



## Teaching Policy to Improve Student Learning: LESSONS FROM ABROAD

In school districts, state capitols, and Washington, D.C., leaders are enacting new policies and programs intended to help recruit, retain, support, and reward effective teachers. But systematic evidence and analysis remain scarce both about the extent of the challenges and the effects of policies to address them.

One place to look for evidence is the experience of other nations. While culture and context matter and international innovations cannot be simply transferred, cross-national comparisons of data and initiatives can reveal common trends, provide new insights about how to define the problem and design solutions, and broaden our thinking about what reforms are both possible and practical.

In the fall of 2006, the Aspen Institute Education and Society Program convened a seminar of about two dozen leading policymakers, researchers, and practitioners from eight countries: Australia, Canada, England, Japan, Singapore, Sweden, Switzerland, and the United States.

The seminar built upon a 2005 report from the Organization for Economic Cooperation

and Development (OECD), *Teachers Matter: Attracting, Developing, and Retaining Effective Teachers*, which reviews teacher policies in 25 countries. Perhaps the most comprehensive international analysis ever undertaken of teacher policy issues, the report reveals how prevalent the concern is across nations about the supply and quality of teachers.

American participants included former U.S. Secretary of Education Richard W. Riley; Susan Sclafani, managing director of the Chartwell Education Group and a former assistant secretary of education; Arlene Ackerman, former superintendent of San Francisco; and Susan Moore Johnson of the Harvard Graduate School of Education. In addition, Tom Mooney, President of the Ohio Federation of Teachers and a national teacher union leader, died tragically just a few weeks after attending the seminar.

These participants were struck by the importance of the international examples to the U.S. debate. This examination of other nations “strengthens my determination to internationalize the conversation about education reform in the U.S., especially as it pertains to the teaching profession,” wrote Mooney shortly before his death.

To bring these international lessons to U.S. policy conversations, we asked Lynn Olson, the managing editor of special projects at Education Week, to develop a short essay based both on the group’s deliberations and her own reading. The seminar and this essay were supported by grants from the Rockefeller Foundation and the Carnegie Corporation.

The time is ripe to launch a national conversation about teacher and teaching quality and to consider possibilities for systematic career structures and compensation systems. We hope this essay can inform this conversation and help spur effective action.

*Robert B. Schwartz*

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### Reflections by Lynn Olson

Smart companies recognize that human capital is their greatest asset. The same applies in education. Research shows that teachers matter more to student learning than any other school-related factor. Yet the effectiveness of individual teachers varies widely. Thus a critical issue for any country that hopes to keep its education system internationally competitive is how to recruit, retain, develop, and nurture a high-quality teaching force.

A traditional strategy is to control who enters the profession—through rigorous selection and training and challenging licensing tests. But an increasing number of countries are looking further. They are focusing on who’s attracted to teaching, how to support and develop them as long as they are there, and how to provide opportunities and rewards that encourage the best teachers to stay in the profession.

This thinking represents a fundamental shift in how American society, in particular, thinks about teaching. Traditionally, teaching in the United States has reflected a factory model. Novices have been expected to fill the same roles as 20-year veterans; teachers have been viewed as largely interchangeable; and salary has been based on years of education and experience rather than on differentiated roles and responsibilities or superior performance.

That model no longer fits a rapidly changing, knowledge-based society. When all students must be prepared to think for a living, teachers also must become lifelong learners. As part of this, their careers should progress in stages—from novice, to experienced, to expert. Each phase should have different expectations, roles, responsibilities, and compensation, particularly for those who prove themselves particularly adept at promoting student learning.

Moreover, personal attributes are not the only determinants of good teaching. The quality of teaching also depends on the conditions under which teachers work. As Christopher Spence, the director of the Hamilton-Wentworth District School Board in Ontario, Canada, noted: “Put a good teacher in a bad system, and the system wins every single time.”

The challenge, then, is not only to nurture good teachers but also to develop good schools in which teachers can be effective. This requires new ways of working together by teachers, school authorities, unions, and professional associations.

## An Opportune Moment

Now is a particularly opportune time to rethink how nations grow and nurture teachers, not only in the United States but internationally.

As the OECD report notes, in most countries, a much larger number of new teachers will enter the profession in the next 5 to 10 years than at any time since the 1970s. That new generation of teachers, at least in the United States, will look much different than in previous generations, according to Susan Moore Johnson, who directs the Project on the Next Generation of Teachers at Harvard University. The retiring cohort of teachers entered the profession in the late 1960s and early 1970s, when women and people of color had limited access to other lines of work. Many were content to stay as classroom teachers, earning relatively modest salaries, for their entire careers.

In contrast, the incoming generation of teachers has many more job options that often pay more, have higher status, and provide better working conditions. Also, they may not look upon teaching as a lifelong career. Currently, in the United States, 30 percent of new teachers leave within three years. Half are gone within five years. Males and those in shortage areas such as mathematics and science are more likely to depart the classroom than other teachers. And studies show that the best and the brightest as measured by academic qualifications and achievement are most likely to leave.

