

Education in China: Lessons for U.S. Educators

Asia Society
Business Roundtable
Council of Chief State School Officers

U.S. Education Leaders Delegation to China, September 2005

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EXECUTIVE SUMMARY

At the invitation of the Chinese Ministry of Education, Asia Society and the Council of Chief State School Officers led a delegation of K–12 education and business leaders to China in late September 2005. The group met with Chinese students, teachers, principals, researchers, and senior government officials, including the Minister of Education. Traveling in Beijing, Shaanxi province, and Shanghai, the delegation visited a number of schools, a kindergarten, universities, and a science park. In Shanghai, the American delegates participated in an all-day forum on “New Skills for a New Economy” with senior Chinese education leaders and met with representatives of American business in China.

The rise of China is one of the central facts of the early twenty-first century. China’s impressive economic performance over the past twenty years is well known. Less well-known are the great strides it has made in education—in a relatively short period of time—in eliminating illiteracy, providing nine years of basic education, and dramatically expanding the numbers of students in higher education. The most profound impression that the delegation came away with is that Chinese education leaders are focused, determined, and organized to improve education—to raise their people out of poverty and produce a highly skilled population to compete in the world economy.

Recognizing the limitations of a brief visit, the delegation nevertheless formed some clear impressions of the scale, pace, and direction of change. This report summarizes some of the lessons learned and makes recommendations for how the United States needs to significantly improve its education system to meet the accelerating challenges of globalization.

Observations

1) China has a bold long-term vision for education and the structures to meet it.

These goals include:

- A world-class education for the top 5–10 percent of high school students
- Universal 12-year education by 2020
- 100 first-class universities and 30 world-class research universities
- Science parks to develop products from university research
- A modernized curriculum aimed at developing student creativity and ability to apply knowledge; skills in technology use; and universal English language instruction

2) China already provides a world-class education to its top 5–10 percent of high school students.

Highly competitive key schools throughout China educate students who score at the top of the entrance examinations. The key schools, many of which are partially boarding schools, receive additional resources and are often associated with universities. Students study a rigorous academic curriculum, including independent research projects; participate in extensive after-school activities in art, music, sports, and entrepreneurship; and spend many hours beyond the school day studying.

3) China has an intensive focus on math and science education.

Like most East Asian countries, China emphasizes math and science education far more than the U.S. Among the contributors to Chinese success are: clear national standards and textbooks that focus on mastery of a few key concepts; strong subject matter preparation and professional development for teachers; specialized math and science teachers beginning in third grade; and a strong societal emphasis on math and science, including in the university entrance examination.

4) China’s schools are far more internationally oriented than American schools.

One hundred ten million students are learning English in primary and secondary schools. In addition, Chinese schools teach world history

and geography, actively pursue partnerships and sister school relationships with schools in other countries, and encourage university students to study abroad.

5) Chinese education leaders use international benchmarking to improve their system.

The syndrome of rejecting any ideas “not invented here” is not an issue in Chinese education. From early childhood education to school curricula to the creation of world-class universities, Chinese leaders study approaches that produce results in other countries and benchmark their own models against the best in the world.

6) China is modernizing its curriculum to incorporate twenty-first-century skills.

China is trying to move away from its traditional didactic teaching practices with their heavy emphasis on rote memorization to a curriculum that incorporates inquiry methods, classroom discussion, applications of knowledge, and use of technology.

7) China has a coherent teacher development system.

Teaching is an honored profession in China. Future teachers have strong subject matter preparation and are immersed in observations of experienced teachers. Once teachers are hired, there is a system of continuous professional development in schools by master teachers. A career ladder provides salary incentives based on demanding standards.

8) China has a strong cultural commitment to education.

The traditions of respect for teachers and education are deeply ingrained in Chinese culture. Students in China work more than twice as many hours as their American peers—to honor their families and to participate in the expanding opportunities that are open to those with good education. Effort, not ability, is presumed to determine success in school.

9) China is creating an early childhood foundation.

China’s commitment to learning begins early. The goal is to universalize preschool by 2015. Western child-centered and “creative” curricula are being combined with traditional Chinese teachings.

Challenges

Educational developments in China are, indeed, impressive. Still, as China seeks to turn its enormous population from a burden into an asset, it faces huge challenges. Among these are:

The Rural–Urban Education Gap

More than half of China’s population is engaged in agriculture, and more than 70 percent of its rural population lives on less than two dollars a day.¹ While the top tier of China’s school system is a productive, exam-oriented meritocracy, rural schools that serve 800 million people lag behind in teacher qualifications, facilities, student achievement, and access to upper secondary and higher education. This rural–urban income and education gap is the biggest challenge to China’s peaceful growth. The government is beginning to address the problem with additional resources for rural education, creation of a vast technology-based distance learning system, and incentives for teachers to work in rural areas.

The Examination Funnel

Like many countries where opportunities for higher education are limited, China’s school system is heavily focused on selecting the most talented students to go on to the next stage. In particular, the university entrance examination system diminishes the importance of subjects that are not tested. Critics also charge that the examination-driven system places undue emphasis on speed and memorization of obscure facts but does not produce the kind of students who are able to apply their knowledge in rapidly changing situations in a modern economy. A

major curriculum reform has been introduced to address these issues, but it is running into resistance.

Capacity Issues

As China seeks to rapidly expand and modernize its education system, there are capacity issues at every level. For example, there is a significant shortage of the English teachers needed to carry out the policy of teaching English beginning in third grade. Also, most Chinese teachers are unfamiliar with the less didactic and more inquiry-oriented approaches being introduced in the new curriculum. At the university level, China produces large numbers of engineers but their training often lacks modern equipment and practice in applications. A private sector is rapidly emerging at both the secondary and higher education levels but does not yet have effective quality control mechanisms.

To some extent, these challenges have parallels in the U.S., where inequitable resource allocation and education achievement gaps are a long-standing problem, where efforts to change curriculum are also met by resistance, and where the side effects of high-stakes testing in narrowing the curriculum are also apparent. These common challenges and the large differences between the two systems also present opportunities for cooperation. The U.S. has much to learn from Chinese educators about math and science education, for example. Then from the Chinese side, there is great interest in how American schools produce creative and independent thinkers and adapt to individual needs, features seen as great strengths of the American system.

