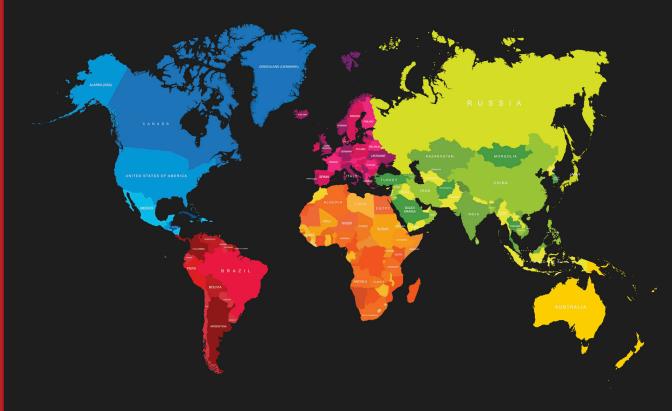
EMPOWERED EDUCATORS

HOW HIGH-PERFORMING SYSTEMS SHAPE TEACHING QUALITY AROUND THE WORLD

SHANGHAI: CULTURE, POLICY AND PRACTICE









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.

The National Center on Education and the Economy was created in 1988 to analyze the implications of changes in the international economy for American education, formulate an agenda for American education based on that analysis and seek wherever possible to accomplish that agenda through policy change and development of the resources educators would need to carry it out. For more information visit www.ncee.org.

The Center on International Education Benchmarking, a program of NCEE, conducts and funds research on the world's most successful education and workforce development systems to identify the strategies those countries have used to produce their superior performance. Through its books, reports, website, monthly newsletter, and a weekly update of education news around the world, CIEB provides up-to-date information and analysis on the world's most successful education systems based on student performance, equity and efficiency. Visit www.ncee.org/cieb to learn more.

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.

Shanghai: Culture, Policy, and Practice

Shanghai has attracted the attention of the global education community since 2009, when the city participated for the first time in the Organization for Economic Co-operation and Development's (OECD) triennial Programme for International Student Assessment (PISA). PISA exams are administered to a random sample of 15-year-olds in participating jurisdictions in three subject matter areas: reading, mathematics, and science. In its first attempt, Shanghai was at the top of the charts in all three subject areas and then repeated that performance in the 2012 results. In addition, Shanghai had the smallest percentage of students performing in the lowest levels and the highest percentage of students performing at the highest levels. These results have left many people in the policy and school reform communities asking how Shanghai has managed to create a system that supports its students to perform so well on these measures of student achievement.

A province-level municipality, Shanghai is able to develop its own policies based on national Ministry of Education guidelines. It occupies a unique status within Chinese education policy, used both as a launching point for rolling out new education policies, and as a test-bed for innovations that inspire national policy.

According to educators and researchers in China, one important contributor to Shanghai students' performance is Shanghai's teachers. Shanghai holds teachers in high regard and structures schools to provide them with continued supports that enable them to improve instruction and learning throughout their careers. These supports include time for collaboration with peers, numerous opportunities for professional learning, and opportunities for career advancement and recognition. Teaching is a career that many highly qualified individuals want to enter and remain in.

This brief will describe the Shanghai education system, show how teachers are regarded, and how the government invests its resources, structures schools, and supports, develops, and rewards this important workforce.

Teachers and Teaching in China and Shanghai

Teaching is a high-status profession in China. The Chinese word for teacher, jiaoshi, is made up of two characters: one meaning "teach" and one meaning "master" or "expert." Thus the language expresses the view that teachers are skilled at their craft. In addition to professional status, as a society, China deeply holds teachers in high regard and the national policies reflect these values. The teacher is also viewed as an elder who invests in the nurturing of youth and becomes symbolic for students as a figure who provides guidance

Shanghai holds teachers in high regard. Teaching is a career that many highly qualified individuals want to enter and remain in. throughout life. This is exemplified in a well-known saying in China: "One day as my teacher, the rest of my life as my father." Surveys in China have rated teachers above other professions in prestige, including corporate managers and mid-level military officers. While the pay of teachers is relatively modest, comparable to that of civil servants, young people, especially women, think teaching is a stable career that affords opportunity for advancement.