At the same time, an influx of new teachers has been entering education from other lines of work. These career-changers may bring with them heightened expectations for what it means to operate in a professional environment. Based on surveys in seven states, Moore Johnson found that between 30 percent and 46 percent of new teachers enter the profession after 7 or 8 years of work experience outside teaching. “We can’t count on talented people being willing to commit 30 years to teaching, but instead are going to have a mix of short-timers and long-timers,” said Robert B. Schwartz, the academic dean at the Harvard Graduate School of Education and the co-chairman of the Aspen Institute Education and Society Program. “It forces you to think in a more differentiated way about the profession.”

The competitive labor market also has heightened concerns about how to attract a reasonable share of society’s talent into teaching. Many of the nations represented at the Aspen meeting worried that individuals choosing to become teachers are generally less bright, less ambitious, less curious, less diverse demographically, and more risk-averse than the population as a whole. Nations need to consider how their teacher policies affect not only the existing teacher force but also those with the potential to become teachers, said Stefan Wolter, the director of the Swiss Coordination Center for Research in Education. “The question we should ask,” he said, “is, of the whole pool, do we get the best?”

Each of the eight nations participating in the international seminar has a teaching profession that uniquely reflects its culture, traditions, and circumstances. Each has made different trade-offs in developing policies to recruit, attract, and retain a high-quality teaching force. Together these countries provide an emerging picture of what a teaching profession based on differentiated career options, support for ongoing development, and a related pay system might look like.

## Starting Out: Supporting New Teachers

Even nations with rigorous pre-service preparation programs are recognizing that new teachers need extensive support and learning on the job. Research documents that new teachers struggle with similar issues in their first few years in the classroom, including classroom management, dealing with differences between students, assessing student work, motivating students to learn, interacting with colleagues, and communicating with parents. To help teachers cope with these demands, countries

are creating “induction” programs to help teachers make the transition from teacher education into teaching as a profession.

## Swiss Induction

In Switzerland, for example, almost all cantons have induction programs that novice teachers must complete to be fully certified. The programs are typically provided through a combination of services from the schools, the regions (subunits of the canton), and the canton itself. It’s not that teacher education is viewed as deficient, explained Heinz Rhyh, who directs the department of quality assurance for the Swiss Conference of Cantonal Ministers of Education. “It’s the idea that newcomers to teaching are facing specific problems, and we have to help them get over these problems.”

In the canton of Zurich, each new teacher is assigned an “experienced colleague” at the school site to help during the first two years. These colleagues take university classes to prepare for their roles and are compensated for their time. They do not evaluate the new teacher but play an entirely supportive function. New teachers are guaranteed between 10 and 42 hours of help per year from their colleagues as needed.

New teachers in Zurich also may request up to 16 hours of individual counseling with an experienced teacher who has earned a counseling certificate. About half of new teachers choose to do so. Counseling sessions may be held at the school (where the counselor may observe the teacher and provide feedback) or at the canton’s induction center. During an initial meeting, the teacher and counselor create a contract that outlines the goals for the sessions, designing them around the individual’s needs. The canton’s induction center also creates opportunities for ongoing collaboration among new teachers by using individual counseling requests to form small groups of novices who meet together with a counselor to discuss common issues or concerns. Finally, new teachers must take a mandatory four-week course at the end of their second year taught by a university professor. The course covers such topics as pedagogy, psychology, and subject-matter content based on needs identified by the teachers. During the course, teachers are placed in groups of two to four to encourage informal networking. The groups each have two leaders—an induction specialist from the university and an experienced teacher. The canton pays for substitutes while the new teachers attend the course. Often, the substitutes are students in the teacher-preparation program who are completing their clinical training.

Beyond the required course, three to eight voluntary courses are offered throughout the induction period. Novice teachers may attend these courses if they feel the content meets their needs.

Swiss cantons can afford the costs of induction programs, explained Rhyn, because new teachers typically do not work full time. They are therefore free to meet with their counselors and to attend necessary coursework outside of paid working hours.

### **New-Teacher Support in Japan**

Japan also offers new teachers an intensive induction program. Yasushi Ogura, a senior researcher at the National Institute for Educational Policy Research in Tokyo, said teacher education in Japan is focused strongly on subject-matter knowledge, and entry to teaching is highly competitive based on academic criteria, “but it’s not enough for becoming a really effective teacher.” Therefore, the first year of teaching includes about 90 days of intensive training, in and out of school, subsidized by the national government. Each new teacher is assigned an experienced teacher to act as a mentor or guiding teacher. Both the guiding teacher and the new teacher are given reduced teaching responsibilities—about 75 percent of the normal teaching load in the case of the new teacher. The principal and the guiding teacher develop a year-long plan for the novice based on guidelines published by the national government, the prefecture, and local needs. The typical plan includes working with the guiding teacher and others in the school about two days a week, or a minimum of 60 days per year, as well as training at in-service centers run by each prefecture and some large cities. The outside-of-school component is about one day per week, or a minimum of 30 days per year.

