

Using Competency-Based Evaluation to Drive Teacher Excellence

Lessons from Singapore

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Lessons from Singapore

By Lucy Steiner

The United States' education system needs to take its critical next step: fairly and accurately measuring teacher performance. Successful reforms to teacher pay, career advancement, professional development, retention, and other human capital systems that lead to better student outcomes depend on it. Where can the U.S. find the best-practice know-how for this? To start, it should look to nations that have revamped teacher performance measurement to sustain teaching excellence, and Singapore offers a remarkable example.

In the early 2000s, the small but racially and economically diverse nation of Singapore designed and implemented a new, performance-linked method of measuring teacher effectiveness that enables measurement of teachers in all subjects and grades. Singapore had already developed a high-performing education system. But as global economic opportunities for its citizens increased, it needed to ensure continued recruitment, retention, and performance of talented teachers. Today, Singapore's students consistently perform at the top of internationally comparable exams,¹ and 98 percent of Singapore's sixth-grade students achieve math standards more rigorous than the eighth-grade standards on the U.S. NAEP exam (National Assessment of Educational Progress).² Think of it this way: many of Singapore's lower-achieving students are learning at levels higher than gifted-student curricula in U.S. schools.³ Singapore,

while much smaller than the United States, compares in size to some of our states and largest cities, not one of which is on a path to achieve for children what Singapore has.

What can we learn from Singapore? Much, it seems, and Singapore knows it. The complete recipe for its educational success is not public, and deter-

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mining the ingredients in the secret sauce is a challenge. But **one element stands out: the development and thorough use of performance-linked "competencies" to measure, reward, and develop teacher performance.** Education leaders take note: we're not even close in the U.S., and yet similar systems and accompanying practices are within reach of any motivated leader who wants to achieve and sustain results like Singapore's. This paper provides a launching point. **Here we present a brief background on the state of teacher evaluation in the United States, the case for why we can learn much from Singapore, and key facts about Singapore's competency-based teacher evaluation system.**



U.S. Teacher Evaluation Falls Short

As documented in several recent reports, the teacher evaluation systems in most schools and districts in the U.S. — many of which have been in place for decades — fail on multiple counts to deliver the kinds of information we need to help teachers improve student learning.⁴ Surveys suggest that even U.S. teachers themselves recognize that most current evaluation systems do not offer meaningful feedback on their performance. “My perspective on the evaluation process is that it is a joke,” a Chicago teacher commented.⁵

These findings and opinions are not surprising when you consider that it is standard practice for administrators to use a binary rating sheet once a year, on which they check off whether a teacher is either “satisfactory” or “unsatisfactory” on a series of items. Research suggests that in districts using such a system, 99 percent of teachers receive a satisfactory rating. But even in districts that use a broader range of rating options, overall scores remain extremely high. In these districts, 94 percent of teachers receive one of the two top ratings, and less than 1 percent get an unsatisfactory rating.⁶

By treating all teachers as essentially the same, current evaluation systems do not allow us to recognize or learn from top performers, to help all teachers by supporting their growth, or to respond forcefully when teacher performance falls well below acceptable levels. It is difficult to imagine any profession that would not be crippled under the weight of these constraints.

Improving the current system will not be easy, but there are powerful forces at work to make finding solutions more likely than ever before. President Obama and Secretary of Education Arne Duncan have made teacher evaluation a central element of their strategy to improve America’s schools. States that applied for federal funding under the “Race to the Top” were scored in part based on whether they tie teacher evaluation to student performance results, and whether they use evaluation data for decisions

about compensation, tenure, and dismissal. Randi Weingarten, the president of the nation’s second-largest teachers’ union (the American Federation of Teachers), announced in early 2010 that the union was ready to work with districts and states to overhaul evaluation practices to better meet the needs of teachers and students. “Our system of evaluating teachers has never been adequate,” Weingarten said. “For too long and too often, teacher evaluation — in both design and implementation — has failed to achieve what must be our goal: continuously improving and informing teaching so as to better educate all students.”⁷

A handful of districts around the country have improved teacher evaluation systems. For example, in Denver; Toledo and Dayton, Ohio; and, more recently, New Haven, Conn., teachers and district officials have hammered out new collective-bargaining agreements, which include teacher evaluation measures leading to increased pay for superior performance. Efforts to improve teacher evaluation systems are also under way in such districts as Ann Arbor, Mich.; Chicago, Ill.; and Prince George’s County, Md. In each case, the primary sticking point inhibiting change is the possibility of removing ineffective teachers based on their students’ performance. After all, if teachers who have previously received “outstanding” evaluations are suddenly judged on their actual effectiveness, administrators will be pressed to act upon newly revealed low performers when results are transparent for the first time. As a result, teachers and their unions often fear that districts will use teacher ratings based on student test scores primarily to weed out the low performers, rather than to reward better teachers.⁸ For example, in Washington, D.C., Chancellor Michelle Rhee faced stiff opposition to her efforts to revamp teacher evaluation and compensation.⁹ To continue the momentum for change, policymakers need more information about performance evaluation systems that work, and how they can be adopted in schools and districts across the United States. Fortunately, we have an excellent example on both these fronts in Singapore.

Why examine Singapore?

Singapore has valuable lessons to offer U.S. policymakers because of its strengths in two important areas. First, as a country, Singapore has been able to demonstrate extraordinary student learning results. For example, it consistently rates among the top countries in the world on international rankings of student achievement in science, math, and literacy.¹⁰ Second, Singapore's rigorous teacher performance management system appears to enjoy very high levels of support among teachers, policymakers, and government officials.¹¹ A survey conducted by the Ministry of Education in 2007, for example, found that the majority of teachers favored an even stronger link between performance and pay than the plan provided.¹² These facts alone suggest that we can learn something from Singapore's approach to human capital management.

An Overview. Singapore — a small island nation of 5.4 million people that sits at the southernmost tip of the Malaysian peninsula — became an auto-

China and India — has created opportunities as well as challenges for Singapore.

Its economic vulnerability may explain why Singaporeans tolerate a highly centralized government that practices what some observers refer to as “soft authoritarianism.”¹³ Government policy influences many aspects of people's lives, including housing (most Singaporeans live in high-rise buildings in apartments that are subsidized by the government) and transportation (there are high taxes on cars, and the government severely restricts the number of cars on the road).

