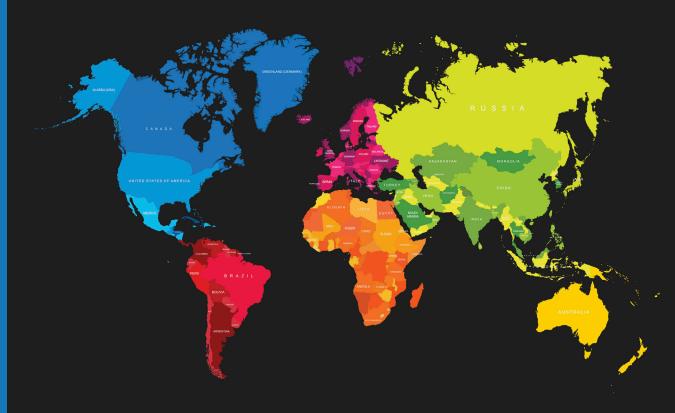
EMPOWERED EDUCATORS

HOW HIGH-PERFORMING SYSTEMS SHAPE TEACHING QUALITY AROUND THE WORLD

RECRUITING AND SELECTING EXCELLENT TEACHERS









This paper is part of a series of policy and country briefs produced as part of *Empowered Educators* – a landmark, international comparative study of teacher and teaching quality in the world's top-performing education systems, commissioned by the Center on International Education Benchmarking® of the National Center on Education and the Economy®. For a complete listing of the materials produced by the *Empowered Educators* project, including a searchable database of recorded interviews and authentic tools, please visit www.ncee.org/empowered-educators.

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Research for the *Empowered Educators* study was coordinated by the Stanford Center for Opportunity Policy in Education (SCOPE) at Stanford University. SCOPE was founded in 2008 to foster research, policy, and practice to advance high-quality, equitable education systems in the United States and internationally.

Recruiting and Selecting Excellent Teachers

A key element in the strategy high-performing countries employ to ensure all students have access to well-qualified teachers is making sure teachers are carefully selected. They do so by encouraging highly-capable individuals to consider teaching and screening the applicants carefully to ensure that the most committed and able pursue a teaching career. In that way, the countries can ensure that those who enter the profession are able to take advantage of high-quality preparation programs and become ready to teach effectively on Day One. Although countries expect teachers to continue learning—and provide ample opportunities for them to do so—the initial recruitment and selection of teachers is a critical step toward a highly-qualified profession.

The practices for recruitment and selection vary in their details from country to country, and some are more successful than others. And in several countries, the policies and practices are evolving. But all strive to make careful efforts to look holistically at prospective teachers and choose ones they believe will make the strongest candidates. And they can do so because teaching is generally a well-respected—and well-paid—profession that many individuals want to join, and thus the countries have an abundance of candidates from which to choose.

This brief examines the practices of recruitment and selection of teachers in five countries: Australia (specifically, New South Wales and Victoria), Canada (Alberta and Ontario), Finland, Shanghai, and Singapore. It describes features that are unique to each and underscores themes that are common to all. Among these common themes are competitive compensation and subsidies for preparation that make teaching attractive and preparation affordable; careful scrutiny of potential candidates; and efforts to check the progress of teacher-candidates during preparation.

An Esteemed Profession

In high-performing countries, teaching is, by and large, a profession held in high esteem. Recruitment of teachers is usually not a problem; although there may be shortages in some geographic areas or teaching fields, many individuals flock to teaching, so the challenge is in many cases selecting the most promising applicants from those who seek slots in preparation programs.

A big part of the attractiveness of teaching in these jurisdictions is the esteem in which teachers are held. Teaching is generally a high-status field. In Finland, teaching is the most admired profession, according to polls of

Because teaching is generally a well-respected and well-paid profession that many individuals want to join, top-performing education systems have an abundance of candidates from which to choose.

high school graduates,¹ and the vast majority of teachers who enter the profession stay in it. A national survey in 2013 found that only 1 in 10 Finnish teachers leaves teaching, and three-fourths of those teachers surveyed said they planned to remain until retirement.²

Teaching is highly ranked in Singapore as well. The value placed on teachers was expressed at the highest level, by Minister of Education Tharman Shammugaratnam, who said in 2007: "Our teachers are simply the most important asset we have. Their commitment to excellence, their caring eye, and the passion they put into nurturing their students are what allow us to provide the best possible education to every young Singaporean." With very low attrition rates, at less than 3 percent, a survey conducted by the Ministry of Education found that teachers' top three reasons for staying in the profession include a positive professional culture, good remuneration that is competitively benchmarked and ample opportunities for professional development and career growth.