The government divides the content of the induction programs into six broad categories: basic knowledge on such topics as the goals of education; classroom management; subject guidance, or planning and analyzing classroom teaching; moral education; special activities, such as after-school sports and clubs; and pupil guidance. What’s striking is the detailed planning involved. Some prefectures, for example, publish their own guidebooks describing their year-long program for new teachers.

To help maximize the resources available for induction, prefectures often group new teachers at schools with particularly good reputations. This frees up funds to hire temporary, full-time teachers to fill in for the new and guiding teachers.

Procedures for selecting guiding teachers vary widely across prefectures and even individual schools. Typically, guiding teachers are experienced educators who teach the same subject as the novice educator. Unlike in Zurich, those who become guiding teachers receive no special training and no financial reward beyond their reduced teaching loads.

Guiding teachers may team-teach with the new teacher, visit and observe their classes, help with lesson planning, communicate through reflection journals, and have new teachers meet with them and others in the building.

In Japan the development and refinement of individual lessons is considered a key avenue for improving teaching and learning. Novice teachers typically teach two or more demonstration or “study teaching” lessons in their first year, with the lessons viewed by the administration of the prefecture, the guiding teacher, the school principal, and other teachers in the school. New teachers prepare for the lessons for several weeks, and

the critiques they receive are a key part of their on-the-job development. The national government also recommends that new teachers complete a research project growing out of their practice during their first year in teaching, with the results usually presented as part of their out-of-school training component.

New teachers in Japan are hired on a probationary basis. At the end of the first year, a teacher can be hired as a fully employed regular teacher. The induction year is used, in part, to winnow out teachers who are not viewed as satisfactory even after additional training.

### **Peer Assistance and Review**

In the United States, the Peer Assistance and Review (PAR) programs are powerful models for new teacher induction. Operated under joint agreements between unions and school districts in such cities as Cincinnati, Columbus, and Toledo, Ohio, and Rochester, N.Y., the PAR programs are explicitly



## **ELEMENTS OF A TEACHER CAREER AND COMPENSATION SYSTEM**

Teacher careers should progress in stages—from novice, to experienced, to expert. Each phase should have different expectations, roles, responsibilities, and compensation, with the core criteria the ability to promote student learning.

Novice teachers struggle with specific problems of practice and need extensive support and learning on the job from teacher education institutions, expert teachers specifically trained and compensated for that role, and from the broader school community.

Novice teachers should be hired on a trial, or probationary, basis. The probationary period should focus on helping new teachers be as successful as possible, by supporting them, including through a reduced teaching load, while rigorously evaluating their effectiveness and suitability for teaching.

The end of the probationary period should be a celebratory event. Teachers who have demonstrated they are effective in promoting student learning should receive a significant bump in status and pay; those who cannot should be dismissed. This would not only motivate beginning teachers but also encourage good teachers to remain in teaching.

Teachers during the middle years of their career should have significant opportunities for ongoing professional development that is largely tied to school and district improvement goals. Performance-based bonus systems could reward both outstanding individual and team contributions on top of teachers’ base pay.

A career track for experienced teachers (those beyond the first 3 to 5 years of teaching) should permit teachers to move up the salary scale based on demonstrated expertise and the assumption of additional responsibilities, without leaving the classroom altogether. Teachers who assume additional roles, such as mentoring, should be given the time and training to do the job, including a reduced teaching load.

The career pathways should be flexible enough to permit career switchers and those adept at raising student performance and developing their colleagues to move up the career ladder more rapidly or to enter at a higher stage if they satisfy the criteria. Salary bonuses or increments also should be available for teachers willing to work in hard-to-staff schools or positions.

designed both to support new teachers and to weed out those who should not remain. Each new teacher is assigned a teacher consultant or mentor who is released from full-time teaching duties for two or three years. The mentors visit the novices or “interns” assigned to them, observe their teaching, and conduct follow-up meetings. Although the number and length of visits vary, consultants typically observe new teachers at least 20 times during the year and meet with them at least 10 times. They also prepare periodic reports on each novice based on detailed evaluation criteria. A final appraisal includes a recommendation on whether the novice should receive a contract for the next year. A panel appointed by the district administration and the union hears the evaluation reports and makes final employment recommendations to the superintendent.

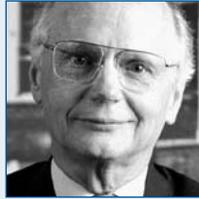
Depending on the district, consulting teachers also may help plan and present orientation sessions for new teachers and they may conduct workshops or graduate-level courses. They must apply for the positions and are selected based on demonstrated teaching ability, good communication skills, and the ability to work with others. Consulting teachers typically receive a supplement equal to 10 percent to 20 percent of their base salary, again depending on district contracts.