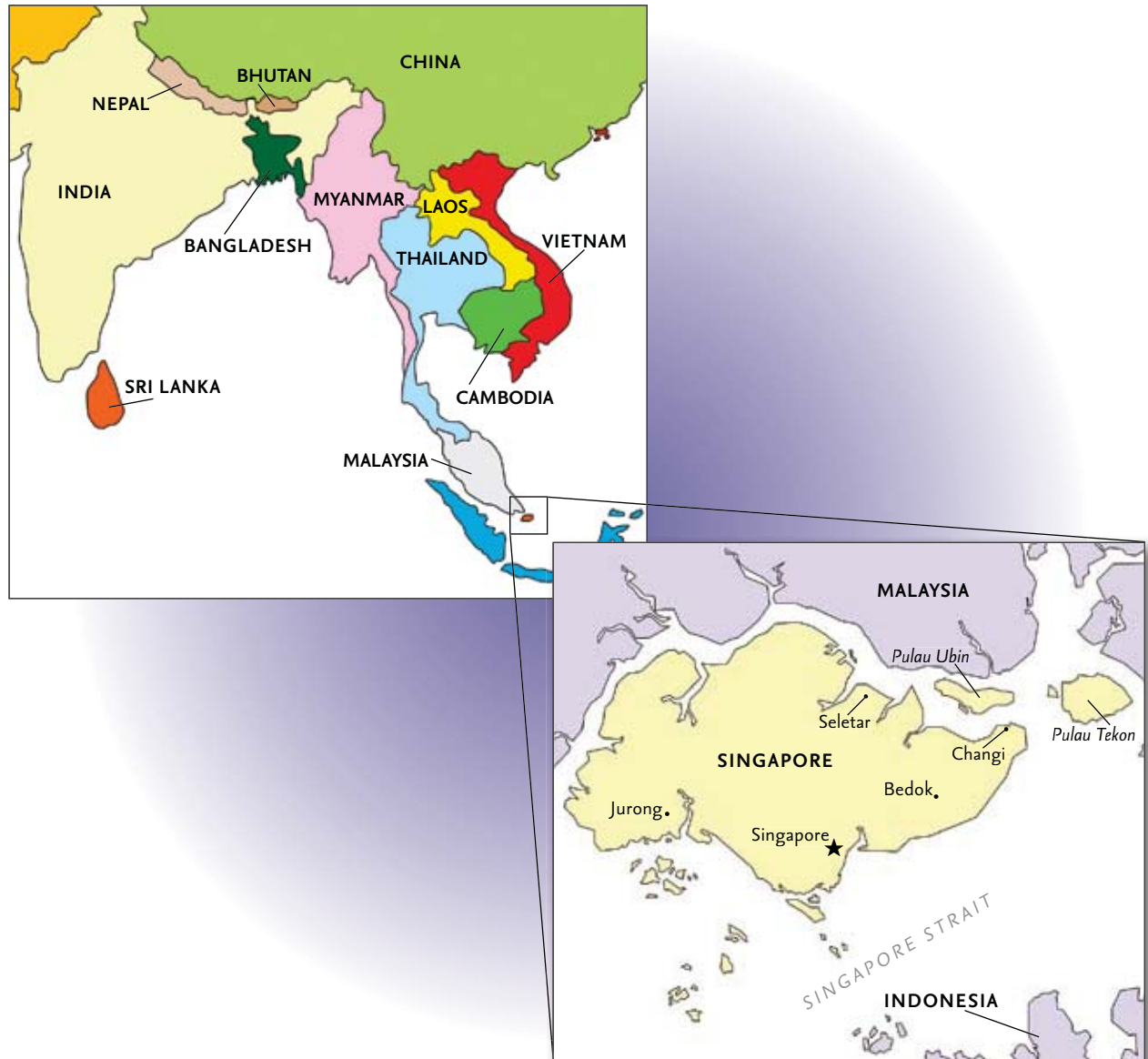
Visitors to Singapore repeatedly hear that the country's only national resource is its people, and that its viability as a country depends on its citizens' ability to contribute meaningfully to the world's economy. Singapore's eagerness to import talent from overseas is an indication of the value that various sectors of the economy, including education, place on academic achievement. While Singapore has an extremely stringent immigration policy for low-skilled workers, industry leaders are encouraged to attract talented people from overseas to become either permanent residents or citizens. This has led to a large and vibrant community of expatriates on the island, people from all over the globe who relocate to Singapore to work in industries such as finance, law, and health as well as education.

Comparing Singapore to the United States. Singapore differs from the United States in several key respects. The scale and natural resources of the U.S. are dramatically larger, as is the size of the U.S. population and its political and economic role in world affairs. The education system in Singapore is tightly regulated by a centralized government, whereas in the United States, primary and secondary education fall largely under state and local, rather than federal, control. This makes Singapore more similar in size and governance to some U.S. states (e.g., Minnesota and Wisconsin) and even to a few of our largest urban school districts (e.g., New York City and Los Angeles).

Singapore's rigorous teacher performance management system enjoys very high levels of support among teachers, policymakers, and government officials.

mous nation in 1965 (see Figure 1). From the outset, Singapore faced enormous challenges. It has no natural resources, a small land mass, and a relatively small population. Its immediate neighbors, Malaysia and Indonesia, are both poorer countries that have dealt with years of political turmoil, export dependency, and extreme poverty despite an abundance of natural resources. They serve as constant reminders of what Singapore has at stake. Meanwhile, the growing economic success of two of its largest neighbors —

