

ANNEX 3

Overview of Vocational Education in Guangdong and the Desired System Development Outcomes

Guangdong province has the largest vocational education system in China. Statistics show that the number of students currently enrolled in vocational education in Guangdong amounts to 2.69 million, accounting for 1/10 of the total national number in 2014. Among them, 1.9 million students are in secondary vocational schools and 790,000 are in higher vocational schools. While vocational education in other provinces is shrinking, new enrolment and current enrolment in vocational schools in Guangdong remains high. The population at the appropriate age for vocational education in Guangdong is larger than that of other provinces.

The percentage of vocational schools is falling, while the percentage of vocational colleges in Guangdong is increasing. Guangdong has set up a preliminary modern vocational education system that includes vocational schools, colleges, and universities of applied technology. The structure of vocational education in Guangdong is improving, as Guangdong's industrial development advances. The priority subjects for vocational education match Guangdong's industry structure.

The proportion of teachers with dual professional qualifications is on the increase. The total number of such teachers is 16,100, accounting for 52.6 per cent of all teachers. From 2011 to 2014, the annual growth rate in the number of such teachers was 6.4 per cent.

At above 95 per cent from 2011 to 2014, the employment rate among vocational graduates has maintained a high rate in recent years. The employment rate among vocational college graduates has exceeded that of university graduates and postgraduates for four consecutive years. Guangdong has a large number of pilot and quality vocational schools and colleges. By the end of 2014, Guangdong had 63 national-level pilot vocational schools and 11 national-level quality vocational colleges. In 2014, Guangdong's vocational education system had met the training demands of industry by providing training for over one million people.

As Guangdong is upgrading and innovating its industry, there is an urgent need to innovate education and training. Guangdong regards modern apprenticeships as an important method in developing its human resources.

Challenges and difficulties for modern apprenticeships in Guangdong

Guangdong has prioritised the technology-intensive industry and high-end service industry to achieve an internet-led transformation. In 2014, the total GDP of Guangdong province reached RMB 6.78 trillion, or £678 billion, ranking first among all provinces in China. The per capita GDP exceeded \$10,000. In 2013, there were more than 1 million domestic enterprises, 35,544 enterprises invested by Hong Kong, Macao or Taiwan, and 14,575 foreign-invested enterprises in Guangdong (Source: 2014 Guangdong Statistical Review). A large number of these enterprises need upgrading to achieve smart manufacturing. Human resources are the key in the process of transitioning to a high-end industry and apprenticeships are an efficient way to achieve this.

Modern apprenticeships have been introduced to Guangdong, but it has experienced many problems in this field, especially in localising apprenticeships. Problems include: How to meet the human resources demand of large, medium and small enterprises and inform vocational schools and colleges of this demand? How to set teaching standards for modern apprenticeships? How to define the responsibilities of schools, colleges and companies in modern apprenticeships?

The desired system development outcomes

Outcome one: Build an integrated provincial (online) modern apprenticeship platform in Guangdong.

This integrated platform will be funded by Guangdong Provincial Education Department and provide services to all vocational schools and colleges, companies and students in Guangdong. The below is a non-exhaustive list of the desired functions of the platform:

- Announcement of vacancies and opportunities by government, schools and enterprises.
- Apprenticeship application, registration and management: students will use the platform to progress their applications and engagements in apprenticeship programmes.
- Teaching management: detailed subject and industry training and teaching plans, as well as curriculum schedules will be announced and accessed on the platform. The system should also capture students' study plans, progress and learning outcomes leading to accreditation at the end by relevant authorities.
- Sharing of learning resources: learning resources from schools and colleges and

enterprises can be published on the platform for access by students. This could include a combination of distance learning, online courses and face-to-face teaching.

- Apprenticeship assessment and evaluation: a third-party organisation will assess and evaluate the performance of the apprentices and issue certificates.
- Analysis and improvement: analysis can be performed on big data generated through the platform so as to provide constant reviews and recommendations for further improvement.

Outcome two: Improve the quality assurance framework of Guangdong's apprenticeship system with a set of developed standards.

- Supporting Guangdong in improving its quality assessment system, focusing on developing assessment and accreditation standards for colleges and enterprise tutors.
- Developing toolkits and delivering training programmes for education researchers and industrial associations in Guangdong so they are able to understand and adopt the approach to subsequently develop sector and subject-based standards and assessments.

Outcome three: Support Guangdong in developing plans for a credit transfer system for vocational education, including the modularisation of school courses with participation of enterprises to enable students to take more flexible education pathways.

- Developing standards, procedures and methods for the transfer of apprentice credits between colleges and enterprises, including accreditation and accumulation
- Setting up and putting into practice a credit bank for apprentices that is linked to a provincial credit bank.