Recommendations for U.S. Leaders

For much of the twentieth century, the U.S. led the world in high school and higher education participation. Now other countries, including China, are making significant investments and fundamental reforms to prepare their

students to be successful in the knowledge-intensive, high-tech, global economy. Learning from China's remarkable education growth and future plans, the delegation brought home some clear recommendations for U.S. education leaders:

- Make learning about China and other world regions a top priority. Business, political, and education leaders urgently need to stimulate a national discussion of the skill set American students will need to compete and cooperate in the interconnected world of the twenty-first century.
- Target the U.S. math–science achievement gap and get more of our students to succeed in a truly world-class curriculum in these vital subjects.
- Redesign high schools for the global age to include international knowledge and skills and connections to schools in other countries.
- Expand the study of Chinese, a language we as a nation can no longer afford to ignore, such that 5 percent of high school students are studying the language by 2015.
- Benchmark our education policies against other high-achieving countries and incorporate international knowledge into the development of our future education leaders.

In sum, in an interconnected world, we need a globally oriented world-standard education to prepare our young people for leadership.

At the end of our visit, Richard Mills, Commissioner of Education of the State of New York, concluded, “China is a society we need to understand so that our children will be prepared. We must engage China, welcoming peaceful growth, while picking up the pace of our own educational progress.”

INTRODUCTION

In late September 2005, Asia Society and the Council of Chief State School Officers led a high-level delegation of U.S. K–12 education leaders to China at the invitation of the Ministry of Education. The delegation included state commissioners of education, representatives of the business community, and leaders from several national education and philanthropic organizations. Recognizing the growing significance of China in the world and the critical nature of the U.S.–China relationship, the delegation sought to learn about educational developments in China and to explore what these developments mean for the United States. It also sought to create relationships that have the potential to benefit the U.S. and China in an age when the global economy and ties to other nations are more critical than ever before.

Over the course of seven days the delegation spoke to a large number of students, teachers, and principals at Chinese schools, and met with senior officials of the Ministry of Education to discuss educational challenges and opportunities for collaboration. Starting in Beijing, the U.S. leaders met with Minister of Education Zhou Ji. They also visited Beijing Normal University and a high school and kindergarten affiliated with the university. The delegates then traveled to Shaanxi province, where outside Xi'an they visited a university-based science park and a more rural middle school.

The last leg was spent in Shanghai, where the president of East China Normal University and Vice Minister Wu Qidi hosted the delegates in an all-day forum on “New Skills for a New Economy” with Chinese education leaders and researchers. Topics of discussion included innovations and challenges in math and science education, use of technology and distance learning in schools, curriculum reform, leadership training, and language instruction. The delegation visited the No. 2 Secondary School affiliated with the University, and Shanghai

High School. The delegation also read some of the available literature on education in China. Finally, delegates met with representatives of American businesses in China before returning to the United States.

Permeating all these discussions was an optimism about China's future and an overriding belief in the value of education to modernizing China's economy. There was also openness to ideas from outside China, an admiration for America's achievements in many spheres, and an interest in building peaceful relationships through education. At the same time, China faces daunting challenges as it seeks to educate 1.3 billion people and raise them out of poverty.

Recognizing the limitations of a weeklong visit, even a visit as intensive as this, the delegation formed some clear impressions of the scale, pace, and direction of educational change in China. This report summarizes some lessons learned and their implications for the United States. It also discusses some of the major challenges facing China and makes recommendations for U.S. educators.

THE RISE OF CHINA

China is indisputably on the rise. In 1949, China was a very poor country—agrarian, poverty stricken, illiterate, and closed off from ideas from the outside world. Since the implementation of its Open Door policy and shift toward a market economy began in the mid-1970s, China's economic growth has been astonishing. Between 1990 and 2004 China's economy grew at an average rate of 10 percent per year, three times the world average, and in recent years (2001-2004) China has accounted for one-third of global economic growth. Some 170 million people have been lifted out of poverty.¹ There now exists a middle class of more than 100 million people, for whom access to phones, televisions, computers, microwaves and, increasingly, cars, satellite television, and the Internet is the norm. The literacy rate is over 93 percent.² The

stunning Shanghai skyline, nonstop construction, and traffic jams in major cities all attest to this vigorous growth.

This opening to outside ideas, occasioned by the growing private economic sector and facilitated in part by sending large numbers of Chinese students to Western universities, has freed up many areas of Chinese life. A new generation of party leaders and public officials is combining Western education with Chinese approaches to governance. There is a proliferation of media and more open debate, especially among the young. American popular perception of China has not kept pace with the country's rapid change.

At the same time, this impressive social and economic transformation has brought with it enormous problems—growing inequalities between the coastal cities and the rural interior, environmental degradation, and corruption among local officials. There are general elections for many local offices, but how swiftly China will move toward a more participatory and representative political system at higher levels is unclear.

The emergence of the People's Republic of China as a regional and global economic power has evoked mixed responses from traditional industrialized countries. On the one hand, export industries, including agriculture, and the governors of many American states have been quick to take advantage of opportunities opening up in Asia. (For example, the United States runs an agricultural surplus with China, providing China with 23 percent of its agricultural imports).³ With 1.3 billion people and a rapidly expanding middle class, China will one day be the world's biggest market. Most major American companies have a presence there and many states are opening offices or sending trade delegations. In fact, much of the growth in China's economy is because U.S. global companies are consciously outsourcing production as a competitive strategy, making China the largest recipient of foreign direct investment in 2002 (\$52.7 billion dollars).

China's trade with the United States exceeded \$245 billion in 2004, composed of everything from high-tech products and steel to furniture and apparel.⁴ And that same year, the United States outranked Japan as China's top trade partner. Chinese production keeps the prices of goods in the United States down and is therefore good for consumers. But competition from China is also eroding manufacturing jobs and investments in some parts of the United States, and there are serious concerns about intellectual property protection, environmental and labor standards, currency policies, and large trade deficits.