FIGURE 1. Singapore's position in Southeast Asia

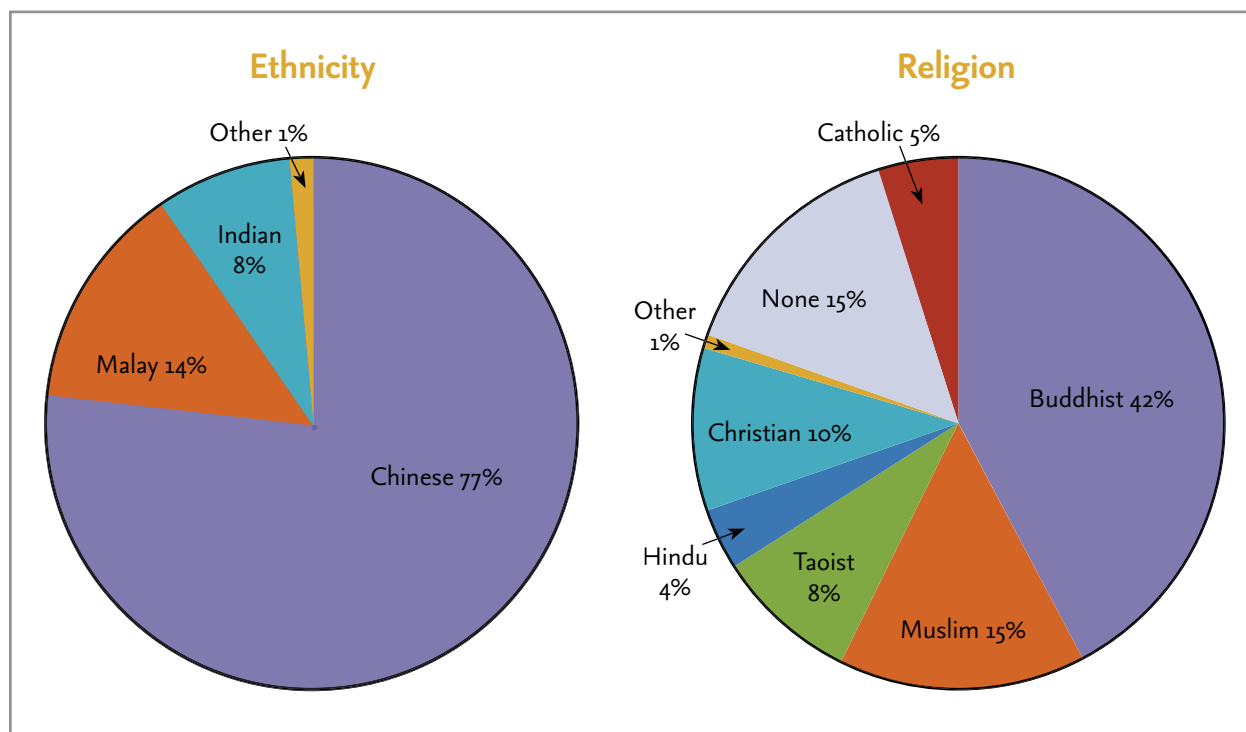


Singapore and the U.S. have important similarities as well. Like the United States, Singapore has a highly diverse population, both ethnically and religiously (see Figure 2). Approximately 77 percent of Singaporeans are of Chinese descent, while 14 percent are Malay and 8 percent are Indian.¹⁴ Strong religious differences exist as well. Buddhism, Islam, Hinduism, Confucianism and Taoism, Christianity, and Sikhism are all practiced alongside one another, often in close physical proximity. It is common to see Chinese temples on the same block with mosques

Like the United States, Singapore has a highly diverse population, both ethnically and religiously.

and Christian churches. English is the official language of Singapore, but other languages are widely spoken. Estimates suggest that more than 40 percent of Singapore's students speak a language other than

FIGURE 2. The Ethnic and Religious Diversity of Singapore's People



Source: Central Intelligence Agency. *World Factbook, East and Southeast Asia: Singapore*. Retrieved April 2, 2010 from <https://www.cia.gov/library/publications/the-world-factbook/geos/sn.html>

English at home.¹⁵ In addition, as in the United States, Singapore has wide economic diversity, as illustrated by the country's Gini coefficient, a common measure of inequality in the distribution of family income within a country. Values range from 0 to 1, with lower values representing greater equality. Singapore's Gini coefficient was 0.481 in 2008, making it the 30th most unequal country on a list of 134 countries, above even the United States, which was 43rd.¹⁶

Ninety-eight percent of Singapore's sixth-grade students pass exams more rigorous than the eighth-grade NAEP mathematics test in the U.S. — nearly triple the percentage of proficient eighth-grade U.S. students.

However, what makes Singapore most useful as an example to U.S. educators and policymakers is that Singaporean students consistently excel on international exams. For the past five years, Singapore has ranked among the top four countries in the world on the Trends in International Mathematics and Science Study (TIMSS) science and math tests and the Progress in International Reading Literacy Study (PIRLS) reading test (see Table 1).¹⁷ National assessments tell a similar story. Ninety-eight percent of Singaporean students passed their sixth-grade "leaving" exam in 2009.¹⁸ U.S. scholars comparing this exam to the National Assessment of Educational Progress in the U.S. (NAEP) have concluded that the Singaporean sixth-grade exam in mathematics is more rigorous than the eighth-grade NAEP test.¹⁹ In comparison, 31 percent of U.S. students tested proficient in reading on the eighth-grade NAEP test, while 34 percent were proficient in math and 29 percent in science, according to the most recent results

TABLE 1. Achievement on Comparable International Exams, Singapore versus the United States

Exam	Singapore	United States
PIRLS Literacy (2006) 4th grade	Score: 558; Rank: 4	Score: 540; Rank: 18
TIMSS Math (2007) 4th Grade	Score: 599; Rank: 2	Score: 529; Rank: 11
TIMSS Math (2007) 8th Grade	Score: 593; Rank: 3	Score: 508; Rank: 9
TIMMS Science (2007) 4th Grade	Score: 587; Rank: 1	Score: 539; Rank: 8
TIMMS Science (2007) 8th Grade	Score: 567; Rank: 1	Score: 520; Rank: 11
6th-grade “leaving” exam (compared to the 8th-grade NAEP)	98% proficient overall	31% proficient in reading, 34% proficient in math, 29% proficient in science

for each subject.²⁰ In summary, students in Singapore are learning far more far younger.

While extraordinary student achievement in Singapore is undoubtedly the result of many factors — high levels of parental engagement and enormous national will to excel in core academics among them — it could not occur without a corps of extremely skilled and effective teachers. Singapore has developed this teaching corps through a deliberate strategy. Conversations with Singaporean education officials suggest that Singapore has carefully built a teacher performance management system designed to promote and enhance teacher excellence. In this report, we describe how Singaporean officials use this model to support excellence at several points in a teacher’s career.

Singapore’s Teacher Evaluation System: Using Competencies to Achieve Outstanding Results

In 2001, Singapore’s Ministry of Education (MOE) overhauled its existing teacher evaluation system and replaced it with a more comprehensive approach, which it called the Enhanced Performance Management System. The new system represented a major

shift from focusing teacher evaluation on observable characteristics, such as subject matter expertise, classroom management, and instructional skills, to emphasizing the underlying characteristics, or “competencies,” that lead to exceptional performance.²¹ The development and measurement of individual competencies are used in conjunction with achievement of performance outcomes to evaluate, career track, promote, and pay teachers. The performance outcomes, which we describe later in this paper, include student learning but span far beyond that to other aspects of

Competencies are used in conjunction with performance outcomes to evaluate, career track, promote, and pay teachers in Singapore.

child development, collaboration with parents, and contribution to the school community.