Teachers in Alberta have long felt well-supported and respected through many decades of largely conservative governments. A 2013 survey conducted by the Alberta Teachers Association found that about 9 in 10 teachers agree that they are very committed to teaching as a profession and that in public they are proud to say that they are teachers. In this same survey, about two-thirds of teachers reported that they experience no or low stress due to any sense of lack of control over their professional practice.

In Ontario, initiatives over the last decade have substantially improved the status and attractiveness of teaching, as an era of policies teachers generally considered hostile and disinvestment in public education was replaced by a supportive approach from the provincial government. As a consequence, retirement numbers and other attrition have declined to about 4 percent annually (about half the rate in the U.S.), while entry into teacher education increased, resulting in a surplus of teachers and a highly competitive market. A survey by the Ontario College of Teachers found that new teachers are highly committed to their careers; of those in their first five years, approximately 9 in 10 indicated that they will definitely or probably be in the teaching profession five years hence.³ A public opinion survey conducted at OISE every three years meanwhile showed that Ontarians have a high regard for the teaching profession and support the public education system.⁴ As Rhonda Kimberley-Young of the Ontario Teachers Federation put it:

Kids coming out of high school now, heading into university, if they think, 'I think I want to go into teaching,' it's because they have had that good experience themselves. And they think, 'That would be a nice place to work.' Of course, it's the 'I want to make an impact on young people's lives.' I think that's what draws you to the profession at a base level, but just that comfort level with 'this is a respected profession. I have a good feeling about public education.'

A Well-Paid Profession

As a measure of the value placed on teaching, high-performing countries tend to pay teachers relatively well, at least compared with other college-educated professionals. That, too, helps encourage young people to pursue teaching as a career. At the same time, government-subsidized tuition for teacher-education students makes it easier to attract individuals to teaching who might otherwise look for professions that might be more lucrative. In all of the countries we studied, tuition for teacher-candidates is completely free or largely subsidized by the government, making it possible for people to pursue teaching careers without worrying about incurring debts. In addition, Singapore provides stipends or salaries to teacher candidates while they are in training.

In the five countries we studied, salaries fell between about 90 and 105 percent of the average received by college graduates across professions. By contrast, U.S. teachers earned, on average, about 60 percent of what other college graduates earned in 2012.⁵

In Canada, teachers are among the highest-paid professionals in both Alberta and Ontario. Starting teachers earned \$58,000 (Canadian) in 2012, and teachers with ten years' experience could earn \$92,000, further augmented by generous benefits. Ontario teachers are also very well paid and can increase their salaries by earning master's degrees or completing Additional Qualifications (AQ). As a result, the salary curve for teachers rises more sharply than it does for other professions. In 2011, the Ontario salary of \$66,893 after five years of teaching was above the 75th percentile of average salaries for comparable individuals with a university degree who were working one full-time job; after 10 years of teaching, teachers were close to the 90th percentile of salaries within the university-educated group.

In Australia, teachers are also well paid, at least at the start of their careers. A government-supported survey of occupations in 2012 found that new graduates who entered teaching ranked 7th among 27 professional occupations in their level of compensation, just behind several medical fields and engineering, but ahead of law; computer science; biological, veterinary and other sciences; pharmacy; and accounting. Although teacher salaries have tended to fall behind those of other professions later in the career, states have been revising their salary structures to significantly increase the pay of veteran teachers who meet standards of accomplishment in the new career ladder. This change will encourage teachers to remain in the classroom. In New South Wales, for example, Highly Accomplished teachers can earn as much as A\$110,000, comparable to the salary of an assistant principal.

Compared to Average College Graduates

90-105%

Teachers' Salaries

Top Performei

U.S.

Singapore's starting salary for teachers is roughly equivalent to the starting salary of other university-educated workers, equivalent to that of engineers, and teachers start receiving a full monthly salary when they begin pre-service education. Salary growth over the career remains competitive; annual increments are generous and can be increased based on performance and advancement on the three-pronged career ladder.