China began efforts to professionalize teaching when it passed the People's Republic of China Teachers Law in 1993. That law defines teachers as professionals and establishes the expectation that the nation should give attention to the "professional training of teachers, improving teachers' working and living conditions, protecting the legitimate rights and interests of teachers, improving the social status of teachers The whole society should respect teachers." September 10 was established as Teachers' Day—a day to recognize, award, and celebrate teachers across the nation. On Teachers' Day, many award ceremonies are held to recognize accomplished teachers.

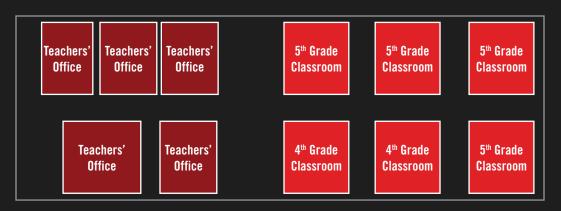
Under the law, the central government authorized schools to manage their teachers, making decisions about employment, teaching assignments, and professional support. Teachers were given the "right" to carry out educational reforms and experiment, engage in scientific research and academic exchanges, and participate in professional academic organizations and academic activities. The law also gives teachers the right to participate in a "staff congress or other forms of democratic participation in school management."

The Teaching Practice

School structures in China are designed to treat teachers as professionals and reinforce the high status teachers hold in the country. Teachers locate their desk and professional materials in an office they share with other teachers in the school. When they are not teaching a class of students, they use this common office to take care of other responsibilities associated with teaching: grading papers, preparing lessons for classes, meeting with other teachers to design lessons, conducting classroom and school-based research, and meeting with students. Chinese teachers are able to perform these tasks effectively because the amount of time they spend in classrooms teaching students is relatively low, compared with teachers in the United States. In a given week, a primary teacher will teach 15 hours per week and secondary teachers will teach about 12 hours per week.

All teachers in China are subject matter specialists, even at the elementary level. Students in Chinese schools are grouped into classes that stay together for multiple years, although students may move to more advanced classes if they demonstrate exceptional academic performance, based on test scores. Students remain in a classroom throughout the day, and subject matter teachers come to them, rotating from class to class. Teachers in core subjects tend to "loop" with students and teach

Figure 1. Typical Shanghai School Layout



Map of the third floor of Qilun Primary School, Minhang District, Shanghai showing the school structure centered on grade level classes and teachers' offices

them for multiple years. This class structure allows teachers to know their students well and stay specialized in a single subject area.

Each class group is assigned a teacher called a *banzhuren* who serves as an advisor for the class—this teacher consults with the families of the students, keeps track of the academic progress of the students in the class, and provides counselling to students on social and emotional issues they are facing. Some *banzhurens* are expected to visit the homes and families of students during the academic year on Saturdays or Sundays. The *banzhuren* provides instruction for the class on issues of social importance or will help the class organize themselves into club activities. The *banzhuren* will also sit in on other subjects to monitor the progress of students with other teachers and in order to support them. This "cohort" model for organizing students in schools is intended to provide a stable and predictable learning community for the students and the *banzhuren* gets to know the students and their families by staying with them from grade to grade. The *banzhuren* receives additional monthly salary for their regular work and bonus salary if their class performs well on school placement exams or academic competitions.

Professional Growth

Chinese schools provide ample opportunities for teachers' professional development, both formal and informal. The expectation is that teachers will continue to refine and improve their practice throughout their careers. These practices, too, contribute to teachers' professionalism.

Chinese regulations require all teachers to participate in ongoing professional learning opportunities for 240 hours every five years. Districts and higher-education institutions provide workshops for teachers, which cover topics such as education theory and practice and educational technology.

Schools in China also offer many sustained opportunities for professional learning and growth for teachers. Some of these opportunities are relatively informal and reflect the cultural expectation that teachers will collaborate with one another. Teachers in China share a long tradition of planning together and observing each other's lessons. Teaching is not a private activity in China as it is perceived in some other cultures and the practice of peer observation is referred to as "open classroom." This openness creates a stronger collective set of ideals for which to gauge strong teaching versus weak teaching. It is still up to the individual teacher to execute lessons and manage large groups of students in tight fitting classrooms. However, teachers hold images of "good teaching" in their heads and maintain the drive toward individual improvement by being immersed in an overall culture that allows them to see colleagues perform on a regular basis.