Identifying competencies that distinguish top performers from the rest. “Competency” often describes any work-related skill. When Singapore’s

At the center of Singapore’s new performance management system are “competencies,” the underlying characteristics that distinguish the best performers from the rest.

MOE uses the term, however, it is referring specifically to the underlying traits and habits — patterns of thinking, feeling, acting, or speaking — that cause a person to be successful in a specific job or role.²² Because different jobs have different demands, the competencies that contribute to outstanding performance differ as well. For example, being an outstanding teacher requires a different set of competencies than those for an outstanding principal. Validating the competencies necessary for a particular role, as well as the levels of increasingly successful behavior within each competency, is possible if developers are willing to invest in the underlying research.²³

The research method Singapore used to develop its competency model was designed in the United States in the 1970s by Harvard University researcher David McClelland.²⁴ His approach is fairly simple: researchers select two groups of current job holders, one that has displayed average performance according to an agreed-upon set of outcome measures, and another that has displayed outstanding performance on the same set of measures. Researchers then use a structured interview technique called the Behavior Event Interview (BEI) to elicit detailed stories that reveal how very high performers differ from more typical or lower-performing job holders.²⁵

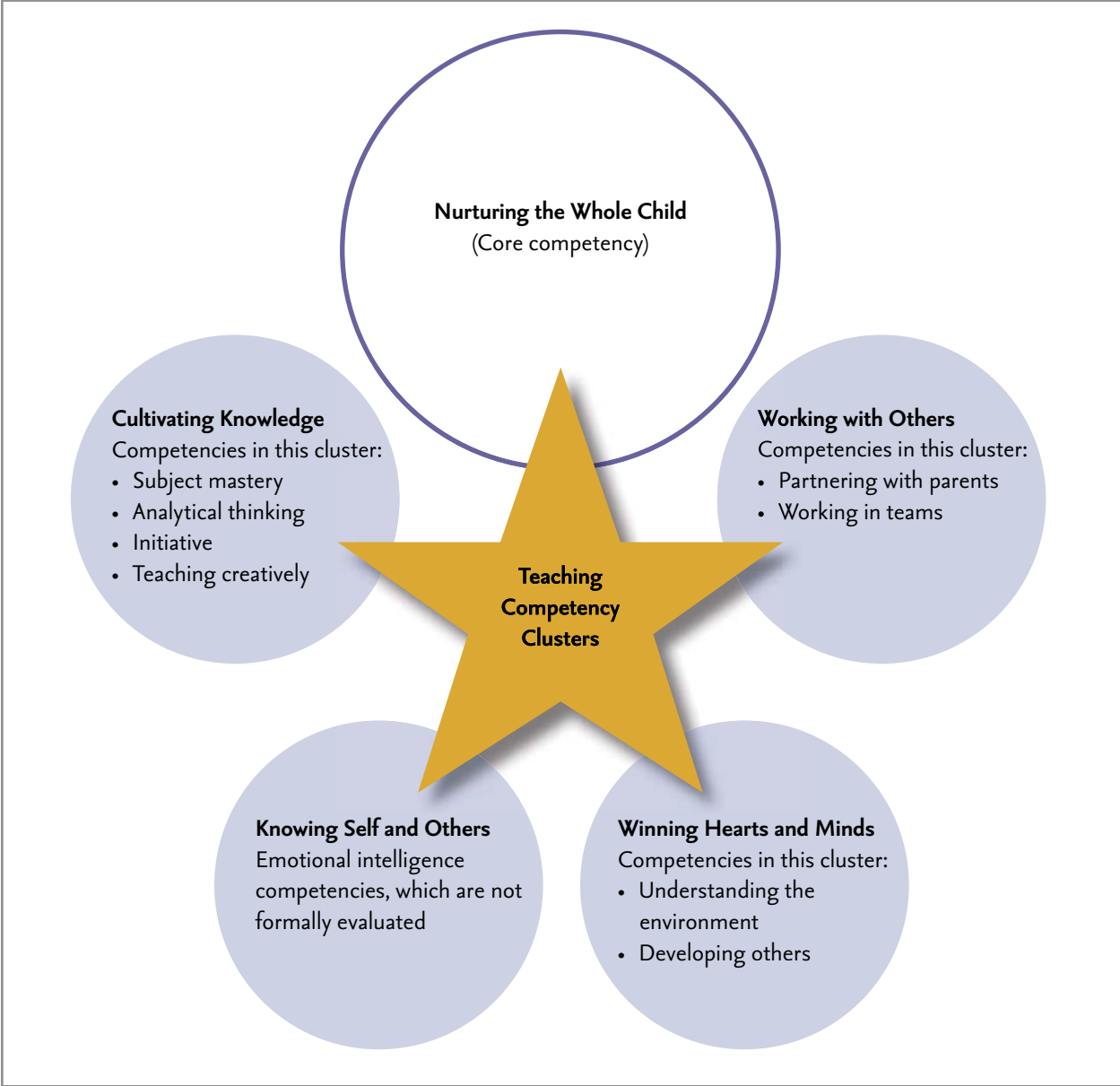
During the BEI, selected job holders are interviewed for two to three hours about details of what they did, said, thought, and felt as they went through critical incidents at work. These interviews are recorded, transcribed, and coded for patterns of behavior. The patterns displayed by both groups are recorded as baseline behaviors, while those exhibited

only by the high performers are used to develop a scale of increasingly effective behaviors associated with that competency.²⁶ For example, the competency called “initiative” focuses on exhibiting the drive and actions to do more than is expected to accomplish a challenging task. As the scale increases, so does the complexity of the actions associated with this competency, from “acting decisively in critical situations” to the more sophisticated “identifying and preventing potential problems before they happen.”²⁷

Singapore’s teacher competency model. There are three major roles in Singaporean schools — teachers, principals, and school specialists. In order to develop a competency model for each of them, education ministry officials hired trained researchers and interviewers from a human resources firm based in the United States.²⁸ The teacher competency model the firm developed for Singapore includes three tools: 1) short, broad definitions of the competencies that distinguish high performance; 2) rating scales of increasingly more effective levels of behavior within each competency; and 3) competency level targets for each job.²⁹ The strength of the model is its ability to correlate a job holder’s performance on the competency scale to successful attainment of work-related goals.³⁰ Increasing levels of competence are designed to enable teachers to perform better in the key result areas identified as critical to effective teaching in Singapore — student learning and development, contribution to the school community, working with parents, and professional development.³¹

Researchers use structured interviews called **Behavior Event Interviews** to elicit detailed stories that reveal how top performers differ from typical performers in a job.