In China, teachers' salaries and benefits are designated by law to be comparable to the average wage of civil servants, and Shanghai offers among the highest salaries in the country. Although teacher salaries in other parts of China have been much lower, the Chinese government has recently made large investments in boosting salaries and creating other incentives, like housing subsidies, across the other provinces, especially in poor rural areas. In Shanghai, this is less of a problem, since the city is relatively affluent and is considered a competitive market for teachers. However, within Shanghai some areas are more desirable for teachers; these areas tend to have higher salaries and high-performing schools.

Finnish teacher salaries – which are just under the average for college graduates – are about comparable to those of nurses. Nonetheless, because the status and working conditions of the occupation are so attractive, and turnover is so low, there are many more applicants for preparation than there are slots available. Because the trajectory of salaries over time is fairly flat, Finland has begun experimenting with providing teachers with small bonuses or increases in salary if administrators felt that the teachers were doing a particularly good job.

Selection Practices

In all of the countries we studied, selection into teaching is a rigorous process. In most cases, selection is based not only on academic merit, but also on evidence of commitment to and capacity to work well with children and, often, to collaborate well with other adults. Interpersonal and communication skills are evaluated, along with conceptual, analytic, and problem solving abilities.

Selecting Teachers in Finland

As a result of the prestige of teaching in Finland, thousands of Finns apply each year for slots in teacher-preparation institutions, far more than the institutions or the schools can accommodate. In 2013, for example, more than 8,000 people applied for 800 available slots for primary teaching positions; at the University of Helsinki, there were 1,800 applicants for 120 positions. The number of applicants nationwide has grown by 18 percent since 2010.

The process of selecting students from these vast pools is a rigorous one. First, applicants must take an exam known as the VAKAVA, developed by faculty from the eight teacher-preparing universities. First instituted in 2006, the VAKAVA is a three-

hour exam consisting of questions based on five to eight education research articles that students must analyze and interpret. This begins to create a research-based profession from the very beginning of the selection process.

In 2013, for example, the VAKAVA included seven articles – among them a study that examined children's discourse in mathematics classrooms, and research that investigated children's use of social media and how they portrayed themselves to others. Candidates have approximately six weeks to read and study the materials before the exam, which is given in May.

Candidates taking the VAKAVA indicate which teacher-preparation institution they would like to attend, and the institution then selects candidates to interview from among those who pass the exam. The interviews are designed to assess candidates' interest in teaching and to evaluate them on a holistic basis.

There is no common interview protocol or other selection procedure among universities. At the University of Helsinki, candidates are interviewed both individually and in groups by professors and lecturers of Department of Teacher Education. In the group interview, three to four candidates are given a text to read, or an illustration about teachers and their work, and asked to prepare to discuss together how they might introduce and discuss it in a group situation. The group of prospective candidates is observed by teacher educators, who are watching for motivation, willingness to work together, and other characteristics. Teacher educators also then interview the candidates individually, and rank order their choices.

Those who are not selected can apply again the following year. A recent survey of candidates taking the VAVAKA found that 56 percent were taking it for the first time, 28 percent were taking it for the second time, and 18 percent were taking it for the third time. Alternatively, candidates can apply for kindergarten teaching or secondary subject-matter teaching, where the competition is somewhat less fierce. (About 1 in 4 candidates is admitted to secondary teacher education, as compared to about 1 in 10 for primary teaching.)

Selecting Teachers in Singapore

Singapore's process is also rigorous. Grounded in the systemic approach that typifies Singaporean education, teacher recruitment is a single, state-wide selection process, jointly managed by the Ministry of Education and National Institute of Education. It places strong emphasis on candidates' academic achievement, communication skills, and motivation for joining the profession, and relies on school partners to be key decision-makers in the selection process. Students who want to become teachers must go through a four-step process before entering a preparation program. Only one of eight shortlisted applicants makes it through the selection interview, which is just the third of the four steps. A study by McKinsey and Company summarized the recruitment process in Figure 1 on the next page.