A unique form of professional learning in Chinese schools is the *jiaoyanzu*, or "teacher research group." These groups consist of three to eight teachers, often those who teach the same subject area, who share office space and meet regularly. *Jiaoyanzu* are led by a teacher who is recognized in the school as high-performing. The school principal works closely with the heads of the *jiaoyanzu*, who serve as an informal council or cabinet for advising the principal.

Jiaoyanzu are so common in China, they go unnoticed within the country as something worth describing in the research and policy literature. As one research study put it, "Working together constitutes the circumstances or environment in which Chinese teachers work; like the air in which we live, it seems to be too common and too customary for people to notice its existence."

Jiaoyanzu typically meet on a weekly basis and engage in a variety of activities as part of their responsibilities to one another and other teachers. The goal of the *jiaoyanzu* is the improvement of educational practices for individual teachers as well as the school. To accomplish this goal, the *jiaoyanzu* members participate in a variety of activities that are directly connected to curriculum, teaching, and student learning. Their activities may include examining curriculum together, designing lessons, observing each other teach and discussing the lesson together, writing tests, coordinating teacher professional development such as lectures and visits to other schools, working with student teachers from preparation programs, soliciting input from students on the quality of teaching they are experiencing, and looking at student work.

Paine and Ma have described how the *jiaoyanzu* structure in Chinese schools creates an expectation of joint or collective work and decision

Teaching is not a private activity in China as it is perceived in some other cultures and the practice of peer observation is referred to as "open classroom." This openness creates a stronger collective set of ideals for which to gauge strong teaching versus weak teaching. making for teachers and establishes a different set of expectations for the daily work of teaching in China when compared to U.S. schools:

While the teacher is still the person chiefly responsible for classroom teaching, many decisions about curriculum and instruction are made jointly through the *jiaoyanzu*. In this sense, the teacher's field is narrower and more focused than it might be in a U.S. setting. At the same time, because of the presence of the teaching research group, the teacher's role is broader. That is, rather than being chiefly a classroom teacher, the teacher is also a teacher-educator—working with colleagues (experienced and new) to educate each other about teaching—as well as researcher or inquirer into teaching, curriculum, and learning. While U.S. teachers are increasingly identified as having these roles, the Chinese organizational context has long made these functions of teaching visible in and central to a teacher's daily tasks. ??

One focus of the *jiaoyanzu* is research. Chinese schools provide many opportunities for teachers to conduct and publish their own research, and most do so. In a national survey of teachers, 75 percent of respondents reported having at least one publication of their own research; 7.9 percent said they had more than nine publications.

Teachers also participate in other collaborative groups to share lessons and ideas about instruction. Lesson Preparation Groups work together to develop lessons, discuss common problems, share ideas, and conduct joint research. Grade Groups are similar, but are organized by grade level, to allow teachers who are teaching the same students to work together and align subject areas. These groups, which meet regularly—about once a week—provide an ongoing professional learning opportunity for teachers.

Teachers also participate in an innovative approach to bringing up low-performing schools through its "commissioned education program" or "empowered management" program. In this approach, district leaders match low-performing schools with high-performing schools. The high-performing school is contracted to support and develop the low-performing school in specified areas, such as teaching quality, school management, or relationships within parents. The empowered management approach to school reform strongly relies on the expertise of its best principals and teachers to reform its failing schools. Such an arrangement not only benefits the poor schools; it also gives the good schools more room to promote their teachers.

China also encourages professional growth by sponsoring teacher competitions. In these competitions, which are held at the district, provincial, and national levels, teachers conduct lessons for a class of students in front of a panel of judges, who rate them according to an observation protocol. Winners of the competitions are celebrated in their schools and communities. They bring recognition to their skill as a

teacher and honor to their school because the lesson they demonstrate has often been collaboratively constructed within a *jiaoyanzu* at their school.

Career Advancement

The emphasis placed in China on teacher professional learning and growth also has rewards for teachers. The country has a well-developed career ladder that enables teachers to advance in their careers and take on additional responsibilities by demonstrating their knowledge, skills, and experience.

