short-cycle programs have grown much faster. In 1998, total enrollment was 3.409 million in regular higher education, with 2.235 million (65.6 percent) registered in four-year programs and 1.174 million in two-year programs. By 2008, four-year programs accommodated 11.422 million students (5.1 times the number in 1998) and accounted for 54.6 percent of the total; two-year programs had 9.168 million students (7.8 times the number in 1998).

WHICH DISCIPLINES HAVE EXPANDED FASTER?

Although all programs have enlarged their enrollment capacity through the massification process, significant disparities exist among disciplines in terms of the rate of expansion. Engineering programs have continued to host the largest percentage of the student body, with their share maintained at 40 percent in 2008, while the share of sciences and agriculture has nearly shrunk in half. Enrollment in economics went through a huge increase with the rapid expansion of management and administration programs, from 14.9 percent of total enrollment in 1998 to 24.7 percent in 2008. The share of education and literature each has increased slightly, while the share of law and social sciences has dropped slightly.

An interesting phenomenon is the development of second-tier independent colleges—colleges affiliated with public universities, but receiving little public funding, and wholly dependent on student fees.

Thus, enrollment in four-year programs no longer exceeds the numbers in two-year programs across all disciplines. As of 2008, enrollment in short-cycle programs in the three disciplines of education, engineering, and management and administration exceeded the four-year programs. Agriculture and medicine programs also gained a much higher proportion of two-year enrollments than was the case in 1998. However, the dominance of four-year science programs was strengthened over the same period, with their enrollments being 236.1 times greater than those of two-year programs in 2008.

CONCLUSION

The expansion and reconstruction of the Chinese higher education system over the last decade has resulted in increased decentralization, differentiation, and privatization of the system. Chinese higher education has evolved into a hierarchical and diversified system: national universities remain at the top, ambitiously focused on attaining "world-class" status and promoting national competitiveness and prestige; local public universities remain in the middle, acting as the major providers for higher education and contributing to local development; and private institutions are largely at the bottom, focusing on vocational programs. However, a significant outcome of this

massification process is that through the differentiated expansion of four- and two-year programs, particularly along disciplinary lines, the diversity of higher education provision has been greatly enhanced. This result could be attributed to the insufficient resources mobilized for the expansion. However, the process of differentiation has practically diversified the curricula structure, making it more responsive to the requirements of social and economic development in the country.

Postcompulsory Education and Training in China

QI WANG

Qi Wang is a lecturer at the Graduate School of Education, Shanghai Jiao Tong University. E-mail: qimwang@sjtu.edu.cn.

The recent debate on building a learning society in China has focused on the gap between individuals' learning motivation and the government's policy orientation on further developing postcompulsory [i.e., postsecondary] education and training programs through certified learning. This gap, reflecting China's cultural and historical force of credentialism, is believed to be a barrier to the promotion of lifelong learning.

GOVERNMENT PERSPECTIVE

Since the late 1990s, the Chinese government at both national and municipal levels has strongly advocated to build a "learning society" in government policies, such as the 2003–2007 Action Plan for Invigorating Education in 2004, the Action Plan for the Nation's Science Literacy in 2006, and the 11th Five-Year Plan for Education in 2007. Other policies emphasizing the development of a lifelong-learning culture have been enacted through direct educational initiatives and regulations, such as the employment promotion law of the People's Republic of China, the decision on promoting vocational education, and the construction of a vocational qualification system. The development of these policies reflects the key national initiative to revitalize the nation based on science, education, and skill development.

In response to these policy initiatives, a large number of new certified education and training programs have sprung up in the postcompulsory sector in China, in addition to university education and degrees. Such certified programs include accounting, law, manufacturing, environmental sciences, and almost all culminate with a professional qualification exam. These programs are designed and implemented mainly by the relevant industries and the government at different levels, as

part of the "learning society" project to meet the social and economic needs for highly skilled workers. For example, the Shanghai Training Program for Talents in Shortage (STTP) has been developed by the Shanghai municipal government since 1993 to train and generate human capital in nine fields identified in response to social and economic development needs. This training program provides more than 60 kinds of courses and certificates. According to the organization's statistics, more than 4.3 million people have participated in the program over the past 10 years.

THE PERSPECTIVE OF CURRENT UNIVERSITY STUDENTS

An increasing number of students expect that job-market-related skills are unattainable during their full-time university experience. Thus, they are actively participating in these postcompulsory education and training programs as well as their own studies at the university. Such increasingly diversified learning opportunities enable university students to develop and improve the skills and knowledge required for the postuniversity labor market.

Since the late 1990s, the Chinese government at both national and municipal levels has strongly advocated to build a "learning society.

Students believe obtaining extra credentials as well as their university degrees forms a kind of employment life insurance. As universities graduate more students, competition in the job market intensifies; job opportunities are not growing as quickly as the number of university graduates. University degrees no longer serve as a guarantee for a job as was the case before the socioeconomic reform in China; rather, they are now only tickets into the employment marketplace. Possessing extra qualifications can protect university graduates in an environment of credential inflation. This credentialism mentality has motivated students to participate in the postcompulsory education and training programs, to strengthen their employability. For example, the above-mentioned STTP program was originally targeted at people with professional experience, but now most participants are university students who consider the program an investment.

The truth is, however, that a credential may not accurately represent its holder's true possession of skills and knowledge. This is especially true in the case of China, where learning is often regarded as irrelevant, rote memorization, and heavily theory laden. In other words, China's postcompulsory education and training programs are considered as part of the ritualistic process of gathering extra qualifications since positional goods and credentials are considered limited paper currency to be exchanged for work opportunities.

Yet, these programs were set up to provide opportunities for students to improve themselves to "be a better person," which

implies a strong sense of learning as moral duty—a trait deeply ingrained in Confucian culture. It is ironic that programs established with such moral goals have turned into just an economic market exchange of credentials and not even real knowledge and skills.

A MISMATCH BETWEEN THE TWO PERSPECTIVES

A disconnect can be found between the government policy orientation on developing lifelong learning and individual learning needs. Postcompulsory education and training programs are introduced by the government authorities to maintain the momentum of the country's development by targeting skills shortages and skill formation. These policies are inspired by straightforward human capital development concerns from the government perspective.

However, individuals' learning needs suggest that a strong cultural force of credentialism influences people's learning management. Along with their doubts about the quality of the higher education system and the role of education and qualifications, the learners find themselves both responsible and compelled to be engaged in learning to develop and improve their skills and knowledge based on the present labor-market demand and in a qualification battle, to raise their position in the labor-market competition. This perception does not sit well with culturally influenced concepts of "real" education to promote engagement in lifelong learning for individual betterment and genuine skills development.

In response to these policy initiatives, a large number of new certified education and training programs have sprung up in the postcompulsory sector in China, in addition to university education and degrees.

Therefore, credentialism presents a major challenge to further evolving postcompulsory education and training into skill formation programs. This Confucian cultural resource could potentially be conducive to building and promoting a learning society in China, where everyone takes an active part in learning, regardless of age, gender, or socioeconomic background. This situation in China may contrast with that of the Western industrial societies, where the influence of social class on a wide range of social phenomena is deeply ingrained.

In this sense, the government might need to coordinate different stakeholders' needs and rethink their strategies of certified learning—including course curriculum, teaching approaches, and exam systems—to ensure the success of human resource development and fighting against the cultural and historical struggle of credentialism.