

China's Strategy for Nurturing Core Workers as a Global Talent Power

QIU Jing and XU Liyan

THE IMPORTANCE OF TALENT FOR CHINA'S FUTURE DEVELOPMENT

China has already started its transition from the world's manufacturing hub to a world leader in innovation. This transition, however, has been faced with challenges that have spurred its government to put increasing priority on skilled human capital.

Loss of the Demographic Dividend

Increases in life expectancy and strict family planning have led to a rapidly aging population. Such demographic changes mean that China cannot rely on a large supply of cheap labor anymore. China's demographic dividend, i.e. its massive population of people at their prime working age, will disappear soon. It is thus imperative that China boosts its productivity as its labor costs increase and its supply of workers falls.

The Low-End Image of "Made In China"

China is the world's largest manufacturer and exporter, but still has few brand names that are globally recognized. "Made in China" products are still stereotyped as poor quality and low-tech. In order to change the "Made in China" brand into a "Created in China" brand, China will need more innovative workers.

Brain Drain

For years, China has ranked as one of the top recipients of global FDI. Nevertheless, China still suffers a persistent brain drain. From 2001-2011, China sent out 1.87 million students and scholars. During the same period, only 690,000 students and scholars who finished overseas studies returned to China. China has to provide incentives for overseas Chinese talent to return, while attracting foreign talent to come to China.

Underdeveloped Cultural And Public Service Sectors

China has poured massive resources into the "hardware" side of its economy, i.e. infrastructure construction, over the past 30 years. Now, China needs to increase its investment in "software," including education, research and development, public health, social welfare and other areas within a balanced and diversified economy. However, China's skilled workforce in these sectors is inadequate to meet demand.

REVIEW OF CHINA'S TALENT POLICIES

In order to increase its talent pool, China has been continuously adjusting and renewing its talent policies.

Table 1 Review of China's Talent Policies

2001	APEC Conference on Human Capacity Building in Beijing China included a special chapter on HR development in the 10 th Five-year Plan (2001-2005), the first time it had ever done so
2002	2002-2005 National Talent Development Plan released China's first national comprehensive program on national human resources development
2003	China's State Council held its first national human resources conference The Central Talent Work Coordinating Group was established to coordinate and integrate the efforts of various departments to study major HR issues
2007	The Chinese Communist Party adopted talent development as a strategy to revitalize the economy, and included this initiative in the Party Congress Report and Party Charter for the first time
2010	The "Outline of China's National Plan for Medium and Long-term Education Reform and Development (2010-2020)" and the "National Outline for Medium- and Long-Term Talent Development (2010-2020)" were announced

Before 2000, education and R&D was the main goal of the nation's human resources strategy. On May 6, 1995, the CPC Central Committee and State Council announced its decision to accelerate scientific and technological development and to rejuvenate China's economy through science and education. Following this strategy, China's education system achieved notable breakthroughs. Growth in higher education enrollment was 20.8 percent a year from 1996 to 2000, and topped 41.2 percent in 1999. At the same time, China greatly

increased its R&D spending, which was merely 0.74 percent of GDP in 1991 and 0.6 percent in 1996. In 2000, the ratio reached 1 percent for the first time.

From 2001, China's government has put high priority on improving the country's HR competitiveness. In 2007, China's Party Congress Report and Party Charter included talent development for the first time, indicating China's determination to build a globally competitive workforce.

Table 2 Main Indicators of China's National Talent Development Outlines

Indicator	Unit	2008	2015	2020
Number of people in the talent workforce	Ten thousand	11385	15625	18025
Share of full-time equivalent R&D Personnel* in the labor force	Person-year / 10000	24.8	33	43
Share of highly skilled talent in the labor force	%	24.4	27	28
Share of the labor force who have higher education	%	9.2	15	20
Share of human capital investment in GDP	%	10.75	13	15
Share of talent contribution to GDP	%	18.9	32	35

Note: Full-time Equivalent R&D Personnel refers to the sum of full-time persons and the full-time equivalent of part-time persons converted by workload.