Teachers in China are formally classified into four "grades," or ranks: probationary status, second level, first level, and senior teacher. They progress from one grade to the next based on their professional competence and status among their peers. To be promoted to the next grade, teachers must take a written test of language competence, write research papers, submit to interviews, and be observed by experienced teachers.

Teachers must apply for advancement at the district level. The school must approve the application first, which typically means the principal is in agreement that the teacher has the qualifications to apply. At the district level, a committee of experts—typically subject area coordinators or teacher professional development staff who themselves have been recognized for their accomplished teaching—review the applications and make the decision about rank advancement.

Districts limit the number of teachers who can advance to the next level, which makes advancement competitive. Currently, only about 6.6 percent of teachers have reached the senior teacher grade based on a national survey of teachers. Highly ranked teachers often serve in leadership positions in schools, such as leaders of *jiaoyanzu*. Higher-ranked teachers also assist senior teachers who have not advanced in rank. These opportunities enable highly ranked teachers to serve as coaches and lead teachers, while providing additional avenues for professional learning for lower-ranked teachers. In addition, advancement to administrative ranks in most cases depends on a demonstration of teaching excellence. In order to become a principal, administrator, or senior ministry official, teachers must first become an accomplished teacher.

To some, the structure of the career ladder in China may seem hierarchical. To a large extent, there is a clear status difference in *jiaoyanzu* meetings, with less experienced teachers serving tea, not speaking as much as more experienced teachers, and sitting on the periphery. The head of the *jiaoyanzu* takes a central seat at the conference table, is the first person to provide feedback on a lesson, and summarizes all the feedback at the end of the meeting. Yet the status differential does not put the more experienced teachers in a position of authority or leader. As Paine and Ma put it, "the experts are at the center of an eddy rather than at the top of a ladder."

Chinese teachers also advance in their careers through public recognition of awards and accomplishments. Teachers' awards are communicated to the school community through the celebration of teachers' accomplishments by the school principal. Photos and awards are posted on school hallways and on marquees that stand outside of school buildings. These awards add prestige to the whole school community.

Since 2009, teachers' salaries have been based in part on performance. Base pay, which amounts to 70 percent of a salary, is distributed to teachers primarily based on the number of classes they teach and the additional tasks and responsibilities that the teacher takes on. This might include being the *banzhuren* for a class, being the head of the *jiaoyanzu*, or conducting demonstration lessons for colleagues in the school or at other schools. The merit component can reflect principals' evaluations, students' exam scores, and the placement of students in prestigious schools. In some schools, student feedback is part of the evaluation process.

However, despite the introduction of merit pay, the system has not acted as a particularly strong motivator of teacher performance. Instead, teachers are motivated by their sense of responsibility to their students, colleagues, and teaching profession that comes with being a teacher and having high social status.

Teacher Preparation

While much of the growth and development of Chinese teachers takes place in the classroom, China has worked in recent years to strengthen the preservice preparation of teachers. In many ways, Shanghai has been ahead of the rest of the country in this regard. In contrast to the rest of China, where many teachers have a two-year associate's degree from a normal college, Shanghai's teachers have considerably higher education levels. Virtually all secondary teachers and most primary school teachers hold a bachelor's degree and about 6 percent of the secondary school teachers hold a master's degree.

Nationally, China has taken steps to attract better-qualified people into teaching, largely because there is a shortage of teachers, particularly in rural areas. For example, since 1997, teacher candidates have had early admission priority at participating universities. This program was based on the logic that the priority admission would attract higher academically performing students into the university teaching programs since they would be guaranteed a place at the university with less competition. In addition, more elementary teachers are now being prepared in normal colleges and universities rather than in senior secondary normal schools whose numbers have been decreasing.

Merit pay has
not acted as a
particularly strong
motivator of teacher
performance.
Instead, teachers
are motivated
by their sense of
responsibility to
their students,
colleagues, and
teaching profession
that comes with being
a teacher and having
high social status.