The United States has played a significant role in China's recent economic and social development. Not only does the American market serve as a model of entrepreneurship and of the power of the consumer to China, but U.S. decisions to open its market to Chinese exports and to allow China to join the W.T.O. have also dramatically affected China's potential for growth. American leaders also work closely with China, particularly since 9/11, on a range of issues from terrorism to North Korea's nuclear weapons to environmental and public health threats.⁵

Experts disagree on where the Chinese economy will be in ten to twenty years' time. One thing is certain: China is and will be an even more influential economic and political power in the twenty-first century. While it has a long way to go to reach Western standards of economic and political freedom, this Asian powerhouse's opening up to the world represents an historic opportunity for more peaceful relations between the two major powers of the twenty-first century.

CHINA'S EDUCATION DEVELOPMENT

China is a developing country with one-fifth of the world's population. There are 375 million people below the age of 18. Consequently, China is running the world's largest education system.

It serves 26 percent of the world's students, with only 2 percent of the world's educational resources. Despite China's long historical tradition in education, in the 1940s, 80 percent of the population was illiterate. By the 1980s, the population over the age of 15 had received only 7.8 years of education, roughly similar to the United States one hundred years ago.⁶ However, China's spectacular economic growth has been matched by equally impressive development of "education for all" over the span of just two decades.

Since the early 1980s when schools reopened after the decade-long Cultural Revolution, China's education has grown by leaps and bounds. In 1986, the Chinese government passed a compulsory education law, making nine years of education mandatory for all Chinese children. By 2004, the national average gross enrollment rate in primary schools reached 98.95 percent, and that of junior high schools 94.1 percent—a formidable milestone. More than 240 million students are enrolled in schools, including 112 million elementary school students and 87.5 million high school students, all taught by approximately 12 million teachers.⁷

Today, the Ministry of Education estimates that more than 93 percent of the population area of the country has achieved universal nine-year basic education and a literacy rate above 96 percent in young and middle-aged populations. And 20 million students (about 40 percent of the cohort) are in senior high school beyond the compulsory schooling age.

This large expansion was achieved through strong centralized leadership in setting strategies and decentralization of implementation. Basic education is funded by local communities through a mix of local government revenues, donations for buildings, and school income through parent textbook fees and school activities.

The higher education sector has burgeoned as well. China has increased the proportion of its college-age population in higher education to roughly 20 percent now from 1.4 percent

in 1978. Twenty million students attend 1,731 institutions of post-secondary education, making it one of the largest systems in the world. There is also a major emphasis on study abroad, especially at the graduate level. In 2004, 115,000 Chinese students studied abroad.

Private school education has also become significant. In 2004, China had 78,500 private institutions, enrolling 17 million students, up 25 percent from the 2003 figure. This figure is composed of approximately 2.4 million college and university students, 6.1 secondary school students, and more than 9 million elementary and kindergarten students.

Technology has become a major tool in China's plan to expand access to education and improve its quality. The China Education and Research Network (CERNET), started in 1994, and the China Education Broadband Satellite Net, started in 2000, have become the second largest Internet network in China, with a high-speed transmission network of 20,000 km, and 28 international and regional channels covering all major cities around the country. A pilot distance education program that started with 68 higher education institutions and the Central Radio and TV University now has 2,027 off-campus learning centers around China, offering 140 majors in ten major disciplines, with a total enrollment of 1.373 million.⁸

Overall, with limited arable land, water, and energy resources, China's leaders recognized that they needed to turn its huge population from a burden into an asset. Chinese education officials, educators, and students alike recognize that China's successful modernization is inextricably tied to its success in the classroom.

LESSONS FROM CHINA

The challenges of bringing universal education to a nation of 1.3 billion people are mind-boggling. Our delegation saw only a small slice of education in China. While we gained a good understanding of schools in urban areas,

we did not focus significant attention on other areas—technical education, rural education, or university education except as it impacted schools. The delegation found much that is very impressive but also recognized the many challenges that stand in China’s way. Most importantly, this delegation learned a number of powerful lessons for the United States. These included:

1) China has a bold long-term vision for education and the structures to implement it.

China’s impressive economic performance is well known. Less well known are the great strides it has made in education, in a relatively short period of time, in eliminating illiteracy, providing nine years of basic education, and dramatically expanding the number of students in higher education. And it has a bold vision for the future—to use education to go beyond being a low-wage manufacturer to becoming a world-class leader in a wide range of fields. As outlined by the Minister of Education, this vision includes:

- Providing a world-class education to the top 5–10 percent of high school students
- Making 12 years of education universal by 2020
- Developing 100 first-class universities and 30 world-class research universities
- Creating science parks to develop products from university research
- Modernizing the curriculum to promote creativity and knowledge application

From the Ministry of Education to provincial directors of education, principals, teachers, and students, there is a widely shared belief in the connection between education and economic growth and in the centrality of high standards. This seriousness of purpose and clarity of focus is accompanied by aligned systems to carry out these goals. Despite considerable decentralization, China is a highly organized society. Any change in policy is immediately dis-

seminated through many means, including the national television network for teachers; model lesson plans and materials; and through the weekly professional development meetings that take place among teachers at every school.

2) China already provides a world-class education to its top 5–10 percent of high school students.

Currently only 40 percent of Chinese students go to upper secondary schools, i.e., school beyond the nine years of compulsory education. Entrance is by examination and at the top of this system are the “key” high schools, which are highly competitive. Considerable investment has been made in these schools, and they are better resourced than other schools through a combination of national and provincial resources and parent fees. (Scholarships are available for some students whose parents cannot afford the fees.) Although systematic national data on how Chinese standards compare with those in other countries do not yet exist, researchers and visitors are struck by the high standards in math, physics, and chemistry prevalent in these schools, and American university faculty who have taught Chinese students consistently remark on their stronger mastery of fundamental concepts in math and science. Visitors to key schools are escorted by students whose level of spoken English ranges from adequate to outstanding, who know U.S. history, and who exhibit curiosity and some knowledge of U.S. current events.