In 2010, China released a very ambitious national talent development plan. The National Outline for Medium- and Long-Term Talent Development (2010-2020) set strategic objectives for China's talent development by 2020. Its goals include cultivating a high-quality talent pool, confirming China's comparative strengths in talent competitiveness, and becoming one of the leading global talent powers.

According to the outline, "talent" refers to those with professional knowledge or special skills who can do creative work and contribute to society. China has vowed to increase its talent pool from the current 114 million people to 180 million people by 2020, with spending on human resources accounting for up to 15 percent of the country's GDP.

METHODS FOR CULTIVATING TALENT IN KEY HR SECTORS

Experts And Skilled Workers For Emerging Industries

According to the National Outline for Medium- and Long-Term Talent Development (2010-2020), by 2020, more than 5 million talented workers will be needed in equipment manufacturing, information technology, biotechnology, new materials, aeronautics and astronautics, oceanography, finance and accounting, international business, environmental protection, energy resources, agriculture technology, and modern traffic and transportation.

The Chinese education authority has thus decided to strengthen university education to meet the human resource needs of these industries.

One way is to enhance the education of Professional Masters in universities. The education of Professional Masters is application-oriented

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and can meet specific industry needs, while traditional academic Masters are for academic research only. Before 2010, there were only 19 categories of Professional Master's degrees in China, including the MBA and MPAcc. In 2010, 19 new categories were created, including a Masters in Journalism and Communication (MJC), a Professional Masters in Pharmacy (M.Pharm), and a Masters in Engineering Management (MEM). It is expected that the share for Professional Master's degrees will increase from the current 30 percent to 50 percent in 2015.

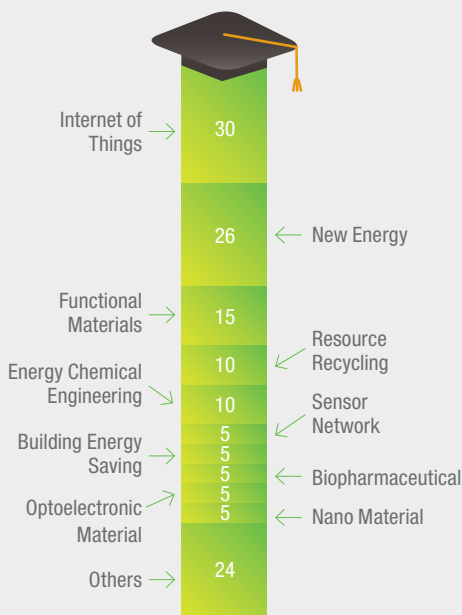
China is also introducing "University education for Strategic Emerging Industries (SEIs)." In 2011, the Ministry of Education launched its project, "Cultivating Talent to Serve Specific

National Needs." This encourages universities to apply for new postgraduate majors with Professional Master's or Doctor's degrees in SEIs. In 2011, 140 domestic universities set up new undergraduate majors for SEIs. The new majors include the "Internet of things," new energy, functional materials, and resource recycling.

At the same time, the government is helping to train more high-level technicians for industries. According to the "National Plan for Reviving High-level Technicians" jointly issued by the Ministry of Human Resources and Social Security and the Ministry of Finance in 2011, China will have 140 million technicians by 2020, and more than 28 percent of these will be senior engineers or above.

Under this plan, the Chinese government plans to mobilize senior skilled workers to launch training workshops for newcomers. By 2020, the country will create about 1,000 workshops in companies and government organizations where seasoned workers and technicians can pass on their skills. In addition, the government has also set a goal of establishing 1,200 "talent incubators" in major cities. The talent incubators will mainly train technicians for SEIs and other key industries.