Figure 1: The Process of Teacher Recruitment in Singapore



Check for minimum qualifications:

- Academically, applicants should be in the top 30% of their age cohort
- Applicants should have completed relevant school and university education
- Applicants must show evidence of interest in children and education

Check literacy:

- Applicants must have a high level of literacy
- Evidence shows that teachers literacy affects achievement more than any other measurable variable

Check attitude, aptitude and personality:

- Conducted by a panel of three experienced headmasters
- May include practical tests of activities

Check attitude, aptitude and personality:

- Teachers are monitored during their initial teacher training at NIE
- A small number of candidates who do not demonstrate the required standards are removed from the course

Source: McKinsey & Company, 2007, p. 17

First, the Ministry of Education selects candidates based on their academic record. Candidates who meet that requirement are then required to take and pass Entrance Proficiency Tests, if their language performance does not meet minimum standards. Of particular importance is English proficiency, which is a key requirement of teacher-preparation programs at the Ministry of Education. (English is one of four official languages in Singapore, and although it is not the native language of most Singaporeans, it is the language of instruction in schools.)

Those who make the short list based on academic qualifications and English proficiency are then invited for interviews. The interview is conducted by a panel led by a currently serving or recently retired principal or vice principal. Interviewers look for good communication skills, deep passion for teaching, and potential to be a good role model to their future students.

If approved by the interviewers, candidates for the Post-Graduate Degree in Education Program are then required to attend the Teacher Preparatory Programme run by the Academy of Singapore Teachers (AST), an organization created by the Ministry of Education to provide teacher-led support to teachers, before they are sent to spend time as a contract teacher in the schools. The TPP is an introductory course that provides all contract teachers with an awareness of the expectations and ethos of the profession, and the fundamentals of teaching. These include adopting a growth mindset, lesson planning and enactment, assessment for learning, use of technology, and classroom management.

The school stint, during which candidates are paid, can range from a few months to a year. Under the guidance and supervision of their school mentor and their reporting officer (usually the Head of Department or Subject Head), the contract teachers take on teaching duties, other than grading examinations or test papers. At the end of their school stint, candidates take an assessment exercise. Only if they receive a good recommendation from the school and pass that assessment can they enter teacher preparation. And during their preparation, they are continually monitored and can be removed for poor performance (although this happens rarely).

Selecting Teachers in Canada

In Canada, teacher education is also selective. Fewer than half of aspiring candidates are accepted into programs in Alberta. Although admissions requirements vary from institution to institution, the major criterion is grade point average in all institutions (high school grades for undergraduate programs and university grades for post-graduate programs). Some universities, such as Concordia University College, also require an interview, portfolio, and volunteer work in the schools. The number of slots in teacher education programs is determined by the universities and is based on money provided to the institutions by the provincial government. The University of Alberta's Faculty of Education has asked the administration to reduce teacher education enrollment by 300 positions in each of the past two years, in part to reduce faculty-student ratios. That has made entry more competitive.

As in Alberta, each Faculty of Education in Ontario has its own set of established criteria for acceptance, typically including academic standards and evidence of competency (e.g., entry interview; teaching statement; experience with children; and teaching). Competition for places is very strong. For example, Ontario's largest Faculty of Education, the Ontario Institute for Studies in Education (OISE) at the University of Toronto, routinely receives around 4,000 applications for just over 1,000 places. At OISE, in addition to academic grades, applicants are also asked to complete a teaching profile that outlines their philosophy of teaching and learning.

In order to increase diversity in the teacher population, teacher-candidates who can bring knowledge of Aboriginal issues and connections with Aboriginal communities and students into their teaching practices are a priority. This is also the case in Alberta, where candidates in the nine teacher preparing institutions typically must succeed in pre-admissions courses in teacher education, sit for interviews, do volunteer work, and, sometimes, complete a portfolio.

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Selecting Teachers in Shanghai

Although there are shortages of teachers in some parts of China, teaching in Shanghai is oversubscribed. As a result, 95 percent of Shanghai teachers have college degrees, most from two major teacher-preparation institutions – East China Normal University and the Shanghai Normal University. By contrast, rural towns and villages in western China often hire teachers with less educational backgrounds. (Although there are efforts underway to increase the educational qualifications of elementary teachers. For example, the number of normal schools that have traditionally prepared senior secondary students for primary school certification has decreased from 892 in 1997 to 430 in 2002.)