Districts with PAR programs report that they retain a higher-than-average number of beginning teachers. But, in any given year, a small percent of first-year teachers also resign or do not have their contracts renewed because they are identified by consulting teachers as lacking necessary teaching skills. The PAR programs also provide support and intervention for veteran teachers who have been identified as struggling.

Although the PAR model has proven powerful in the places where it’s been operating—in some cases for more than a decade—“the sad part is it hasn’t spread farther,” observed Tom Mooney, the president of the Ohio Federation of Teachers. One reason may be that it runs so contrary to traditional norms. Teachers are seldom asked to reach a consensus about what constitutes quality teaching or to exercise a role in evaluating their peers. Typically that’s been viewed as a management prerogative.

What all of the induction efforts across nations have in common is the recognition

that teachers are not maximally effective on the first day they enter the classroom. Rather, novices need additional support and instruction as they struggle with issues common to beginning teachers. In addition, such programs acknowledge that it is almost impossible to identify from pre-service education and licensing exams which teachers will be effective in the classroom.



**Richard W. Riley**

*Former U.S. Secretary of Education*

“Success in education is 100 percent dependent on teachers and teaching. We must continue efforts to attract talented and committed people into the profession. But getting great people into teaching is not sufficient. Building an effective teaching force requires support for new teachers in the form of mentoring and collaborative teamwork with their more experienced colleagues, recognition of accomplished teachers, and opportunities for advancement. My hope is that in this new year there will be a national conversation among leaders at all levels—members of congress, governors, state legislators, school board members, educators, and others—about effective federal, state, and local policies to foster and reward teaching excellence.”

“We should delay the decision as long as possible, giving people a chance on the job to have a rigorous induction process,” argued Phillip McKenzie, a research director at the Australian Council for Educational Research and a lead investigator of the OECD study. Thus, an important goal during the induction period is to identify who is likely to be a successful teacher and who is not, and to dismiss or counsel out the latter before they receive tenure. Such a period also provides an opportunity for beginning teachers to assess whether teaching really is the right job for them.

Once new teachers have proven they can be effective on the job in the first two or three years, through a rigorous induction process, McKenzie said, they should receive a significant bump in status and salary as full-fledged members of the profession. This would not only motivate beginning teachers but also encourage good teachers to remain in teaching.

### **Established Teachers: Schools as Places to Work and Learn**

Induction programs can help support new teachers, but keeping teachers beyond their initial years in the classroom requires environments conducive to teaching and learning.

As Ben Levin, the deputy minister for the Ontario Ministry of Education in

Canada noted, “We will never have all the high-quality teachers we want. One of the challenges for me is how you work with the people who are already teaching to create the conditions that allow them to improve their practice.”

Supporting all teachers means creating working conditions that promote their learning as well as that of their students. Fortunately, Levin argued, the ingredients needed for effective school improvement coincide with many of the conditions that teachers want: teaching assignments that fit their skills, strong leadership, a shared sense of mission, a reasonable degree of autonomy connected with a high degree of collegiality and teamwork, program stability, and effective communication about what the organization is trying to accomplish.

### **Ontario’s Approach**

Ontario’s Literacy and Numeracy Strategy is a major initiative designed to improve schools as places to work and learn. Its goal is to have all students read, write, do math, and comprehend at a high level by age 12. The strategy includes reducing class sizes in the primary grades to 20; investing in additional specialist teachers in such areas as art and music to enrich instruction and to provide more preparation time for math and reading teachers; and providing intensive training for teachers in effective literacy and numeracy instruction.

Rather than assuming all knowledge resides with governments, said Levin, “We started with the idea that everything good we want to do someone is already doing out there.” Instead of mandating practices centrally, a new Literacy and Numeracy Secretariat within the ministry works with local school boards and schools to set achievement targets and improvement plans. The Secretariat also has selected and funded more than 200 local initiatives, and it has collected and analyzed successful practices from 170 schools and classrooms as the basis for sharing best practices across the province.

To date, the initiative has trained more than 10,000 teachers in summer programs over the last two years; collaborated with principals’ associations to provide more than 700 principals with professional development in creating learning communities; and increased the number of “lead teachers” in the primary grades from 8,000 to 16,000. Lead teachers share best practices with other teachers in their schools. At the high school level, student success leaders work with teachers to implement new initiatives and to provide professional development.

Since the initiative began, test scores have been rising in writing, reading, and math in

the primary grades. The gap between the highest and lowest achieving school districts has narrowed. According to Spence, the director of the Hamilton-Wentworth District School Board in Ontario, the strategy has created “a laser-like focus on teaching and learning, and the way it’s done that is through pressure and support.”

### **The Japanese Way**

In Japan, the notion of schools as learning communities for teachers is deeply embedded in the national culture. The tradition of “lesson study,” in which groups of teachers within a school meet regularly to plan, practice, observe, and refine a particular lesson with the goal of sharing it more broadly, is more than 100 years old.

