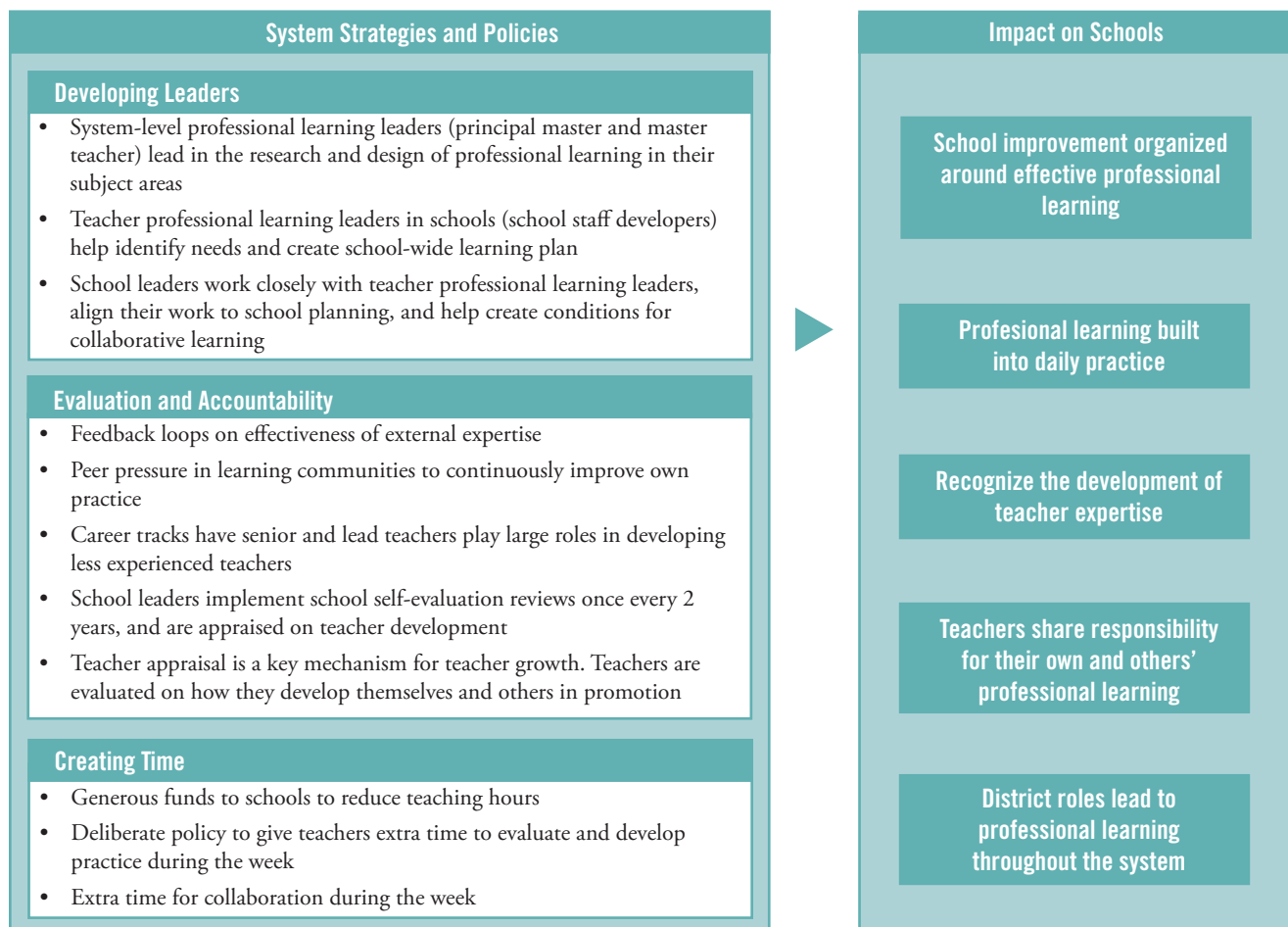
1. What is it we expect students to learn?
2. How will we know when they have learned it?
3. How will we respond when they do not learn?
4. How will we respond when they already know it?

These questions guide data collection and evaluation, with a view to developing teaching practice to improve student outcomes.

This report provides strategic, policy and practical pathways to improve professional learning based on an analysis of high-performing systems. The background context is always what the research says has the greatest impact on teaching and learning in schools. In this sense, the report shows how these high-performing systems operationalize the evidence for sustained impact.

Figure 2 Professional Learning in Singapore

Strategic Directions: Setting Expectations for Professional Learning and Recognition



Box 1 Effective Adult Learning

Adult learning should only be considered effective when it changes practices for the better. Therefore, professional learning is only effective when it improves teaching. How can this occur? There are many ways but it is fundamental that for teachers' learning to be effective it must include a range of activities connected to their classroom practice. Figure 4 (page 14) demonstrates the positive relationship between the percentage of people that change their practices and the range of activities in their learning. Most adults change their practices not simply from reading and observing others work, but from combining these passive activities with active collaboration and learning-by-doing.⁵

Effective adult learning is active, where learners work toward learning goals and drive their own process of improvement. Effective professional learning involves teachers collecting, evaluating and acting on feedback to modify their teaching practices. Intensive observation and analysis, or 'microteaching', is most effective.⁶ In John Hattie's 2009 meta-analysis ranking the impact of different interventions, professional learning activities such as formative assessment (ranked 3rd) and feedback (ranked 10th) had a strong effect on student learning. An internationally renowned study by Timperley et al. (2007) found the greatest effects for professional learning occurred when it challenged teachers' thinking and conceptions about student learning and engaged them sufficiently to develop their knowledge and skills in ways that improved student outcomes. This generally took place over an extended time period and involved external expertise. Teachers will then be in a position to adapt their classroom behaviors to better meet student needs: this is, after all, the point of professional learning.

A more detailed overview of the evidence on effective professional learning is provided in Appendix 6.