Figure 1 Number of Universities that Have Established New Undergraduate Majors for SEIs (2011)

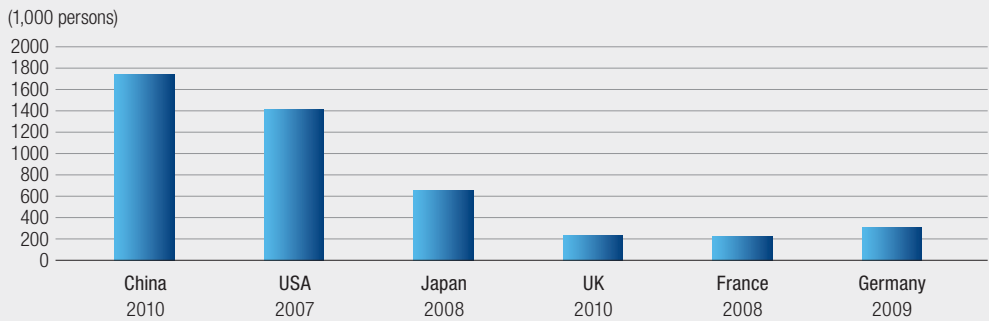


Source: Ministry of Education.

Entrepreneurs To Lead The Globalization Of Chinese Companies

The "Quality Improvement for Business Management Talent" project was launched by the State-owned Assets Supervision and Administration Commission and the Ministry of Industry and Information Technology in November, 2011. The objective of the project is to have 500 globally competitive entrepreneurs and 10,000 managers in various business specialties in China by 2020. The government also announced plans to cultivate 100 "strategic entrepreneurs" who can lead Chinese firms into the ranks of

Figure 2 Number of R&D Researchers



Source: China Statistical Yearbook on Science and Technology 2011.

the world's top 500 companies.

The project includes three plans: 1) Domestic and overseas training courses for top managers in China's top 500 companies; 2) Specialty training courses (i.e. strategic planning, finance, and law) for high and middle level managers in both state-owned and private companies; and 3) Training projects for small and mid-sized firms. The first plan will be sponsored by the government, while the others will be directed by the government, with expenses shared by companies and individuals.

At the same time, the selection of top managers in state-owned enterprises will be made more competitive in order to improve the quality of management. According to the National Outline for Medium- and Long-Term Talent Development (2010-2020), by 2020, 50 percent of top managers in state-owned enterprises will be recruited in an open and competitive recruitment process.

World's Leading R&D Team

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government has launched a National High-tech R&D Program (863 Program), National Key Basic Research Program (973 Program), National Key Technology R&D Program, National Natural Science Foundation, and other national programs and foundations. By the end of 2011, 130 National Engineering Research Centers, and 119 National Engineering Laboratories will have been built.

As a result, China has become one of the world's major sources for research and development personnel. The number of R&D researchers in China exceeded 1.6 million in 2010.

In August 2011, seven Chinese government agencies (including the Ministry of Science and Technology) released a national long-term plan (2010-2020) for the development of human resources in science and technology. The plan indicates that China will train 3,000 talented young workers for the development of cutting edge technologies and strategic emerging industries by 2020. To meet this objective, China will make more money available for the development of S&T personnel. By 2020, China's per capita R&D expenditure on R&D personnel will hit 1 million yuan per year¹ from 0.28 million yuan per year.

Talent In The Culture, Philosophy And Social Science Areas

At the 17th CPC Central Committee in 2007, the Chinese Communist Party included culture as a subject for discussion in the Central Committee for the first time. Convened in October 2011, the sixth plenary session of the CPC's 17th Central Committee indicated the importance of strengthening Chinese culture, and adopted a guideline aimed at boosting China's soft power and maintaining cultural security.

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¹ 2008 constant price.

To increase national soft power, China intends to cultivate masters with wide influence in culture, philosophy, and social science. From 2011 to 2020, the government plans to sponsor 2,000 figures in philosophy, social science, news and publishing, culture and art, heritage protection and related social and humanities areas.