Such practices, explained Ogura, are based on the recognition that “schools have many problems without a recipe or prescription, and teachers and school leaders need to develop their own approach to solve these problems by a kind of creative work.”

These practices are strongly supported by national and local policies. Each prefecture, for instance, has a well-equipped professional development center. Teachers have larger class sizes than in the United States—about 29 students in the primary grades and 35 or more in high schools—but teach fewer periods, making it possible for them to engage in other professional activities. Every year, each school is expected to set a practical research objective that teachers will investigate, often through lesson study. Teachers meet regularly to discuss that research. “Such meetings are very good because many ideas from the whole teaching staff are presented,” said Ogura, “and they discuss in a very productive way how to obtain that goal or objective.”

Teachers also are expected to change schools every 5 to 10 years so that their ideas and practices spread more readily from school to school and the best teachers are spread more evenly among schools. In their tenth year of teaching, the national government subsidizes about 20 days out of school and another 20 days in school of intensive professional development for teachers. “Our teachers view themselves as professionals, but never confident about their professionalism,” said Ogura. “They are on the path of lifelong learning and there is no end. And that means nobody can be confident about their professionalism. Always, they are lacking something.”

“Such consciousness is very important,” he added, “because when doing lesson study they can speak anything about the lesson somebody did, and teachers of the lesson

can accept everything and exchange ideas. I think this kind of atmosphere is not easy in different contexts.”

Leadership is also important, he noted. To make time for lesson study, principals will reserve time during the school day once or twice a month for teachers to observe a particular classroom while their own students work independently. In some cities, the board of education decides that once a month, in the afternoon, all schools will close and all teachers of the same subject will come to one school to meet and discuss their practices.

### **Susan Moore Johnson**

*Professor, Harvard Graduate School of Education*



“Public education will never succeed without a robust system of differentiated roles for teachers. Schools that are organized like egg crates, with each teacher working alone, squander scarce knowledge and talent. Teachers with expertise and experience can supervise new teachers, coordinate curriculum and resources, provide professional development, help analyze data to inform instruction, and build links with the community. While many districts have roles for teachers as mentors or coaches, most of those are one-off appointments that lack legitimacy and last only as long as the grants that fund them. A sturdy system of differentiated roles should be developed with teachers and incorporated into district policy, including the collective bargaining agreement. It would specify purposes, selection criteria, titles, pay, responsibilities, plans for review, and a commitment to ongoing funding. This approach would strengthen not only schools, but also teaching as a career.”

*Photography by Dina Konovalov of A Dream Picture, Inc.*

The common element in all countries is the recognition that good teaching is an intellectual enterprise. It depends upon evidence-based problem solving that draws on a solid knowledge base and is strongly rooted in the context of particular schools. Retaining and supporting good teachers require making them part of that knowledge-generating enterprise, not just passive recipients of prescriptions handed down from on high. “What I mean by a profession is a profession that is in control of its knowledge body,” said Ingrid Carlgren, the vice chancellor of the Stockholm Institute of Education. “One of the big problems is that we don’t know enough about learning in different disciplines, and how we can engage teachers in the production of that knowledge.”

### **Expert Teachers: Rewarding and Utilizing Excellence**

To retain effective teachers, policies also have to address issues of teacher pay and the potential for career growth. Research

suggests that teachers’ salaries relative to other professions influence both who enters teaching and who stays. According to the OECD report, in the last 20 years, in most countries, teachers’ salaries have declined relative to other occupations that require similar levels of education and training. Moreover, while the pay differential within other professions has widened to reward skill and productivity, that’s less true in teaching. In 70 percent of the countries studied, the report found, it takes at least 20 years for lower secondary teachers to move from the bottom to the top of the salary scale. (Australia has the opposite problem. Teachers typically reach the top of the classroom-based salary scale after about eight years, so their careers plateau quite early and at a fairly modest salary.) “In a competitive, global labor market, the more productive people are being paid more,” observed McKenzie, an investigator on the OECD study. “It doesn’t always seem to be the same in teaching.”

To help make teaching a more attractive career choice, with more room for growth, many countries are creating new roles and responsibilities for teachers that reward their expertise without taking them out of the classroom. Whether they’re called “experienced colleagues” in Switzerland, “guiding teachers” in Japan, “consultants” or “school-based coaches” in the United States, or “lead teachers” in Ontario, Canada, each of the nations participating in the Aspen meeting was seeking ways to recognize expert teachers, reward them for their abilities, and take advantage of their skills. Creating a stronger connection between individual teachers’ contributions and what they are paid lies at the heart of redesigning teaching for the next generation.

“This notion that you have to take a vow of poverty in order to be a teacher is driving out so many of our smart young people,” said Susan Sclafani, the managing director of the Chartwell Education Group, who recently co-authored an international review of teacher and principal compensation systems.

