



International Approaches to Improving Teacher Salaries

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Introduction

With increasingly widespread teacher shortages, U.S. policy leaders and experts at the local, state, and federal levels are re-energizing the push for research-based solutions. These leaders want solutions that will not only attract and retain enough teachers for all students, but also attract enough teachers who represent the changing demographics of the student population and possess the skills, knowledge, and dispositions to effectively put each student on a path to success.

Achieving these education workforce objectives requires leaders to take a multipronged talent management approach that includes strategic teacher recruitment, preparation, induction and mentoring, professional learning and evaluation, leadership, working conditions, and compensation (Laine et al., 2011). But, too often, the attention to engage and retain educators is directed toward just one, or a few, of these components—typically excluding compensation because of its complexity and expense.

While many leaders dismiss significant increases in teacher salaries as an unrealistic impossibility, this assumption is challenged by the fact that other countries, including **most of the world's top-performing school systems, do pay teachers competitive salaries that are aligned with what similarly educated college-educated professionals earn**. In fact, leaders in top-performing countries attribute this piece of their talent management system as essential to the success of their schools.

This brief was developed to inspire a refreshed dialogue on the importance of investing in competitive teacher salaries. The examples highlighted show that sustaining competitive teacher salary levels is possible, there are multiple approaches other countries have taken to do so, and these global approaches have led to successful outcomes for students.

Summarizing Global Studies of the Importance of Teacher Salaries for School Performance

Recent large-scale examinations of the world's top-performing school systems have all concluded that competitive teacher salaries matter. For example, reviewing 30 years of research on the world's top-performing education systems, the National Center on Education and the Economy (NCEE) concluded,

In order to attract and retain effective staff, high-performing systems pay teachers competitive salaries. Teachers in high-performing systems do not go hungry, suffer from crippling student loan debt, or take second or third jobs to make ends meet. This is because these systems benchmark teachers' salaries against the salaries of other professions requiring similar academic qualifications—nurses, architects, civil engineers—and regularly adjust teacher salaries to meet those benchmarks. They may offer additional benefits, which may include tuition reimbursement for undergraduate studies and bonuses for teaching in high-need areas. (NCEE, 2021)

The NCEE review also emphasized the presence of a variety of additional forms of compensation, such as tuition reimbursement, bonuses for teaching in high-need areas, or career ladders in many of the top-performing school systems.

A study of 25 of the world's top-performing and fastest-improving school systems conducted by the leading global business consulting firm McKinsey & Company had similar findings, concluding,

Almost universally, the top school systems do two things: they have developed effective mechanisms for selecting teachers for teacher training, and they pay good starting compensation. These two things have a clear and demonstrable impact on the quality of people who become teachers. These same features are frequently absent in lower-performing systems. . . . What is interesting, however, is that the range of starting salaries offered by the top performers is very narrow: most systems pay a starting salary between 95–99 percent of GDP per capita. (Barber & Mourshed, 2007)

The importance of competitive teacher salaries is also emphasized in *Empowered Educators: How High-Performing Systems Shape Teaching Quality*, authored by Linda Darling-Hammond and colleagues in 2017, which details the commonalities across nations that have largely overcome the challenges of recruiting and retaining effective teachers. The authors' initial finding is

in virtually all of these jurisdictions, positive views of teaching reflected in public surveys and government statements are also reflected in compensation that is competitive with other professions requiring comparable education. In all of these jurisdictions, starting salaries for teachers are above international averages, and all have significant increases within the first 10 years of teaching. In some jurisdictions, teacher unions negotiate for salaries; in others, the government sets high salaries and raises them consistently without a negotiating process . . . salaries fell at or near the average received by other college graduates across occupations (generally between 90% and 105% of the average for college-educated workers). By contrast, U.S. teachers earned, on average, about 70 percent of what other college graduates earned. A competitive pay scale reinforces the prestige in which teaching is held in these systems; at the same time, the financial rewards serve as an incentive for highly capable individuals to enter teaching. . . . Further, there are structures to enable teachers to use their expertise to support other teachers and participate in policymaking. This in turn makes teaching a more attractive profession to thoughtful and creative individuals, supporting recruitment and retention in the field. (Darling-Hammond et al., 2017)