Many of these schools are associated with universities, which enables strong connections to be built between teacher training and classroom practice. Many, if not most, of the students at high schools are boarders, at least during the week. The key high schools we visited in Beijing and Shanghai had well-equipped science labs and television studios. The curriculum included a requirement that every student develop independent science research projects. A wide range of after-school activities including sports, music, art, and entrepreneurship clubs

rounded out the curriculum. In traditional Chinese fashion, teachers and students work in groups to raise everyone's achievement level, but the students also compete fiercely to do well on the university entrance exam and go to the best universities. Some of these schools have sections for international students where the standards are publicly acknowledged to be lower than in the Chinese mainstream of the school. Key schools have a clear academic purpose and everything is directed toward that end.

3) China has an intensive focus on math and science education.

Like most East Asian countries, China has a much stronger focus on math and science education than the U.S. has. The standards and student achievement in these subjects are impressive. A number of factors contribute to this result:

- Clear national standards in math and science that focus on key concepts are the starting point with which all other aspects of the system are aligned.
- Textbooks focus on mastery of a small number of key concepts by contrast with U.S. textbooks, which cover a larger number of concepts superficially.
- Chinese math and science teachers have strong subject matter preparation and continuous professional development in their schools by master teachers.
- Specialized math and science teachers teach these subjects from third grade onward, at least in urban schools. By contrast, American elementary students are taught by generalist elementary school teachers whose math and science preparation is typically weak.
- By the time children enter school, substantial differences exist in the mathematical competence of North American and East Asian children.⁹
- There exists a strong societal focus on math and science as keys to a modern

economy and as central to success in the university entrance examination.¹⁰

As a result of these factors, Chinese students have a strong desire to take and excel in math and science classes. This attitude is reinforced by their parents' encouragement and expectations. Consequently, girls as well as boys do well in math and science, and China produces enormous numbers of students who want to go into engineering.¹¹

Chinese educators greatly admire U.S. research and innovation in math and science, but American educators are concerned that this current scientific supremacy may be threatened as too few of our best students go into math and science and many more exhibit a very low standard of scientific knowledge. Thirty-five percent of students do not score at even the "basic" level on the twelfth-grade NAEP test of mathematics. And U.S. students are twenty-fourth among students in industrialized countries in math and science on the TIMSS.¹²

4) China's schools are far more internationally oriented than American schools.

Perhaps surprisingly, given China's history of isolation from the world since 1949 and especially during the Cultural Revolution, Chinese schools are far more internationally oriented than American schools. This is most obvious in the strong focus on English language instruction. In 2001, Chinese leaders decided to gradually require English as a second language, beginning in third grade, deeming foreign language mastery a key twenty-first-century skill. Of China's elementary school population of 130 million, 30 million elementary school students are currently learning English, with some learning informally as early as kindergarten. Eighty million junior and senior high school students are learning English. These numbers compare with fewer than 50,000 American K–12 students who are learning Chinese.¹³ English is a compulsory subject on the university entrance examination and visitors to China are struck by the rapidly

increasing fluency in English among secondary school students.

In addition to English, China's schools introduce international knowledge and skills through teaching world history and geography, and through the spread of English language television stations and scientific periodicals in English. Some schools in eastern China have international students, and Chinese schools are actively seeking to form partnerships and sister school relationships with schools in other countries to give their students a more international perspective.

5) Chinese education leaders use international benchmarking to improve their system.

Chinese education leaders too have a distinctly international orientation. The current generation of leaders was the first to be educated in the west after the Cultural Revolution. (The Minister of Education, Zhou Ji, for example, completed his doctorate at the State University of New York.) Since Deng Xiaoping opened China to the world, Chinese educators have consciously conducted international benchmarking studies to assist their decision-making. We learned, for example, that before creating science parks, university and science administrators studied different models in Europe, the United States, and other Asian countries and then adapted the models to China. Early childhood educators are studying Montessori and High Scope curricula and combining them with traditional Chinese early learning practices. Education officials in provinces across China are studying things as varied as the British Inspectorate model of school quality control and improvement, international higher education accreditation systems, and the application

of Howard Gardner's theories of multiple intelligences to the classroom.¹⁴

It is a profound advantage for China that both students and leaders are developing a global view. Thousands of Chinese university students go abroad each year to study, especially in the United States, UK, and Australia. But while more than 60,000 Chinese students are studying in the United States, each year fewer than 3,000 American students study in China.¹⁵

“The world demands global vision, global communication skills, and skills to live together.”

—Xiaoya Chen
Vice Minister, Basic Education, Ministry of Education, People's Republic of China

In addition, the Ministry of Education and each province's Department of Education has a budget

and staff for international exchange to ensure that teachers, principals, and senior leaders have the opportunity to advance their professional knowledge by studying aspects of education in other countries. No systematic funding or international benchmarking strategy exists for K–12 education in the United States. Our U.S.–China Forum on “New Skills for the New Economy” in Shanghai, in which Chinese officials, practitioners, and researchers participated at an international level in a conference conducted solely in English, provided ample evidence that China is grooming leaders who can function on the world stage.

6) China is modernizing its curriculum to incorporate twenty-first-century skills.

At the same time that China is greatly expanding access to education, it is seeking to improve the quality of education through a major effort at curriculum reform. Recognizing that the Chinese system has produced mastery of basic concepts in math and science but that a twenty-first-century economy and society may require a broader set of skills, including the habit of thinking independently and the ability to apply knowledge to new situations, China

introduced a major curriculum reform in 2001. Initially introduced in a few provinces, it is now extending it to all. In introducing these reforms, China studied the education systems of more developed countries, including the United States. The curriculum reform includes an effort to go beyond the subjects emphasized on university entrance examinations to incorporate more humanities and liberal arts, an emphasis on citizenship education, the introduction of less didactic teaching practices, and an effort to integrate information technologies into instruction. Encouraging debate in the classroom, introducing more inquiry-oriented methods, and focusing more attention on application of concepts to new problems are all features of the new curriculum. Developing more effective vocational pathways so that education is more relevant and less dominated by the subjects on the university entrance examination is also a major goal. Problem solving and creativity are the watchwords of this reform.