FIGURE 3. Singapore's Teaching Competency Clusters



Source: Derived from Edmund Lim's "Appendix B: Description of the Performance Management Process," Susan Sclafani and Edward Lim, *Rethinking Human Capital: Singapore As A Model for Teacher Development* (Aspen Institute, 2008). Available: <http://www.aspeninstitute.org/sites/default/files/content/docs/education%20and%20society%20program/SingaporeEDU.pdf>



The Singapore competency model for teaching consists of one core competency, “Nurturing the Whole Child,” and four other major competency clusters, “Cultivating Knowledge,” “Winning Hearts and Minds,” “Working with Others,” and “Knowing Self and Others.”³² Each cluster has two to four competencies. For example, “Cultivating Knowledge” has four key competencies: subject mastery, analytical thinking, initiative, and teaching creatively (see Figure 3). The competencies are broken down further into progressive levels of more effective behaviors based on the high-performer interviews, and these are used as rating scales. Each level includes descriptions of the specific behaviors a teacher should demonstrate at a particular level of mastery. We did not have access to the competencies for all of the teaching roles the MOE offers, but Table 2 shows the competencies distinguishing beginning teachers from master teachers.

This teaching competency model forms the bedrock of Singapore’s Enhanced Performance Management System (EPMS). Recognizing that the quality of its teaching force is vital to its success, the Ministry of Education developed this system to promote increasingly high levels of performance, even from teachers who are already excellent. Ministry officials responsible for hiring and school leaders responsible for leading teachers use the competency model in conjunction with the achievement of performance goals at each stage of employment to:

- ▶ Hire and train aspiring teachers;
- ▶ Set annual competency achievement targets;
- ▶ Evaluate competency levels throughout the year;
- ▶ Match each teacher to a career path; and
- ▶ Determine annual bonuses.

TABLE 2. Description of Singapore's Teacher Competencies

Competency Cluster	Competency	All Teachers	Master Teachers
Nurturing the Whole Child	n/a	<ul style="list-style-type: none"> • share values with student • take action to develop the student 	<ul style="list-style-type: none"> • act consistently in the student's interest • get others to join the education process • influence policies, programs, and procedures
Cultivating Knowledge	Subject Mastery	<ul style="list-style-type: none"> • active interest in subject matter • take initiative to keep abreast of education trends in subject 	<ul style="list-style-type: none"> • apply knowledge of trends • get feedback to determine effectiveness • develop innovative approaches • provide thought leadership
	Analytical Thinking	<ul style="list-style-type: none"> • break down problems • identify cause-and-effect relationships • prioritize tasks according to their importance 	<ul style="list-style-type: none"> • see basic and multiple relationships • analyze and develop solutions to complex, multidimensional problems
	Initiative	<ul style="list-style-type: none"> • recognize and respond to current situations • act decisively in critical situations • address potential problems before they worsen 	<ul style="list-style-type: none"> • think and act ahead of time to optimize opportunities • identify and prevent potential problems before they happen • anticipate situations to attain long-term benefits
	Teaching Creatively	<ul style="list-style-type: none"> • use routine methods to teach • provide worksheets and notes • appeal to students' interests by using specific techniques and approaches to teach concepts • assess learning through simple questioning 	<ul style="list-style-type: none"> • use a variety of approaches • use reflective questioning to assist student comprehension • teach a range of concepts simultaneously • exploit learning opportunities inside and outside classroom • inspire learning beyond the curriculum
Winning Hearts and Minds	Understanding Environment	<ul style="list-style-type: none"> • know policies and procedures • recognize organizational capabilities • understand reasons for people's resistance • understand the rationale behind policies 	<ul style="list-style-type: none"> • apply understanding of school issues • comprehend school climate and apply this knowledge to attain positive outcomes • develop activities that align with school's education vision • apply knowledge of socioeconomic forces • address long-term issues influencing the school's relation to the external world
	Developing Others	<ul style="list-style-type: none"> • give suggestions to address immediate developmental needs • provide guidance to beginning teachers that draws on personal experience and knowledge 	<ul style="list-style-type: none"> • coach teachers for development • stretch potential of self and colleagues through professional development
Working with Others	Partnering with Parents	<ul style="list-style-type: none"> • keep parents informed about activities, student progress, and policies • treat parents as partners • encourage parental involvement 	<ul style="list-style-type: none"> • work collaboratively with parents • build and nurture long-term relationships with parents
	Working in Teams	<ul style="list-style-type: none"> • willingly help others and share information • express positive attitudes and expectations of others • show willingness and keenness to learn from colleagues to attain work targets and goals 	<ul style="list-style-type: none"> • encourage and empower team teachers • build team commitment • highlight and resolve issues that affect teacher effectiveness

Source: Derived from Edmund Lim's "Appendix B: Description of the Performance Management Process," Susan Sclafani and Edward Lim, *Rethinking Human Capital: Singapore As A Model for Teacher Development* (Aspen Institute, 2008). Available: <http://www.aspeninstitute.org/sites/default/files/content/docs/education%20and%20society%20program/SingaporeEDU.pdf>

Hiring and Training Aspiring Teachers

As in many other countries, convincing the best and brightest students to consider a teaching career is not an easy task. The lure of other professions, such as medicine, finance, and law, is as strong in Singapore as it is in many other parts of the world. Yet top-performing students in Singapore consistently apply to become teachers, enabling the Ministry of Education to recruit teachers who graduated from the top 30 percent of their secondary school classes.³³ It is outside the scope of this report to closely examine Singapore's teacher recruitment strategy, but ministry officials say that they have worked hard to refine the incentive structure to attract a strong candidate pool, offering teachers opportunities to earn additional pay and benefits, advance in their teaching career, and attend professional development training (see Figure 4).³⁴ Once they have assembled this pool, the MOE uses the competency model to screen and train prospective teachers.