At the same time, the Chinese government will provide more support for social science and philosophy students and scholars to study abroad. In 2011, the China Scholarship Council sponsored 13,690 Chinese students to study abroad, with more than 34.6 percent of them in the social science & philosophy field. The number will increase to more than 40 percent in the near future. At the end of 2011, the Ministry of Education released the “Social Science & Philosophy Outgoing Plan for Higher Education of China”. The plan encourages international cooperation and education in social science and philosophy and requires establishing an international social science and philosophy talent cultivation system within 10 years.

Towards A More Efficient Government And A Better Social Life

Government efficiency is a vital contributor to national competitiveness, while civil servants are the main instrument to improve administrative efficiency. Thus civil servants are a core category for talent in China’s long-term strategy.

The government is imposing stricter controls on the hiring of civil servants. More than 70 percent of the civil servants recruited in 2010 had earned at least a bachelor degree. According to the National Outline for Long-Term Talent Development (2010-2020), by 2020, more than 85 percent of all government officials will at least have bachelor’s degrees. At the same time, the professional capabilities of individuals are being

emphasized. The 2011 National Civil Service Exam, for example, paid greater attention to individual expertise than common political and economic issues.

The government will open the doors of government entities to talented individuals, and will widen channels to recruit talent so that officials can be chosen and hired from various enterprises, institutions and social organizations.

To improve the efficiency of public service, the Chinese government aims to build an army of 1.45 million social workers by 2020. A long-term plan (2011-2020) for developing a national social work system has been jointly devised by 19 departments, including the Organization Department of the Communist Party of China (CPC) and the Ministry of Civil Affairs. China currently has just over 200,000 social workers. According to the plan, by the end of 2015, licensed social workers in China will total 500,000, and another 950,000 will be added from 2016-2020.

In order to achieve this goal, domestic colleges and universities will make more effort to train social workers. China will build 300 social worker training bases, 50 of which will be at the national level. At the same time, China will improve the evaluation system for social workers. Better pay is also promised to retain outstanding employees.

Favorable Policies To Attract Overseas Talent

China’s authorities are introducing more measures to induce overseas Chinese talent to return to their native country.

To attract overseas Chinese students, China has constructed more than 160 high-tech business incubators. More than 20,000 returned students are working in these incubators. By 2015, China

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will have more than 200 high-tech business incubators. In 2011, the total number of returned Chinese students studying abroad was 186,200, up more than 38 percent compared to 2010.

The recruitment of senior professionals overseas is mainly carried out through the "1000-Talent Plan." Launched in 2008, the Thousand Talent program targets Chinese and foreign academics and entrepreneurs working at the world's best institutions and enterprises. The program attracted about 1,000 senior professionals in 2011 and 2,263 professionals in total by the end of April, 2012.²

Drafting of "Opinions on Building a Green Channel for High Level Overseas Chinese Returnees" is now under way. Policy measures on permanent residence management of high-level overseas talent, taxation, medical care, social insurance, family planning, education for children, spouse employment, project applications, funding and investment & financing are being upgraded.

In August 2011, the Ministry of Human Resources and Social Security released "The 12th Five-year Plan for Returning Overseas Chinese Talent". The plan has a goal of attracting at least 500,000 overseas Chinese scholars from 2011 to 2015.

China will also be more open to foreign talent. China plans to attract more than 1.97 million foreign experts from 2011-2015. 23 percent of the total will be high-end foreign innovative specialists.

Policies will be more favorable to foreign experts. The government is considering issuing more green cards and easing restrictions for visa-free entry to encourage more talented indi-

² Source: The Central Organization Department (COD) of the Chinese Communist Party.

viduals from overseas to work in the country. For example, a new visa category titled “talent introduction” has just been added to a draft law on China’s exit and entry administration recently. The government also announced that it will allow foreign nationals to take senior roles in science & technology sectors and state-owned enterprises. They will also pay foreigners salaries equal to what they can earn at top paying jobs in developed countries.