### **‘New Professionalism’ in England**

As part of a “new professionalism” agenda, England has restructured its pay and career system for teachers. Until 1999, teachers

moved up the pay scale based on annual salary increments until they reached the top. Although the pay increases were theoretically based on satisfactory job evaluations, most teachers received them. In the late 1990s, the government created a new system that gives experienced teachers access to an upper-level pay scale, but only if they volunteer to earn “experienced teacher status” based on an appraisal of their performance. The government also introduced a career grade of “advanced skills teacher” to give talented teachers more pay and responsibility without leaving the classroom. To become an advanced skills teacher, an individual must pass an assessment that includes a portfolio, interviews, and observations of their teaching. Advanced skills teachers are paid on a separate, higher salary scale and spend about 20 percent of their time offering professional development to teachers both in and outside their own school. The goal is to have between 3 percent and 5 percent of the teaching force become advanced skills teachers. The government also is negotiating a tighter performance-based pay system focused more sharply on teachers’ new job descriptions.

### **Individual Negotiations in Sweden**

Sweden has taken the most radical approach to performance-based pay, with salaries negotiated individually between teachers and their principals. The shift was part of a larger movement toward decentralization that began during the mid-1980s. While the central government retained responsibility for a national curriculum and evaluation system, local municipalities were put in charge of running the schools. During an economic downturn in the early 1990s, the local authorities also sought and won control over setting teacher salaries, in part, to make better use of limited resources to meet accountability goals. The economic downturn created a deadlock in salary negotiations between the municipalities and the two national teachers’ unions. In the end, the unions obtained a significant increase in base pay for teachers by agreeing that, above that base salary, individual teachers would negotiate their pay directly with the school principal. The system is underpinned by central government financing that provides higher funding to municipalities in disadvantaged areas.

In part, the unions were responding to concerns from their own members that about half the teaching force had already reached the highest level on the salary scale with no room for advancement. Meanwhile, younger teachers did not want to wait 18 years to earn a decent living. Overnight, the unions’ role shifted. While national agreements set the floor for the salary scale, the unions

## CHALLENGES IN BUILDING A TEACHER CAREER AND COMPENSATION SYSTEM

***How can effective teachers be identified?***

For a career and compensation system to work, teachers must have confidence that the means for evaluating teacher effectiveness are fair and transparent. While the core criterion must be student learning gains, many other nations take a more holistic view of teacher evaluation that relies upon multiple indicators and measures. Singapore, for example, relies on expert panels that use a range of “soft measures,” such as developing student ethics and values, and working effectively with colleagues, in addition to meeting student-learning targets.

***What’s the right balance between competition and cooperation?***

Research suggests that effective schools are learning communities in which teachers work together to achieve mutually agreed upon goals. Given the research, what’s the right balance in performance-based pay systems between rewarding the contributions of outstanding individual teachers and rewarding team efforts that promote a collaborative culture?

***What kinds of incentives and working conditions are needed to attract and retain teachers for hard-to-staff schools and positions, and to increase the diversity of the teaching force?***

Although many countries are experimenting with scholarships and loans for prospective teachers, hiring and retention bonuses, smaller class sizes, and other incentives, there’s limited evidence of the effectiveness of any of these approaches.

***Where’s the data on costs?***

Policymakers need to know the cost-benefits of investing in induction programs for new teachers and career pathways for accomplished veterans. But limited data exist on the impact and costs of induction programs or on the costs related to teacher attrition, such as the need to constantly recruit, hire, and train new teachers.

***What is the right mix of short- and long-timers needed in the profession?***

Given the changing labor market, and the fact that staying in one job or even one profession is increasingly rare, it is likely that many individuals may teach for only a limited time period. How can schools be structured to make best use of these short-timers while ensuring enough veteran teachers to run an effective school?

***What kinds of teachers do we need for schools of the future?***

The kinds of teachers we need depend on our vision of the schools we want and the kinds of students we want to grow. The technological revolution offers opportunities to explore new relationships with students and new pedagogies. The role of the teacher and therefore the skills required of recruits to the profession could change significantly. Changes in how learning and instruction occur could alter who’s attracted to teaching, what teachers do with students, and whether teachers work full or part time.

***What is the right balance between centralized direction and autonomy?***

In designing their teacher career and compensation systems, each country is struggling to determine which aspects of education should remain highly centralized and common to all schools and which should be left to the discretion of individual teachers and schools, based on their local context. The evidence suggests that the best performing countries combine external control of resource levels and performance standards with school autonomy in the process areas, such as teacher selection and development, where school knowledge is important. While a strong decentralization movement in Sweden has left teachers with too little research-based guidance, argued Ingrid Calgren, the vice chancellor at the Stockholm Institute of Education, England “has been on a steep journey from very tight central prescription toward what we’re hoping will be informed professionalism,” said Carole Whitty, the deputy general secretary of the National Association of Head Teachers.

now negotiate with each municipality over how much money to set aside for the individualized pay system and to design guidelines for how the system will work. “We went from boxing to dancing as a strategy for negotiations,” said Ove Johansson, the chief negotiator for the Swedish Teachers Union.