Initial screening. All public school teachers in Singapore work for the Ministry of Education. Teachers are hired prior to their training, which occurs for all teachers at one institution, the National Institute of Education (NIE). Teachers can enter

The strength of Singapore's model is the statistical correlation of individuals' competencies on scales of increasingly effective behaviors to successful attainment of work-related goals.

training at different stages: right after they complete secondary school (equivalent to the end of 12th grade in the United States), after they complete a university degree, or as a midcareer change. In initial screens, the MOE considers only candidates with relatively high test scores who graduated in the top third of their high school class.³⁵ This is true for recent grad-

Singapore's Education Ministry officials and school leaders use the competency model in conjunction with the achievement of performance goals at each stage of employment to:

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- ▶ Match each teacher to a career path; and
- ▶ Determine annual bonuses.

uates as well as for lateral-entry teachers who leave other careers to become teachers.

Officials then hold in-person interviews with candidates to assess whether they demonstrate the competencies that the ministry has identified as essential prior to training. Although the MOE does not expect candidates to demonstrate the same level of competence as experienced educators, the competencies it uses to evaluate them are aligned with the competencies in the EPMS used to evaluate current teachers.

Consequences of competency screening. The rigorous initial screen that the MOE uses to determine who enters the teaching profession has several ramifications for how the ministry manages other aspects of its human capital system. For example, both NIE and MOE supervisors expect the vast majority of candidates to become successful teachers if they receive the right mix of training, support, and accountability, because they already possess the underlying competencies necessary for success.³⁶ This may explain why, in general, the performance management system in Singapore is largely geared toward constant improvement, rather than weeding out low performers. Conversations with government officials support this notion. When asked about processes for dismissing low-performing teachers, interviewees uniformly stated that dismissal was a low priority except in cases of egregious misconduct.³⁷ The rea-

FIGURE 4. Incentives for Incoming Teachers in Singapore

- ▶ **Attractive compensation.** Teachers are relatively well paid, have performance bonus opportunities, and have excellent benefits.
- ▶ **Multiple opportunities for career advancement.** There are three education tracks, each with several levels of advancement.
- ▶ **Ongoing professional support.** Includes paid leave, scholarships for advanced study, online training opportunities, and opportunities to collaborate with colleagues.
- ▶ **Chance to be part of a vitally important and revered profession.** Throughout Singapore, there are recruiting posters inviting people to become teachers so they can “Mould the Future of the Nation.”

Source: Susan Sclafani and Edward Lim, *Rethinking Human Capital: Singapore As A Model for Teacher Development* (Aspen Institute, 2008). Available: <http://www.aspeninstitute.org/sites/default/files/content/docs/education%20and%20society%20program/Singapore%20EDU.pdf>

sons for dismissal are transparent — they are widely publicized — but rarely need to be enforced. According to interviewees, the MOE has very carefully sought to enhance public confidence in the teaching profession in part to make it more attractive for talented candidates.³⁸

Attrition statistics back up these claims. Officials estimate that about 3 percent of the teachers in Singapore leave in a given year for any reason, excluding those who retire.³⁹ This means that an even smaller number of teachers are dismissed and, unlike in the U.S., where large numbers of students fail to achieve adequate growth, student results in Singapore suggest that the low rate of dismissals is actually due to higher performance rather than an inability or unwillingness to measure teacher effectiveness.

Training. The National Institute of Education works closely with the ministry in the design and emphasis of its training programs, which include coursework as well as several opportunities to teach in a supervised setting. Having one training institute

ensures that all teachers are prepared to a uniform standard, and it also allows the ministry to tightly control the number of students who are admitted each year.⁴⁰

In addition to grades and instructor comments on coursework, candidates get extensive feedback during their supervised teaching experiences. At the end of their fourth and final year in the bachelor’s degree program, for example, candidates teach in a school for 10 weeks under the direction of their NIE supervisor and mentor teachers. During this experience, supervisors work alongside teaching candidates, conduct frequent observations, hold ongoing discussions about their performance, and give candidates specific assignments to improve their craft.⁴¹ To receive a passing grade on this experience, candidates have to demonstrate both strong teaching skills and the underlying competencies for successful teachers. Supervisors from NIE, the cooperating teacher, and the school principal jointly evaluate the candidate, although NIE is the main decision-maker.⁴²

Setting Annual Competency Achievement Targets

All teachers begin the year by developing their annual performance goals, which they record on a standardized evaluation form (see Figure 5). According to the ministry, these performance goals address both the “what” and “how” of performance.⁴³ Although accomplishing work targets, such as improvements in student learning, is critical, teachers and their supervisors also set individual performance goals for reaching higher levels of competence, which captures *how* teachers are able to achieve these work targets. After looking at their final evaluation from the previous year, teachers develop goals that span four key result areas: 1) holistic development of students through quality learning, co-curricular activities, and pastoral care and well-being; 2) contribution to the school; 3) collaboration with parents; and 4) professional development. For example, a teacher might set a goal to improve student understanding of a particular mathematical concept that the previ-

FIGURE 5. Description of the Standardized Teacher Evaluation Form in Singapore

The standardized evaluation form includes:

- ▶ **Goals.** Specific work goals that include competency targets and other performance goals for the next year
- ▶ **Competencies.** Current competency ratings
- ▶ **PD plans.** Training and development plans for the next year
- ▶ **Feedback.** Reviews and comments by the teacher and supervisor regarding work performance and competencies as well as additional comments or review by a second evaluator

Source: Susan Sclafani and Edward Lim, *Rethinking Human Capital: Singapore As A Model for Teacher Development* (Aspen Institute, 2008). Available: <http://www.aspeninstitute.org/sites/default/files/content/docs/education%20and%20society%20program/Singapore%20EDU.pdf>

ous year’s students did not master adequately (the *what*), as well as *how* he might do this by reaching the next level of competence on the competency “Teaching Creatively.”⁴⁴

According to officials, the MOE does not set requirements about how much weight teachers and schools should give to student achievement results as part of the evaluation process, but individual schools do set internal expectations.⁴⁵ As a result, some schools weigh student achievement scores more heavily than others. But, in contrast to many teacher evaluations in the United States, some part of every teacher’s evaluation in Singapore is based on student learning.⁴⁶

Once teachers have completed a draft of their standardized evaluation form — which they refer to as a “work review form” — they meet with the supervising officer at their school to make sure their goals and plans align with departmental, school, and national goals. At this meeting, the supervisor and the teacher also review and agree on the professional development and internal support that the teacher will need to meet her goals.⁴⁷

Evaluating Competency Levels throughout the Year

The work review form is not a one-time exercise that gets filed away and forgotten. Throughout the year, supervisors monitor each teacher’s progress on their competency goals and other work performance goals. Informally, supervisors frequently observe and confer with teachers, providing coaching and guidance when needed. Formally, supervisors meet with teachers for midyear and final reviews. At the midyear review, teachers and supervisors assess each teacher’s progress toward her goals. During these meetings, supervisors offer constructive criticism and advice about targeted professional development opportunities outside the school, as well as suggestions about staff members within the school from whom teachers can request help.