Features of the Best Education Systems Abroad

Collectively, the research suggests that the best systems abroad do the following:

- Benchmark teachers' salaries against the salaries of other professions requiring similar academic qualifications.
- Provide starting teacher compensation that ranges very narrowly from 95–99% of GDP per capita (or between 90% and 105% of the average for college-educated workers).
- Provide significant increases within the first 10 years of teaching.
- Consider a variety of additional benefits beyond the base salary.

Paying for Higher Teacher Compensation

On average across the Organisation for Economic Co-operation and Development (OECD) countries (an intergovernmental organization of 38 member countries focused on stimulating economic progress and world trade), primary school teachers earn 86 percent of what other college-educated professionals in their countries earn, while lower secondary school teachers earn 90 percent and upper secondary school teachers earn 96 percent of what similarly educated professionals earn ([OECD, 2022](#), see Table D3.2). **Teachers in the United States earn about 52 percent to 64 percent of what similarly educated professionals earn (the lowest rate among all OECD countries that collect these data) ([OECD, 2022](#), see Table D3.2).** Clearly, rising to the recommended levels will require some financial maneuvering in most U.S. states and districts.

The feasibility of spending more on teacher salaries will depend on numerous factors: the political and public will, the health of the existing budget, the extent of resources being perhaps less-than-optimally spent in other areas, and the anticipated returns on the investment, to name a few.

Frontloading compensation, meanwhile, can help balance the costs of higher starting salaries (Barber & Mourshed, 2007). This strategy will work better in some contexts than others, however, depending on the experience distribution of the existing teaching workforce, concerns about teacher retention, and the existing salary structure. And these factors may change over time. As one benchmark—across OECD countries, on average—teachers with 10 and 15 years of experience earn 29 percent and 37 percent more, respectively, than beginning teachers. And at the top of the pay scale, on average, teachers earn 67 percent more than the average starting salary. This varies widely from top teacher salaries in Denmark, Iceland, and Norway which are only 20 percent higher than starting salaries to top salaries in South Korea which are 2.8 times the starting salaries ([OECD, 2022](#), see Table D3.2).

Increasing class sizes is a strategy that has been adopted by leaders in South Korea and Singapore—two of the world’s consistently top-performing school systems according to PISA test scores (Schleicher, 2019). In South Korea, the student-to-teacher ratio is 30:1 (compared to the OECD average of 17:1) which essentially doubles teacher salaries while maintaining spending levels ([Barber & Mourshed, 2007](#)). Increasing class sizes can place additional stress on a teacher workforce that is facing calls to accelerate and differentiate learning in classrooms after a period of pandemic-induced school closures.

Professional Teacher Compensation in Action

Below, we share several examples of international models for teacher compensation that have been adopted by top-performing school systems, including a more in-depth overview of Singapore’s approach. Although it is impossible to fully summarize the decades of historical, cultural, and policy landscapes that have yielded these systems, these examples present key high-level elements of these international approaches to teacher compensation.



While culturally similar to the United States, Canada consistently outperforms the United States on the PISA assessments in reading, mathematics, and science (Schleicher, 2019). Public school teaching is also a highly sought-after profession in Canada; trained early-career teachers commonly take on substitute teaching positions for years before they can secure a job as full-time teachers of record (Darling-Hammond et al., 2017).

Canada’s 10 provinces govern education differently. Ontario educates approximately 40 percent of the country’s students ([NCEE, n.d.](#)), and teacher attrition in Ontario is 4 percent. Starting teacher salaries in Ontario are competitive compared to other occupations and can rise more sharply than in other comparable professions due to teachers earning additional degrees, completing content-specific coursework approved by the Ontario College of Teachers, or earning specializations in such areas as technology use. After 5 years in the classroom, Canada’s teachers earn at

the 75th percentile among individuals with university degrees and after 10 years, Canada’s teachers approach the 90th percentile among earners (Darling-Hammond et al., 2017).