As with curriculum reform in the United States, the process of changing long-established subject matter and teaching practices is challenging. The power of the university entrance examination, which is controlled by the universities, makes it extremely difficult to effectively introduce a broader curriculum. Traditional teacher-directed instructional practices are hard to change, and the large class sizes, characteristic of China, make introducing debate and discussion more difficult. Finally, there is disagreement about the direction of change. Some math faculty, principals, and parents, fearful that the changes will weaken standards in math, are protesting the reform.¹⁶

“The reformers were looking for a way to address students’ lack of creativity, an overemphasis on testing, a focus on memorization over application, and a disconnection between school learning and real-life situations.”

—Yong Zhao
Professor, Michigan State University

7) China has a coherent teacher development system.

Teaching has historically been and remains today a highly respected profession in China. Teachers have strong preparation in their subject matter and prospective teachers spend a great deal of time observing the classrooms of experienced teachers, often in schools attached to their universities.¹⁷ Once teachers are employed in a school, there is a system of induction and continuous professional development in which groups of teachers work together with master teachers on lesson plans and improvement. There is also a clear career ladder in teaching, with demanding standards and salary incentives for each step.

There are indeed trade-offs to these practices. Although teachers work long days, much of the time is not spent in the classroom. Teachers work on lesson preparations, daily assessment of individual students’ progress and performance, assistance to those who need individualized or additional instruction, and professional development such as classroom observations. Consequently class sizes are large, ranging from 40 in primary grades to 60–70 in senior high schools. And, like the United States, it is hard to get highly qualified teachers into rural classrooms. To meet this need, the Chinese are proposing salary and career incentives for teachers who spend some time in rural schools. They are also investing in a large-scale system of distance education, with Internet, cable, and satellite technology that will enable master teachers to “teach” in rural schools.

8) China has a strong cultural commitment to education.

China has a continuous cultural history of 5,000 years. As early as the Zhao dynasty (1046–221 BC), schools existed in China for people preparing to be government officials. The Confucian tradition of respect for teachers and valuing education is deeply ingrained in Chinese culture. Chinese students have an incredible work ethic and motivation to succeed. Effort, not ability, is presumed to determine success in school. Students in China study hard to honor their families and to participate in the vast new opportunities opening up to those with education.

The school year is 190 teaching days for primary school and 200 teaching days for secondary school compared with 180 days in most of the United States. But even this understates the differences in the number of hours Chinese students study compared to their U.S. peers. At the end of the regular school day and organized after-school activities, students have several hours of homework and extra reading. Many schools are residential, at least during the week. This not only shortens commuting time but also reduces the distraction of jobs and television and creates a community of learners among students and teachers. Extensive tutoring for examinations also takes up many hours of students' time. Clearly, the high achievement of Chinese students in math and science is not just due to a coherent curriculum and highly qualified teachers, but to a deep cultural commitment to education and a willingness to study hard.

9) China is creating an early childhood foundation.

China is expanding its investment in early childhood education, both in nurseries for children under age three (under the auspices of the Ministry of Health) and preschool/kindergartens for children from age three to six (under the auspices of the Ministry of Education). Currently about 40 percent of students are enrolled in preschools. The national

goal is to universalize three-year (ages three to six) preschool education in urban areas by 2015 and to increase enrollment in one-year preschool education in rural areas to 80 percent by 2015. Since early childhood education is not included in compulsory education, non-governmental organizations are the main providers of nurseries and preschools and, just as in the U.S., parents pay a substantial portion of the costs.¹⁸

Our trip to the Experimental Kindergarten associated with Beijing Normal University featured a warm, stimulating approach much like high-quality early childhood centers in the United States. The facilities featured abundant outdoor play yards, brightly colored, systematically organized classrooms decorated with student art and written work, and much evidence of a creative, interactive curriculum in which individual expression was encouraged. The school principal and lead teachers spoke of Western curriculum influences such as High Scope and Montessori, and staff members embraced a child-centered approach. Class sizes, while large by Western standards (averaging about 20), were far smaller than in primary schools, and many student teachers from the university supplemented the permanent teaching staff, allowing far smaller groupings to do projects and engage in early literacy development. The school also featured a good deal of what is referred to as “moral education,” with dances and songs reinforcing the importance of good manners, strong effort, patriotism, and cooperation as key values to strengthen character and promote harmony. English language exposure also begins in preschool.

CHALLENGES FOR CHINA

The educational developments in China over the past twenty years are, indeed, impressive. Still, as China seeks to raise the quality of its human capital, it faces enormous tensions and challenges. Among these are:

The Rural–Urban Education Gap

While the top of China’s school system is a productive, exam-oriented meritocracy, the social and economic gap between urban and rural areas is huge. There are, indeed, two Chinas: one urban, one rural. Of the 1.3 billion Chinese, 800 million live in the countryside where agriculture is the main livelihood. Rural schools lag behind urban schools in terms of teacher qualifications, facilities, and quality. The imbalanced development between the eastern coastline and cities and the rest of the country is creating new types of problems. Large numbers of children have migrated to cities with their parents or are left in the countryside while their parents work in cities. In both cases, access to even basic education is a significant problem.

Between 2004 and 2007, the Chinese government aims to complete nine years of basic education for all by creating boarding schools in remote areas, providing free textbooks and other subsidies to prevent children from dropping out of school, and creating an ambitious distance learning system to leapfrog rural schools into the twenty-first century. It is also creating a rotation system whereby city teachers work for a period in rural schools in exchange for salary and career benefits. Perhaps the Chinese government’s gravest challenges are to live up to its proclamations that “the right to education is the most basic right and the core of social justice,” to meet the rising expectations of its population, and to right the imbalanced development of the past.

The Examination Funnel

The Chinese system, like many systems where opportunities for higher education are limited, is heavily focused on selecting the most talented students to go on to the next stage. The examination system also has deep roots in Chinese history beginning with the Imperial civil service examinations. While these examinations, especially the national university entrance examination, are a significant factor in causing students to work hard and achieve at high levels,

they are also a source of tremendous, unrelenting stress on students and teachers.

Moreover, critics charge that the examinations place undue emphasis on speed and memorization of obscure facts, things that are useful for selection purposes but that may not produce the kind of adaptable independent graduates who are able to apply their knowledge to new situations in a modern, fast-changing economy and society. A reform of the examination system has reduced the number of subjects but because the examinations focus on only certain subjects and certain aspects of those subjects, it has a narrowing effect on the curriculum. Also the university entrance examination, controlled by the universities, is not in line with the curriculum reforms being introduced into the schools.