For those who successfully complete the coursework and clinical experiences, there is a new three-part national certification exam that, as of 2014, replaced the previous local exams. First the candidate must pass written examinations in pedagogy, psychology, and teaching methods. Candidates who are successful then participate in an interview process with master teachers and local school district officials who themselves are typically former teachers. During this interview, candidates demonstrate their teaching ability in specific subject matter instruction, show their teaching process and handwriting skills on the blackboard, and may be asked about their classroom management and classroom questioning techniques. Finally, all teachers must also pass the Mandarin language test (with both speaking and listening components). In addition, local districts also ask candidates to take a district-developed exam, which contains questions about content knowledge, other subject areas, and pedagogy. Candidates also participate in an interview with a panel of experts in the content area from the district office. In many interviews, the candidate is asked to teach a short lesson to the panel on a topic the panel has selected.

Selecting Teachers in Australia

In Australia, the competition for teacher-education positions is somewhat less intense, but the federal government has taken steps to raise standards for entry into teacher education. For example, new standards for accreditation of teacher-education institutions require applicants for an education degree to be in the top 30 percent of the population in literacy and numeracy, and graduates now need to meet registration standards in order to continue in the profession. At the same time, though, the federal government "uncapped" the number of slots for government-assisted tuition at universities. While this move opened entry into higher education for many students from disadvantaged backgrounds, it also in some cases allowed universities to relax standards for entry.

Traditionally, entry standards for teacher education programs were decided by each higher education institution, and generally included both academic abilities and personal characteristics. But the federal government, acting on a report by the Teacher Education Ministerial Advisory Group, has proposed more formal guidelines

for all institutions in Australia. These guidelines require universities and other providers to include a combination of academic and mon-academic criteria for selection into teacher education. Non-academic criteria could include motivation to teach, strong interpersonal and communication skills, willingness to learn, resilience, self-efficacy, conscientiousness, and organizational and planning skills. The guidelines also encourage institutions to facilitate entry into programs from "equity groups," such as Aboriginal or Torres Strait Islander students.

In addition to these anticipated federal initiatives, there are also innovative selection initiatives underway at some universities. For example, at the University of Melbourne, candidates are evaluated based not solely on academic transcripts and working experiences, but also on their disposition and suitability for teaching, based on a set of tasks that evaluate candidates' abilities and perspectives ranging from literacy, numeracy skills, and spatial reasoning, to communication style, persistence, cultural sensitivity, and ethics. Some of these traits are measured in a recently introduced "Teacher Selector Tool," which rates candidates on several dimensions, including conscientiousness, agreeability, openness, and persistence. The outcomes are used in conjunction with other application materials in admissions decisions, and faculty are studying how differences in scores are related to outcomes in teacher education and beyond.

Lessons Learned

The systems are highly selective, using a broad set of criteria to select recruits. A report by McKinsey and Company (Auguste, Kihn, and Miller, 2010) attracted a great deal of attention in the United States with its finding that teacher-education institutions in countries such as Finland and Singapore draw from the top 30 percent of students, based on their academic skills. Although it is true that both countries expect strong academic qualifications for teacher-candidates, that is not the only criterion they use to select candidates. In these and other jurisdictions we studied, candidates are expected to demonstrate interest in, experience with, and commitment to children, and a range of competencies and dispositions that are surfaced in selection processes that extend beyond transcripts and grades. These can include interviews and performance tasks, as well as a range of references.

Selective recruitment is supported by competitive salaries and subsidized preparation. The jurisdictions we studied pay teachers comparably with other college graduates, so there are few opportunity costs for choosing teaching. In addition, preparation is free or subsidized and, in some countries, accompanied by a stipend or salary.

Teacher candidates in high-performing systems are expected to demonstrate a range of competencies and dispositions that are surfaced in selection processes that extend beyond transcripts and grades.

Recruitment and Selection are part of a system. The selection process is just the beginning of a continuum of teacher policies in high-performing countries. The process includes a rigorous preparation program to ensure that all prospective teachers develop the knowledge and skills they need to become effective, induction programs to ease new teachers' entry into teaching, professional learning opportunities to enable teachers to work with peers to develop and improve their competencies, and professional growth opportunities to enable them to use those competencies to take on greater responsibilities.

Notes:

- 1. Liiten, 2004; Martin & Pennanen, 2015; see also Ministry of Education and Culture, 2012
- 2. Jokinen et al. 2013.
- 3. Ontario College of Teachers, 2011.
- 4. Hart 2012.
- 5. OECD, 2014.
- 6. Graduate Careers Australia, 2013



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