At the end of 2011, the Central Organization Department (COD) of the Chinese Communist Party and State Administration of Foreign Experts Affairs launched the “1000 Foreign Experts Plan”, as a sub-program of the “1000-Talent Plan”. It is aimed at introducing foreign experts to work in China long-term. Those who are selected will be subsidized with 1 million yuan from the central government, while those who are engaged in basic research will be granted 3-5 million yuan more as research funds. By the middle of February 2012, the project attracted 214 candidates from countries like the United States, Japan and Germany.


The number of foreigners who stayed in China for at least six months rose to 600,000 in 2011 from less than 20,000 in 1980. By the end of 2011, 4,752 foreigners were given a Permanent Residence Card, the Chinese equivalent of a “green card.”

Conclusions

The scope of China’s talent strategy is now expanding from strengthening of higher education and R&D activities to the improvement of all HR sectors, including industry experts, R&D personnel, business leaders, civil servants, social workers, cultural masters, and foreign scholars. This will help China increase its human resource competitiveness in all aspects—not only in industry, but also in cultural and so-

cial areas.

Talent cultivation is a massive and challenging project which cannot be implemented by the government alone. Thus China must create a more open system for nurturing talent. First, cooperation between industries and universities must be enhanced, and university education must respond to industry dynamics. Companies will also be encouraged to get more involved in nurturing talent. Second, China must learn more from developed countries. More scholars and business people will be sent to foreign countries to learn technologies and experience. Third, the domestic and cross-border mobility of talent will be increased. The selection mechanism for civil servants and managers in state-owned companies must be more open. To attract overseas talent, China’s government will need to provide more favorable working and living conditions for them.

However, one challenge is providing enough incentives for universities, enterprises, official entities and other participants in the HR system. They may bear the costs and risks in the process of talent training and mobilizing. Some local governments have already adopted methods like special subsidies and tax incentives to encourage enterprises to participate in nurturing talent. Nevertheless, China still has a long way to go if it is to fulfill its ambitious plans by 2020. 

Keywords

China, talent strategy, key HR sectors, open system

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014 **Korea's Growing Demand for Science and Technology Talent**

BAE Seong-O

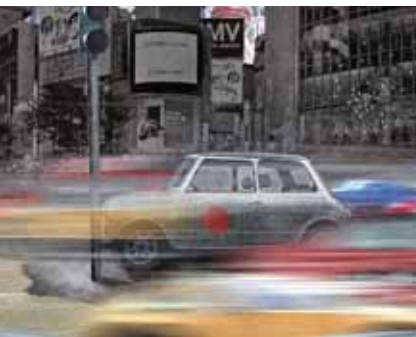
Aggressive efforts by many nations to recruit science and technology talent have put the spotlight on Korea's own workforce. New industries like green energy, robotics, bio-medicine, and nanotechnology will require highly skilled personnel, but Korea is coming up short in these promising areas. New initiatives like Korea's "10,000 Plus Plan," and investments in basic research are trying to address these gaps.



022 **China Ups Its Ante in the Talent Game**

QIU Jing and XU Liyan

China faces the challenges of brain drain, an aging population, and a perception as a manufacturer of low-quality products. To overcome these challenges, China has made an intensive commitment to recruiting talent from overseas and fostering talent on its own shores. These efforts include massive investment in R&D, universities, and corporate training, as well as an all-out effort to recruit talent from overseas, both foreign researchers, and China's own overseas citizens.



032 **Japan Struggles to Regain Its Edge**

Yutaka Kato

More than 30 years after Ezra Vogel published "Japan as Number One," Asia's first technology superpower is struggling to regain its footing. Dwindling research and training budgets at companies, disinterest in science among the young and widespread business practices that discourage innovative research have spurred Japan's government to pursue new ways to fund research and promote science and technology education.



042 **Singapore at the Head of the Class**

Toh Mun Heng and Jiang Bo

Singapore, in contrast to nearly every other Asian country, has become a "brain gain" nation by attracting professionals from around the world. Singapore has succeeded due to its supportive government, aggressive recruitment of foreign talent and its high quality of life and openness to outsiders. At the same time, Singapore's successful pursuit of foreign talent comes with tradeoffs, including rising income inequality.

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