The examination funnel is exacerbated by the lack of second-chance opportunities that are an important part of the U.S. opportunity structure. Chinese educators greatly admire the U.S. community college system, for example.

Capacity Issues

There are capacity issues at every level of Chinese education as it seeks to rapidly expand and modernize. For example, China has embraced an ambitious English language policy. However, it faces a great shortage of English teachers as only about one-third of the 800,000 English teachers currently in Chinese classrooms have fully met the qualification requirements set out by the Ministry of Education. Then too, Chinese teachers, trained in the traditional didactic and examination-oriented methods, do not adapt easily to the more modern curriculum that is being introduced.

The rapid expansion of university education is inevitably accompanied by uneven quality. For example, one-third of Chinese university students study engineering but, according to a McKinsey survey, because their labs are poorly equipped and they lack practical experience in projects and teamwork, relatively few are considered well enough trained to work in multinational companies.¹⁹ There is also, as yet,

little international-level management training. Since the public sector cannot support the scale of expansion needed, a market in private education, both at the school and university level, is developing, but lacks effective quality control mechanisms at this point.

Technology is being looked to as a major solution to these capacity issues. To serve rural parts of Western China, 10,000 distance education centers are being created in schools, with computers, satellite dishes, televisions, and DVD players through which master teachers will relay lessons to schools in poor rural areas.

To some extent, these challenges have parallels in the U.S., where inequitable resource allocation and achievement gaps are a long-standing and continuing problem, where efforts to modernize curricula are also met by resistance, and where the side effects of high-stakes testing in narrowing the curriculum are also apparent. These common challenges and the large differences between the two systems also present opportunities for cooperation. The United States has much to learn from Chinese educators about math and science education, for example. Then from the Chinese side, there is great interest in how American schools produce creative and independent thinkers and adapt to individual needs, features that are considered great strengths of the American system.

RECOMMENDATIONS FOR U.S. EDUCATION LEADERS

Globalization is the central feature of our time. Major forces are driving change at an accelerated pace, creating new challenges to education systems worldwide. Increasing proportions of jobs are tied to international trade. New discoveries in science and the rapid spread of new technologies are “flattening the world” and organizing work in virtual—not just physical—communities.²⁰ Demographic movements are increasing student diversity in

schools on many parts of the globe. Changing opportunities and changing threats are driving international cooperation across a wider range of occupations than ever before. The implications of all these rapid changes are not completely clear. What is clear is that we can no more afford to isolate ourselves educationally than we can economically or in terms of national security.

Countries such as China, India, South Africa, Chile, and Brazil, to name a few, are making dramatic and fundamental reforms in response to changed political conditions, demographic shifts, and in order to prepare their students to be successful in the knowledge-intensive, high-tech, and globalized economy. We must do the same. Learning from China’s remarkable educational growth, the delegation brought home some clear recommendations for U.S. education leaders:

Make Learning about China and Other World Regions a Top Priority

The visit galvanized the U.S. delegation to the urgency of raising awareness of the need to learn more about developments in China and other world regions and make them issues of national debate and action. How can the U.S. remain a global leader in a “flat world”? Action is needed at every level:

- Business leaders who are functioning every day in a global environment need to take the lead and work in partnership with legislators, educators, and parents to define what new skills and standards students will need in the twenty-first century to compete as workers in a knowledge-intensive, globalized economy.
- National political leaders should expand cultural and educational diplomacy efforts to engage critical emerging world regions in exchanges across a range of fields (including elementary and secondary education), and to increase significantly the number of college students who study abroad.²¹

- Education leaders should immediately create initiatives to help students understand and prepare for this new world. A clear priority must be to teach students about world history, geography, and international economic trends; to ramp up exchanges of students and educators; and to expand world language competence.

Target the U.S. Math–Science Achievement Gap

The low and stagnant achievement of U.S. students on key international measures of math and science learning has caused great concern in U.S. policy and business circles. The success that China has experienced in educating a talented group of students who perform well on a rigorous world-class science and math curriculum suggests (1) a need for the U.S. to take notice of their progress; and (2) several possible areas for collaboration between our two countries.

First, China’s achievements and progress in math and science compared to the United States suggests a need for the U.S. to learn more systematically from China and other high-achieving countries and take immediate action to increase the number of American students succeeding in a truly world-class math and science curriculum. The state commissioners of education who were part of this delegation would be well informed and in a good position to help lead such improvements.

Second, since China and the U.S. are grappling with similar issues, productive collaborations might include:

- Joint comparative research on curriculum, standards, textbooks, assessment, and teaching practices to generate and improve “best practices”
- Collaborative experiments in improving math–science learning through technology to help close achievement gaps in the U.S. and China
- Partnerships between schools in the U.S. and China with joint student science projects

Several conditions should be placed on any collaborative activity in this and other areas. The initiatives should be: mutually beneficial; achievable within a defined time period; governed by agreed-to outcomes; and financed fairly and adequately.²²

Redesign High Schools for a Global Age

There is widespread dissatisfaction with the relevance and effectiveness of American high schools, as currently designed, for many students. As governors, business leaders, and chief state school officers lead efforts to change the structure and requirements of secondary school education, they need to promote global competence as part of these initiatives. The best Chinese high schools we observed provided a global perspective through world history, geography, and technology, and offered dual-language instruction, a serious emphasis on rigor (particularly in math and science), and performance-oriented research projects that demonstrated skill mastery. Possible ways to ramp up international knowledge and skills in American high schools include:

- Creation of stronger world history, geography, literature, and international economics courses in the core curriculum
- Requiring proficiency in a world language
- Introduction of international content in graduation exit exams and senior projects
- Expecting every American high school to create a collaboration with students and teachers in another country through media and communications technology

Expand Chinese Language Study

Recent studies by Asia Society and the College Board indicate that there is keen, sharply expanding interest in Chinese language study in the United States among students and schools but not nearly enough capacity or investment in effective programs to fill the growing demand.²³ Fewer than 50,000 students are learning Chinese in U.S. schools, while more than 110

million Chinese are currently learning English in primary and secondary schools in China. National security needs have also contributed to renewed interest among intelligence, military, and diplomatic leaders in building capacity in a wider range of critical world languages, including Chinese.