Other Canadian provinces also structure salaries at competitive levels. In Alberta, the nation’s highest-paying province, teachers are the highest-paid professionals after those employed in utilities and oil and gas extraction. In British Columbia, each teacher is placed in one of seven Teacher Qualification Service categories based on their education and their categorization determines their salary. As in many U.S. school districts, teachers can advance to higher categories by completing additional degrees or credit hours, such as in special education, library science, counseling, language arts, and curriculum development ([NCEE, n.d.](#); [Teacher Qualification Services, n.d.](#)).



Estonia

The most recent (2018) PISA examinations ranked Estonia behind only China and Singapore in reading and science and behind only China, Singapore, Japan, and Korea in mathematics (Schleicher, 2019). Whereas teachers in the United States earn about 52 to 64 percent of what similarly educated professionals earn, in Estonia, teachers earn 113 percent of what their peers earn ([OECD, 2022](#), see Table D3.2; and Tambur, 2023). In 2021, the country’s Minister of Education committed to further raising teacher salaries to 120 percent of the national average salary by 2025 ([NCEE, n.d.](#)). Until recently, this was not the case.

In Estonia, each year the national government establishes a fixed amount to allocate to schools (via the local government) for teacher salaries. This amount historically has been very low, but following increasing teacher shortages and growing societal pressure, Estonia committed to significantly improving teacher salaries. Upon studying the issue, the education leaders in Estonia committed to salary increases of approximately 7 percent per year. Between 2011 and 2023, Estonia managed to more than double teachers’ minimum salaries from 839 euros/month to 1,749 euros/month ([Statistics Estonia, 2023](#), personal communications). According to some Estonian experts, however, these salaries are still not competitive with what similarly educated professionals earn. For example, it represents just 82 percent of what other professionals with a master’s degree earn (Tambur, 2023).

Although these resources came from the national government (as part of the state budget), the Estonia Minister of Education and Research encouraged school principals to organize the distribution of these resources among their staff, based on work and contributions ([BNN, 2021](#)). School principals have a great deal of autonomy in Estonia and typically decide to provide higher salaries to teachers that assume a larger workload or take on additional assignments (personal communications).

The Estonian government also makes available Beginning Teacher Allowances (i.e., signing bonuses). These allowances are of significant value. In 2023, the starting allowance is nearly 16,000 euros (or 12,783 euros after income taxes), in comparison to a 20,988 euros annual salary.

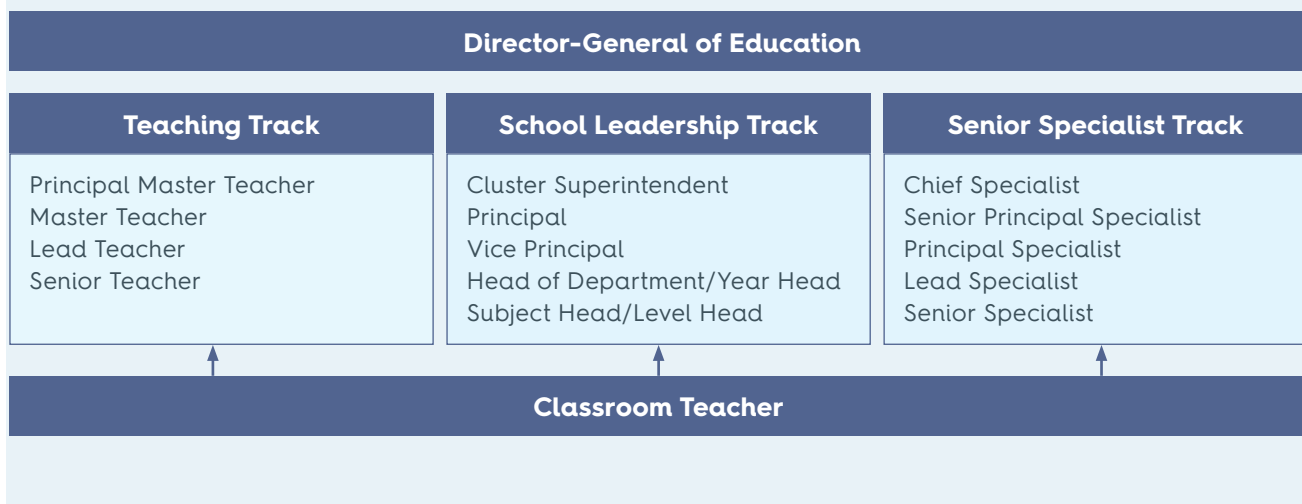
All teachers are eligible to apply, excluding teachers in the two larger cities of Tallinn and Tartu where there is an ample supply of teachers to fill positions. For teachers that work part-time, the allowance is reduced proportionately to their workload (personal communications). Beginning teachers are required to repay this beginning teacher allowance if they leave teaching within 5 years ([Basic Schools and Upper Secondary Schools Act, 2021](#), see Section 77).