At the end of the year, teachers meet once more with their supervisor to discuss whether they have met the goals established at the beginning of the year. The year-end appraisal has multiple purposes, each of which is designed to improve teacher performance. First, the year-end appraisal sets the stage for future growth. By comparing actual performance with planned performance, teachers and their supervisors come to an agreement about the next stages of growth a teacher needs to reach, and this information is recorded in the year-end review.⁴⁸ This review also informs decisions about teachers’ career tracks and performance bonuses, described in the following sections.⁴⁹

Singapore offers three different career tracks — for teaching, leadership, and specialists — each of which offers teachers the opportunity to earn greater stature, responsibility, and pay.

Matching Each Teacher to a Career Path

Singapore has a robust career ladder system that was introduced (and continues to be refined) in an effort to enhance teacher effectiveness and ensure that the highest performing teachers have incentives to stay in the profession. Indeed, their efforts are backed by research; studies across sectors repeatedly suggest that high-performing employees are more likely to stay in a profession if they have opportunities to advance their careers, and if they are generously compensated for their superior work.⁵⁰

Singapore offers three different career tracks — for teaching, leadership, and specialists — each of which offers teachers the opportunity to earn greater stature, responsibility, and pay (see Figure 6). Teachers who receive superior ratings on their annual evaluations are eligible to become master or senior teachers within the teaching track, taking on additional responsibility for mentoring and assisting other teachers. With continued outstanding performance and a matching competency profile, teachers can enter the leadership track and become school principals or take leadership positions within the education ministry. Teachers who have exceptional content knowledge are eligible to enter the senior specialist track, where they conduct research and share with teachers the best practices related to their subject expertise.

All of these tracks have salary grades that are designed to provide all educators (teachers, specialists, and leaders) with an incentive to advance as far as they can. A senior teacher, for example, can make a salary equivalent to a school vice principal, so excellent teachers do not have to leave teaching to earn higher pay.⁵¹ Advancement in any of the career tracks requires meeting work targets and demonstrating increasing levels of competencies.

On an annual basis, teachers use their year-end review forms to indicate their career aspirations. Supervisors also have an opportunity to weigh in on the direction they think a teacher's career should take. On the review form, supervisors rate teachers on their "current estimated potential," which is the highest

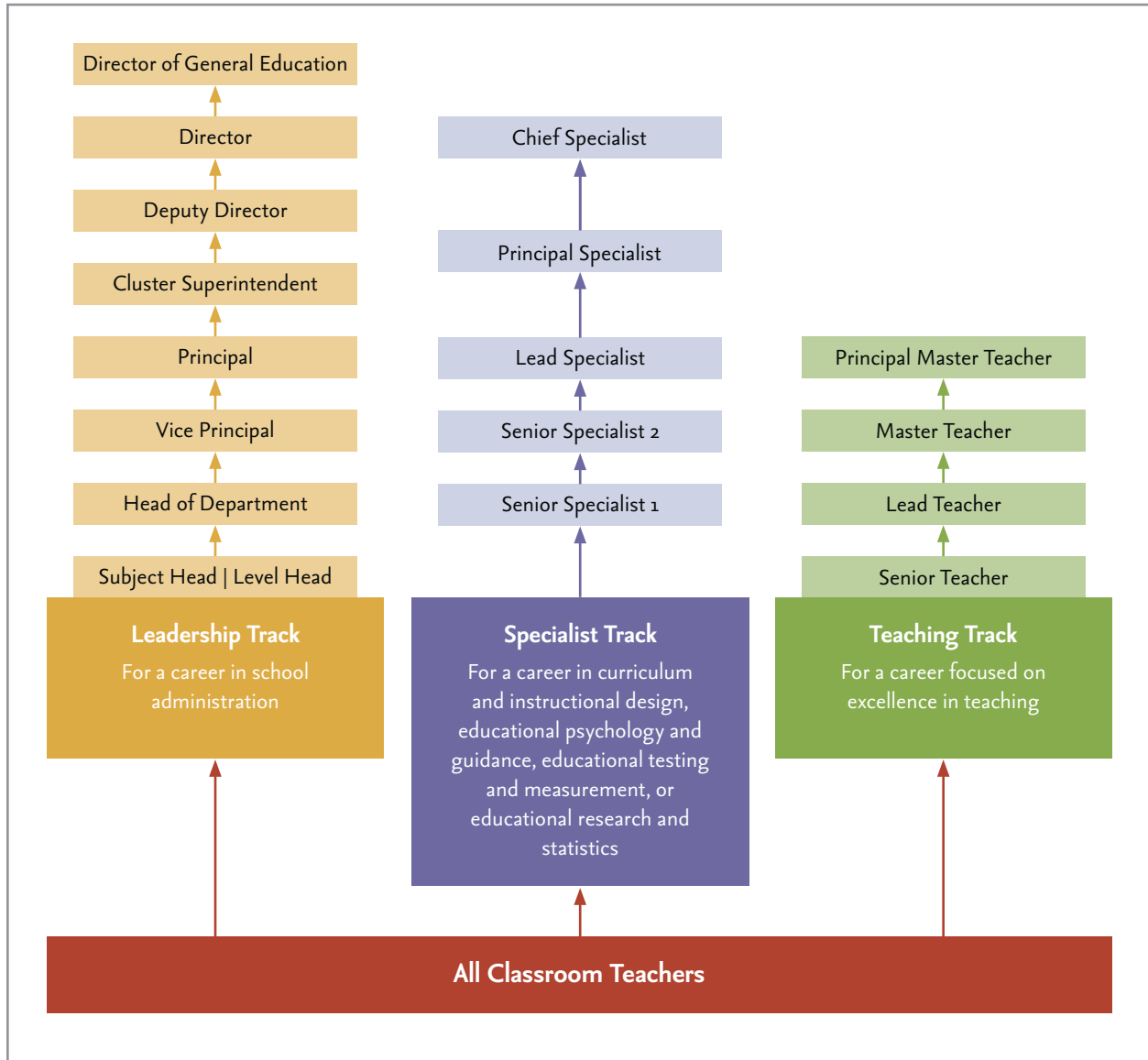
grade they think that a teacher can achieve prior to retirement. This evaluation, while subjective, is based on observations, discussions with the teachers, and student performance data, as well as each teacher's contribution to the school and community.⁵² Current estimated potential provides a formal way for supervisors to identify teachers with the capacity to take on additional responsibilities within teaching, or those who are strong enough in the required competencies to move to a different career track if they choose.⁵³