“What we are discussing a lot now is how can we combine this individualized system with a career system,” he said. While salaries in general have increased, the differential between the highest and the lowest salaries has not widened significantly, and studies show that new teachers with the best pay

development are the most likely to leave after five to seven years. “So we have a very long way to go,” said Johansson.

### **Career Tracks in Singapore**

Among the nations participating in the Aspen seminar, Singapore has arguably the most developed career system to recognize and reward outstanding classroom teachers.

Unlike the United States, Singapore has a highly centralized education system. Schools follow a national curriculum, with national tests for students at key intervals. Teachers are employed centrally by the national Ministry of Education. And becoming a teacher is a highly competitive process. Applicants are drawn from the top one-third of their college classes. They are paid a full monthly stipend while they complete one to three years of teacher study at the National Institute of Education, after which they are obligated to remain in teaching for three years. Teachers with an honors degree earn higher beginning salaries than other teachers.

Since 2002, Singapore’s Ministry of Education also has started a new incentive payment scheme to encourage teachers to make teaching their long-term career. Teachers receive a retention bonus for every three to five years they stay in the service. This has helped keep the resignation rate for teachers at less than 3 percent, despite the good performance of the Singapore economy over the last few years and increased job options in the private sector. To encourage a culture of learning in schools, the government pays for 100 hours per year of professional development for all teachers. Even so, said Wong Siew Hoong, the Director of Schools for the Ministry of Education, the challenge is to continue to motivate teachers to remain committed to the profession. “For teachers to do the best job,” he said, “they must feel comfortable in school. They must feel ownership of the school community. And they must feel they want to do something for their students.”

Partly for that reason, Singapore has developed a performance-based pay plan for teachers, which has been in place for about a decade, and more recently three career tracks for teachers to aspire to. “One of our governing principles is the concept of ‘work for reward and reward for work,’” explained Siew Hoong. “That assumes that people are incentivized by rewards and, therefore, as employers, we must reward people for their work.”

The performance-based bonus system provides rewards for both outstanding individual and team contributions in every school. In addition, on top of their base pay,

individual teachers are eligible for annual bonuses, ranging from half a month’s to three months’ salary, based on the judgment of panels composed of people from within the school who have day-to-day knowledge of the teacher’s work.

After their first three years in the classroom, teachers now can choose to pursue one of three career tracks: a leadership track; a specialist track, for those interested in curriculum and instructional design, educational psychology and guidance, educational testing and measurement, or educational research and statistics; and a teaching track. The “teaching track” caters to the majority of educators, who want to make excellence in classroom teaching the primary focus of their careers. Within that track, teachers can move up from a “senior teacher” to a “master teacher” to a “master teacher, level 2,” with their pay rising to reflect both their demonstrated expertise and the assumption of additional responsibilities.

Senior teachers serve as a mentor and role model for teachers in their schools. Schools also have been given the flexibility to arrange their workload so that senior teachers can spend more time mentoring younger teachers. Master teachers spend their time working on initiatives at the national level or assisting groups or clusters of schools. The master teacher’s main role is to provide advice and guidance to teachers and to help introduce new teaching methods and pedagogy within subject areas. Master teachers are appointed on a fixed, three-year term, which can be renewed, with the cluster superintendent deciding on the deployment of individual master teachers in consultation with local principals. A master teacher might teach in a particular school for a semester or a year, for example, to provide model lessons for other teachers in the school to observe and learn from.

To move up the career track, teachers must satisfy various criteria to show they have the skills, knowledge, and competencies for the job, by submitting a professional portfolio of their work to a selection panel at their school. Among other things, applicants must demonstrate the contributions they have made to their school organization as a whole, their ability to collaborate with parents and community groups, to contribute to the character development and well-being of their pupils, and to advance student learning.

Under the career-track system, a master teacher can earn a salary equivalent to a career “specialist” level 1 or 2, while a master teacher level 2 can earn a salary equivalent to a school vice-principal. Individuals can also choose to move laterally across career tracks if they satisfy the criteria for the job or career track they want to enter. “Now we’re saying that those people who are really, really good in the classroom, if we want to keep some of them in the classroom, we will move them into the teaching track,” says Siew Hoong, “whereas in the past we would have moved them up and out of the classroom.”

### **Arlene Ackerman**

*Professor of Practice at Teachers College, Columbia University, former Superintendent in San Francisco and Washington, D.C.*



“Many districts are putting in place some of the needed teacher supports and incentives—but are struggling with the separate pieces in isolation and don’t have a systematic approach that will lead to significantly higher performance. There is tremendous learning to be gained from looking at more comprehensive international examples and cutting-edge states and districts. It is high time that superintendents and union leaders learn and work together to identify and put in place comprehensive systems for improving teaching and strengthening the profession.”