Chinese is a language we, as a nation, can no longer afford to ignore. To expand our national capacity in Chinese, such that 5 percent of high school students are studying Chinese by 2015, we need to:

- Expand cooperative arrangements with the Chinese Ministry of Education for exchange of teachers and materials to promote learning of Chinese in the U.S. and English in China
- Increase the number of schools offering instruction in Chinese (Mandarin), starting at the elementary school level
- Create a pool of qualified teachers of Chinese, currently the biggest barrier to expansion of programs
- Use software and distance learning mechanisms (e.g., CHENGO program, virtual high schools) to increase access to Chinese language instruction²⁴

Make International Benchmarking a Key Leadership Dimension

Business and philanthropic leaders in the delegation noted a “sea change” in the definition of what is now needed to manage industries that rely on knowledge in an interconnected world. Just as no business leader can rise to the top today without significant exposure to international business, so our teachers and education leaders need to

have some understanding of changes in global markets and job requirements, and be able to compare our educational practices against the best international benchmarks.²⁵ Ways to do this include:

- Education leadership training programs should introduce a global leadership dimension.
- Outstanding principals should have opportunities for short-term shadowing of counterparts in countries with notable education practices.
- International institutional partnerships could build capacity. U.S. teacher preparation, early childhood development, and leadership programs could develop partnerships with Chinese counterparts.
- Business and philanthropy should sponsor visits to China by groups of key actors in a state or city to create partnerships and address the recommendations in this report.

CONCLUSION

The key to U.S. continued economic strength does not lie solely with education. But education has a critical role to play in positioning the United States in a knowledge- and technology-intensive economy that requires working with people from around the world. In the latter half of the twentieth century, the U.S. had

the advantage of high rates of participation in secondary and higher education, but now other countries are investing heavily in education, too. This report has outlined China’s vision for its education future. We need to develop our own bold vision about the knowledge, skills, perspec-

“China is a society we need to understand so that our children will be prepared. We must engage China, welcoming peaceful growth, while picking up the pace of our own educational progress.”

—Rick Mills
*Commissioner,
New York Education Department*

tives, and experiences that our students will need to succeed as workers and citizens in the world economy of the twenty-first century.

In order to do this, we need to examine more closely the connections between different aspects of educational attainment and economic growth. We also need to benchmark our education system against other major countries, going beyond simple box scores on international tests to understanding more deeply how other countries promote high achievement. In the case of China and the United States, the two systems have very different histories and traditions so that practices cannot simply be copied from one to the other. But we have much to learn from China about improving our math and science education and cultural commitment to learning while they admire our teaching approaches and cultural context that produce more independent and innovative thinkers.

We must also greatly expand our students' knowledge of Asia and of Asian languages, which are currently extremely limited—both in the formal curriculum and through exchanges, real and virtual.

As former Secretary of State Colin Powell said, “The young people of Asia and the U.S. need to know and understand one another because they will be building and sharing the same future.” It is to this end that this report is dedicated.

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NOTES

1. World Bank, World Development Indicators. (2001) ONLINE. (21 Nov. 2005) <http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>.
2. U.S. Department of State, Bureau of East Asian and Pacific Affairs, "Background Note: China (March 2005)," <http://www.state.gov/r/pa/ei/bgn/18902.htm>.
3. "Education in China" (Ministry of Education booklet, The People's Republic of China, 2005).
Qidi Wu, "Remarks at the China–U.S. Basic Education Leaders Forum," Shanghai, September 29, 2005.
4. The U.S.–China Business Council, 2005, "China's Trade Performance 2004," http://www.uschina.org/statistics/2005tradeperformance_2.html.
5. The U.S.–China Business Council, 2005, "U.S.–China Trade Statistics and China's World Trade Statistics 2004," <http://www.uschina.org/statistics/tradetable.html>.
6. Kishore Mahbubani, "Understanding China," *Foreign Affairs* (September/October 2005): vol. 84 n. 5, p. 49-60.
Bijian Zheng, "China's 'Peaceful Rise' to Great-Power Status" *Foreign Affairs* (September/October 2005): vol. 84 n. 5, p. 18-24.
7. Jin Yang, "High School Education in China: Challenges and Priorities" (PowerPoint Presentation at the ECS National Policy Forum, Denver, Colorado, July 2005).
8. "Education in China" (Ministry of Education booklet, The People's Republic of China, 2005).
9. Xuemei Zhang, "Internet-Based Collaborative Learning Project" (PowerPoint Presentation at the U.S.–China Basic Education Leaders Forum, Shanghai, September 29, 2005).
10. Kevin F. Miller, Melissa Kelly, and Xiaobin Zhou, "Learning Mathematics in China and the United States Cross-Cultural Insights into the Nature and Course of Preschool Mathematical Development," in *Handbook of Mathematical Cognition* (London: Psychology Press, 2004).
11. Sarah Jensen, et al, "Elementary Teacher Specialization in Mathematics: Exploring the Transferability of China's Approach to the United States" (U.S. Department of Education Policy Support Brief, September 2005).
12. Vivien Stewart, "U.S.–China Education Leaders Forum on Math and Science Education Meeting Report" (New York: Asia Society, 2005).
Sarah Jensen, et al, "Elementary Teacher Specialization in Mathematics: Exploring the Transferability of China's Approach to the United States" (U.S. Department of Education Policy Support Brief, September 2005).
13. Susan Sclafani, "Issues in Math-Science Education in USA" (PowerPoint Presentation at the U.S.–China Education Leaders Forum on Math and Science Education Meeting, Denver, Colorado, July 2005).
14. Yafu Gong, "English Language Education in Chinese Schools" (PowerPoint Presentation at the U.S.–China Basic Education Leaders Forum, Shanghai, September 29, 2005).
15. Howard Gardner, *Frames of Mind: The Theory of Multiple Intelligences* (New York: Basic Books, 1983).