In order to fill positions where there were shortages, the 1993 education law provided for a form of alternative certification. Under that provision, those who did not have the recommended preparation could apply for a certificate by passing national certification examinations. Those who had the recommended preparation were exempted from the national qualification examination; they were awarded a teaching certificate when they completed their preparation. However, beginning in 2014, all teachers were required to pass the certification examination.

Most of Shanghai's teachers receive their preparation at two universities: East China Normal University and Shanghai Normal University. These institutions offer four-year programs that start candidates off immediately with studies in educational sociology, philosophy, and psychology, and include content pedagogical training, child development, and teaching methods. In addition to their broad study of all the subjects they will teach, elementary candidates specialize in a content area from among the social sciences, math and natural science, or performing and fine arts, as do secondary teachers. A growing emphasis on clinical training has expanded the amount of practicum and student teaching candidates receive in the third and fourth years of their program. At Shanghai Normal University, for example, students in their third year spend two weeks each semester observing classrooms and complete assignments to show what they have learned about teaching from the observations. In their fourth year, they spend two months practice teaching.

Once teacher candidates complete their preparation program, they must pass an examination in order to be certified as a teacher. The exam consists of three parts. First, the candidate must pass written examinations in pedagogy, psychology, and teaching methods. If the candidate is successful on these aspects of the examination, they then participate in an interview process with master teachers and local school district officials who themselves are typically former teachers. During this interview, the candidate demonstrates their teaching ability in specific subject matter instruction, shows their teaching process and handwriting skills on the blackboard, and may be asked about classroom management and classroom questioning techniques. Finally, all teachers must also pass the Mandarin language test (with both speaking and listening components). Some special considerations in the passing scores are afforded to candidates who live in areas where Mandarin, the official language of China, is mixed with local dialects or other languages.

Hiring and Induction

Districts are responsible for recruiting and hiring teachers. Cities like Shanghai, which are more desirable for teachers than rural areas and tend to pay teachers more, have greater numbers of applicants and districts can be selective in their hiring. They can also impose additional requirements; the Xuhui district in Shanghai, for example, requires teacher candidates to take a test, sit for interviews, and take psychological and physical examinations.

These requirements can be quite rigorous and help ensure that the most qualified applicants are hired. The district exams contain content knowledge questions, questions about other subject areas, and a few questions about pedagogy. These exams are constructed by content area specialists on the district research staff. These staff members are typically highly respected teachers from within the district who are now working at the district level. Each subject area has a director and this director writes questions for the exam, grades the exam, and participates in the interview process for the potential hire. The exams include both multiple-choice and open-ended questions.

After passing the district-level exam, the candidate participates in an interview with a panel of experts in the content area from the district office. The interview questions can range from specific content knowledge questions, questions about how to teach particular concepts to students, and pedagogical questions such as "what do you think is most important in preparing a lesson?" In many interviews, the candidate is asked to teach a short lesson to the interview panel on a topic that the panel has selected.

Once hired, teachers are given a one year probationary status. During that first year, veteran teachers mentor them and they receive additional training. In part, this induction process is intended to supplement the limited clinical experience teachers receive in their preparation programs. It also reflects the Chinese tradition of *lao dai qin*, or "the old bring along the young."

At the end of their first year, teachers are assessed, and if they demonstrate acceptable levels of knowledge and skills, they are rehired on a permanent basis. Once teachers achieve permanent status, they are very unlikely to lose their jobs.

Conclusion

The high performance of Shanghai students on the PISA exams in 2009 and 2012 has focused the world's attention on the city's education system. While a number of factors have contributed to the students' success, Shanghai's system of valuing, preparing, supporting, and recognizing teachers is a major contributor to the results Shanghai has achieved.

Yet while the results have been impressive, Shanghai, and China overall, are not resting. The country has pledged to refine its curriculum to place less emphasis on examinations and more on student-centered learning, including extended projects. This shift will require teachers to learn new ways of teaching and managing classrooms.

The strong support for teacher learning already in place in China, and particularly in Shanghai, can ease that transition for the nation's teachers. With ample time for collaboration and learning, Shanghai teachers are poised to take the next step in improving learning for Chinese students.



2121 K Street, NW Suite 700 Washington, DC 20037 202-379-1800

www.ncee.org

Follow us on Twitter: @CtrEdEcon

Find us on Facebook: facebook.com/theNCEE