Singapore’s Ministry of Education takes a very active role in managing the development of its educational workforce. It identifies potential leaders early, uses data to track their performance, and makes sure they get a range of experience to groom them for future roles. A competency-based performance-management system evaluates teachers annually both for how well they meet current work targets and for their estimated career potential. The latter is used to identify training possibilities and to plan for future job postings and assignments.

Singapore and Japan also share a commitment to keeping teachers’ mindsets open in a rapidly changing environment. Japanese teachers with 10 years’ experience can spend several weeks in businesses, social welfare institutions, and other settings to improve their understanding of the broader society. In Singapore, teachers may spend two to three weeks working in private industry to gain a better understanding of real-world contexts. A “Teach Less, Learn More” initiative, launched in 2005, also encourages Singapore teachers to provide students with opportunities to speak up and engage in creative work in the classroom. “Our preoccupation now is really about the future,”



## Susan Sclafani

*Managing Director of the Chartwell Education Group, former Assistant U.S. Secretary of Education*

“As we design new systems that leverage teachers’ knowledge and experiences and give them opportunities for varied roles and responsibilities, we should be planning for how schooling will be 10, 20, and 30 years from now. Rapid changes in society and the economy require students to have new kinds of preparation for successful lives and careers in the 21st Century.

These new demands—coupled with new media and technology that make new forms of learning and working possible—mean the job of teaching will be different. Particularly at secondary school, there may no longer be one teacher in front of a classroom of students. Instead, teachers may be learning coaches whose task is to help students understand the vast array of information, expertise, and opportunities available to them and to work individually and with teams of students to solve real life problems. This new context may attract different types of people into teaching and change the knowledge, experiences, roles, and responsibilities needed to strengthen the teaching career system.”

said Siew Hoong. “Our students are going into a future that is so unpredictable, where change is the norm, where they are expected to be learning and relearning. How do we get our students ready for that? How can we get our teachers to be role models?”

### U.S. Prospects

The United States also has promising ingredients for the development of a full-fledged teacher career and compensation system. The Peer Assistance and Review Programs scattered around the country already recognize and reward expert teachers for taking on the added responsibility of mentoring and evaluating novices and struggling classroom veterans. Nearly 50,000 teachers nationwide have earned recognition for their knowledge and expertise from the National Board for Professional Teaching Standards, a voluntary assessment program that certifies accomplished teachers who have met professional standards based on the completion of a portfolio and a series of tasks completed in an assessment center. But, in general, board-certified teachers have not been systematically offered additional responsibilities or opportunities in their schools or districts that could take advantage of their expertise. Nor have they been aggressively recruited to teach in high-poverty, high-minority or low-performing schools. To be fair, the board was created as a way to recognize expert teaching not to develop instructional leaders.

A growing number of states and districts also are experimenting with pay-for-performance. In Denver, for example, the Professional Compensation System for Teachers provides salary increments based on increased knowledge and skills, professional evaluation, willingness to work in hard-to-staff schools

or positions, and reaching specified student-growth targets, including performance on state tests. About 13 states also are participating in the Teacher Advancement Program, launched by the Milken Family Foundation in 1999. Now administered by the Santa Monica, Calif.-based National Institute for Excellence in Teaching, the program has four primary elements: multiple career paths for teachers, ongoing school-based professional development, evaluations tied to student performance, and performance-based pay. The program can also include incentives for teachers who transfer into low-performing schools.

Data systems that can link student learning gains to individual teachers, while still in their infancy, also hold promise for identifying and rewarding especially effective classroom educators. Most experts caution, however, that the results from such value-added

analyses should be only one component of a more complete and robust teacher-evaluation system.

While the United States cannot take the highly centralized approach of Japan or Singapore, individual states or districts are free to experiment with the development of career and compensation systems. And the federal government could provide stronger financial incentives to do so. Such systems could permit highly able career switchers or those with demonstrated effectiveness in raising student performance to progress up the salary scale more rapidly. They could provide more structured support for novices. And they could give teachers in the middle of their careers—during years 5 to 10, for example—incentives to stay and opportunities for growth.

“The time is both ripe and necessary to move on a systematic career structure and compensation system in the United States,” argued Moore Johnson of Harvard. “We have to think about differentiated roles for teachers. If we don’t provide the opportunity for some people to dig in deeply, to build a career, to be the experts, then in the United States we’re going to move to very short-term teachers, and the policy and administrative side are going to move to scripted curriculum, and then we will not attract anyone.”

*Note: The information in this article draws primarily on the Aspen seminar, the OECD report Teachers Matter (OECD 2005), and country background reports prepared for the meeting by the participants and Harvard University School of Education graduate student Mindy Sick Munger. Other sources of data and information include Comprehensive Teacher Induction (Britton, Paine, Pimm, and Raizen, 2003) and various policy publications of each country.*

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