16. “Open Doors Report,” Institute of International Education, 2005. <http://opendoors.iienetwork.org/>
17. Yong Zhao, “Increasing Math and Science Achievement: Sharing Best and Worst Practices from East and West,” *Phi Delta Kappan Magazine* (Bloomington: Phi Delta Kappa International, 2005).
18. Liping Ma, *Knowing and Teaching Elementary Mathematics: Teachers’ Understanding of Fundamental Mathematics in China and the United States: Studies in Mathematical Thinking and Learning* (Mahwah: Lawrence Erlbaum Associates, 1999).
19. Michael H. Levine, “Take a Giant Step: Investing in Preschool Education in Emerging Nations,” *Phi Delta Kappan Magazine* (Bloomington: Phi Delta Kappa International, 2005).
20. Diana Farrell and Andrew J. Grant, “China’s Looming Talent Shortage,” *The McKinsey Quarterly: The Online Journal of McKinsey & Co.*, 2005, Number 4.
21. Thomas L. Friedman, *The World Is Flat: A Brief History of the Twenty-First Century* (New York: Farrar, Straus and Giroux, 2005).
22. “Changing Minds, Winning Peace,” Report of the Advisory Group on Public Diplomacy for the Arab and Muslim World, Chairman Edward P. Djerejian, October 2003.
- “Global Competence and National Needs: One Million Students Studying Abroad,” Report of the Commission on the Abraham Lincoln Study Abroad Fellowship Program, November 2005.
23. Susan Sclafani, “Possible China–U.S. Collaborations in Math and Science Education” (PowerPoint Presentation at China–U.S. Basic Education Leaders Forum, Shanghai, September 29, 2005).
 Vivien Stewart, “U.S.–China Education Leaders Forum on Math and Science Education Meeting Report” (New York: Asia Society, 2005).
24. Vivien Stewart and Shuhan Wang, “Expanding Chinese Language Capacity in the United States” (New York: Asia Society, 2005).
25. CHENGO E-Language Learning, <http://www.elanguage.cn/>
26. G. Thomas Houlihan, “The Importance of International Benchmarking for U.S. Educational Leaders,” *Phi Delta Kappan Magazine* (Bloomington: Phi Delta Kappa International, 2005).
 Lynn Kagan and Vivien Stewart, “A New World View: Education in a Global Era,” *Phi Delta Kappan Magazine* (Bloomington: Phi Delta Kappa International, 2005).

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Agenda: China-U.S. Basic Education Leaders Forum
New Skills for a New Economy
Shanghai, September 29, 2005

Chairs: YANG Jin, Deputy Director-General, Basic Education Department, Ministry of Education of the People's Republic of China
Richard MILLS, Commissioner, New York State Education Department

- 8:30 – 9:40 **Opening Session****
Welcome: WANG Jianpan, President, East China Normal University
Vivien STEWART, Vice President, Asia Society
WU Qidi, Vice Minister, Ministry of Education
Opening Remarks: YANG Jin and Richard MILLS
Introductions by participants
- 10:10 – 12:00 **Innovations and Challenges in Math and Science Education****
WANG Dinghua, Basic Education Department, Ministry of Education—Curriculum Reform and Math & Science Education
Susan ZELMAN, Commissioner in Ohio—Ohio Challenges and Innovations in Mathematics and Science
ZHANG Tiedao, Professor of National Institute for Education Research
Susan SCLAFANI, Former Assistant Secretary, U.S. Department of Education—Possible China-U.S. Collaborations in Math and Science Education
- 12:00 – 13:30 *Lunch*
- 13:30 – 15:00 **Innovations and Challenges in Education Leadership Training****
Jo Lynne DeMARY, Commissioner in Virginia—Innovations and Challenges in Leadership Training and Development
JIANG Guohua, Professor of National Institute for Education Research
Dan KATZIR, Broad Foundation—Development and Training of Education Leaders
YANG Xiangning, Deputy Commissioner of Jiangsu Province—Training for Primary & Secondary School Principals in Jiangsu
- 13:30 – 15:00 **Innovations and Challenges in Technology Use/Distance Education****
Susan GENDRON, Commissioner in Maine—Maine Learning Technology Initiative
ZHANG Xuemei, Deputy Director of International Division, National Center for Education Technology
Ken KAY, Partnership for 21st Century Skills—A Vision for I.C.T. Literacy in the 21st Century
- 15:30 – 17:00 **Innovations and Challenges in Language Teaching and Exchange****
GONG Yafu, Curriculum & Teaching Materials Research Institute—English Language Education in Chinese Schools
Vivien STEWART, Asia Society—Expanding Chinese Language Capacity in the United States
- 17:00 – 17:30 *Closing Session*

Asia Society

Asia Society is an international nonprofit organization dedicated to strengthening relationships and deepening understanding among the peoples of Asia and the United States. The Society operates cultural, policy, business, social issues, and education programs. Through its Asia and International Studies in the Schools initiative, Asia Society's education division is promoting teaching and learning about world regions, cultures, and languages in K-12 schools by raising awareness and advancing policy, developing practical models of international education in the schools, and strengthening relationships between U.S. and Asian education leaders. Headquartered in New York City, the organization has centers in Hong Kong, Houston, Los Angeles, Manila, Melbourne, San Francisco, Shanghai and Washington, D.C and will open a center in Mumbai in 2006.

Business Roundtable

Business Roundtable is an association of chief executive officers of leading U.S. corporations with a combined workforce of more than 10 million employees. The Roundtable is committed to advocating public policies that ensure vigorous economic growth, a dynamic global economy, and the well-trained and productive U.S. workforce essential for future competitiveness. Business Roundtable believes that its potential for effectiveness is based on the fact that it draws on CEOs directly and personally, and presents government with reasoned alternatives and positive suggestions.

The Council of Chief State School Officers

The Council of Chief State School Officers (CCSSO) is a nonpartisan, nationwide, nonprofit organization of public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, and five U.S. extra-state jurisdictions. CCSSO provides leadership, advocacy, and technical assistance on major educational issues. The Council seeks member consensus on major educational issues and expresses their views to civic and professional organizations, federal agencies, Congress, and the public.

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