Singapore

Over two generations, Singapore has grown into the world’s sixth strongest economy as measured by GDP per capita, in large part due to the contributions of its strong schools ([Stewart, n.d.](#)). Per the OECD, Singapore ranks second among 77 countries in PISA reading, mathematics, and science ([OECD, 2018](#)). Investing in an educated citizenry has been a clear economic development strategy among Singapore’s leadership, one that has required making teaching a career that top students aspire toward.

Teachers are recruited from the top 10 percent of their college class and attrition in Singapore is less than 3 percent annually. Each year, the Singapore Ministry of Education reviews starting salaries for a range of professions and adjusts teacher starting pay to ensure that teaching is as equally attractive as other career options ([Stewart, n.d.](#)). Teachers can choose one of three career tracks: teaching, school leadership, or senior specialist (e.g., in curriculum, applied psychology, or measurement and research) with a range of dynamic career opportunities in each track and opportunities to move between tracks in some cases. Figure 1 illustrates Singapore’s career ladder.

FIGURE 1. SINGAPORE’S EDUCATOR CAREER LADDER



Salaries for beginning teachers in Singapore are pegged to the labor market salary benchmarks, which include other university-educated workers employed in the civil service, engineering, and accounting. Salaries remain competitive over a teacher's career, with annual salary increases based on a teacher's performance as assessed by a team of coaches and professionals working closely with the teacher on their development (Darling-Hammond et al., 2017). There is no differentiation based on subject area or grade level; however, a variety of salary components aim to encourage and reward performance and retention. These include merit increments, performance bonuses, and a long-term incentive plan and service benefits. Notably, a long-term teacher retention plan—called the CONNECT plan—provides eligible teachers with stipends at critical junctures (e.g., every 3 to 5 years) throughout their careers. The lump-sum remainder is paid upon retirement or at the end of the 30-year plan whichever is earlier, and forfeited if the teacher resigns before retirement (Singapore Ministry of Education, 2023).

For those that remain on the teaching career ladder, salaries increase as teachers advance from Classroom Teacher to Senior Teacher, to Lead Teacher, to Master Teacher, and ultimately to Principal Master Teacher. Advancements are determined by teams of professionals that work closely with the teacher on their continual development. Mid-career professionals that move into teaching are compensated for their prior work experience (Darling-Hammond et al., 2017).

Conclusion

Leading researchers come to the same conclusion—competitive salaries for teachers are a major contributor to successful school performance. Many of the world's top-performing school systems have strategically chosen to invest in teacher salaries to attract and retain top-performing individuals in the profession, including the three highlighted above. There is no one-size-fits-all solution and no evidence to show that transitioning toward investing in attractive teacher salaries is easy, but the international evidence gives reason to question the naysayers who insist competitive teacher pay is not possible.

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