The levels within each career track (for example, in the teaching track: teacher, senior teacher, lead teacher, master teacher, and principal master teacher) are tied to specific competency levels, so it is clear to both the teacher and the supervisor what constitutes the next level of competence as well as what indicates outstanding competence. A description of the competency levels is attached to the back of the work review form and used frequently. According to a ministry official, during the review process, the competencies are "defined, highlighted, discussed, reviewed, and evaluated with the aim that the competencies can be manifested and nurtured in the teachers."⁵⁴

Determining Annual Bonuses

As part of the year-end review, supervisors must note, in narrative form, how well teachers performed during the year. In these narratives, supervisors describe teacher's strengths, unique skills, areas of improvement on both the competency ratings and on other work performance goals, work-related challenges, and their "current estimated potential," described above. These narratives, along with the teacher's own written self-assessment, are used to determine whether individual teachers will receive a performance bonus and how much they will receive. In order to make the process as fair and impartial as possible, ministry officials ask a "countersigning officer," a person at a higher grade than the teacher being evaluated, to provide additional perspective on the teacher's performance.⁵⁵

FIGURE 6. Career Tracks in Education



Source: MOE website: <http://www.moe.gov.sg/careers/teach/career-info/>

A school committee made up of all heads of departments within the school, the vice principal, and the principal meets at the end of the year to determine staff bonuses. They consider each teacher's year-end review, rank each teacher on a forced ranking scale, and decide on the award amount.⁵⁶ These bonuses typically range from a half-month's salary, for performance that exceeds expectations in a few areas, to four months' salary, for outstanding performance in multiple areas. Approximately 5 to 10 percent of the teachers across the country are typically deemed

outstanding, thus qualifying for the top bonuses.⁵⁷ At this meeting, the panel also decides whether to recommend individual teachers for advancement within a particular track or to move, if they wish, to a different track. The MOE has ultimate approval for these promotions, but the school-level committee makes an initial recommendation. Moving to the next salary grade is not automatic. In order to be promoted, teachers' year-end evaluations must include evidence that they have increased their competencies and attained their other performance goals in multiple areas.⁵⁸



These high-stakes decisions regarding performance bonuses and advancement opportunities can be controversial. According to letters to the editor and news reports, these decisions are particularly sensitive; some teachers do not think the process is conducted fairly, and some believe that linking pay to performance creates a cadre of teachers who lack creativity. The ministry responds to these complaints by saying that the majority of teachers surveyed support pay for performance because they agree that it helps with retention and motivates all teachers to perform more effectively.⁵⁹

Teacher's Perceptions of the EPMS

While the formal and informal review processes are critical steps in holding teachers accountable for their performance, MOE officials stress that evaluations are not designed to be punitive. On the contrary, MOE officials describe the process as collegial and

say that teachers are to be given “encouragement, feedback, and guidance so they can grow as professionals and contribute more effectively to a better education system.”⁶⁰ Anecdotal evidence from news reports and interviews suggests that rather than resisting the intensive amount of feedback they receive, most teachers appear to respect the evaluation system, although it is hard to determine this with certainty. Teachers appear to support the evaluation system for multiple reasons:

Teachers accept the validity of the EPMS

- ▶ Teachers are evaluated against a highly differentiated competency model that is based on research conducted in Singapore on outstanding teachers, so teachers have reason to accept the validity and relevance of the evaluation tool.
- ▶ Competency level expectations increase with experience. Senior teachers are expected to demonstrate higher competency levels than new teachers.⁶¹
- ▶ Teachers are heavily involved in identifying and setting their own goals, which gives them a sense of control over their own professional careers.⁶²

EPMS clarifies next steps

- ▶ The work review plan clearly lays out the performance goal areas in which teachers need to focus and the competency levels they need to reach to achieve these performance goals.
- ▶ Conversations with supervisors about competence and other performance gaps are accompanied by specific recommendations about where teachers can go for additional support, so teachers are immediately given information about how they can improve.⁶³

EPMS rarely leads to dismissal

- ▶ Teachers in Singapore are rarely dismissed for poor performance, so the threat of actually losing one's job is relatively minor.⁶⁴ Even struggling new teachers are given lots of support in the form of intensive coaching by an assigned men-

tor, grade-level chair, and/or department head. If, after a year, a teacher fails to improve, has a poor attitude, or lacks professionalism, then she will be asked to leave the profession, but that is the exception rather than the rule.⁶⁵ As noted above, this low-dismissal environment is made possible by Singapore's rigorous, competency-based screening of candidates before they become teachers, and by other policies that enhance the quality of the entering teaching pool.

Conclusion

Perhaps the most striking feature of Singapore's teacher evaluation system, and the process that produced it, is the stark contrast to the United States. *All* Singaporean schools and teachers have access to a world-class, research-based set of competencies that are correlated with performance on outcome goals. In contrast, it is not clear that *any* U.S. schools have access to competency models near this level of performance-related validity. In Singapore, implementation varies from school to school, but all schools use performance outcome goals — including student learning results — along with competency ratings to determine teacher promotion and pay. In the U.S., the talk on this front significantly exceeds the action. Even the boldest, most controversial teacher evaluation and pay plans in the U.S. fall far

Despite the enormous will and expense it must have taken to design and fully implement this teacher evaluation system, Singapore got the job done. Even the boldest plans in the U.S. fall short in comparison.

short in comparison. In Singapore, performance goals include soft measures of student development, including children's health and general welfare. In the U.S., we regularly complain that it is unfair to ask that teachers contribute to these building blocks of highly effective learning. And most strikingly, despite the enormous will and expense it must have taken to design and fully implement this teacher evaluation system, Singapore got the job done. No state or district in the U.S. comes close, in practice or in plan. Singapore's learning results are as world-class as its teacher evaluation system. What would happen if even one state or one large district in the U.S. were to embark on the same journey that Singapore did in the early 2000s?

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