SINGAPORE

The Workforce Skills Qualifications system (WSQ) is the product of major recent reforms to Singapore's Continuing Education and Training (CET) system, which provides training and education to all levels of the workforce. The WSQ system focuses on vocational as opposed to academic education. In 2003 the Singapore Government made the move to coordinate CET efforts across different government departments under a new statutory board, the Singapore Workforce Development Agency (WDA). One of the key initiatives of the WDA was to establish a comprehensive CET system, which was launched in 2005 as the WSQ system.

1. CHALLENGES THE NQF WOULD NEED TO ADDRESS

Considerable efforts had already been made prior to the launch of the WSQ system to improve the skills and knowledge of the workforce through training programmes. However, the system was fragmented and many courses were institution-based and overly academic in focus, making them inaccessible to a large proportion of the workforce.

When the government commissioned the development of the WSQ system in 2004, there were an estimated 500,000 workers who lacked secondary school level qualifications. Singapore's resident workforce increased from 1.73 million out of a total workforce of 2.34 million in 2004 to 1.93 million out of a total workforce of 2.94 million in 2008. One of the challenges is to ensure that all workers are equipped with employable skills that are in demand in the globalized labour market.

2. MAIN POLICY OBJECTIVES

The main policy objectives of the WSQ system can be seen from national, sectoral and individual worker perspectives:

- At the national level, the WSQ system strives to meet the needs of existing and emerging sectors by ensuring that all workers are equipped with relevant and portable competences that support their lifelong employability.
- At the sectoral/industry level, the WSQ system aims to strengthen the expertise of industries, professionalize their workforce and enhance the productivity of their workers.
- At the individual worker level, the WSQ system seeks to improve the provision of quality programmes to support the training needs and aspirations of all workers. WSQ programmes lead to industry recognized qualifications and are designed to allow progression to other qualifications either within or outside of the WSQ system.

3. INVOLVEMENT OF STAKEHOLDERS AND LEGAL ARRANGEMENTS

The WDA functions as the awarding body for WSQ modular certifications and qualifications. It provides guidelines on competency standards and curricula, oversees the award of certificates and the implementation of training and assessment programmes, and is responsible for the quality of CET programmes.

The WDA worked closely with other economic agencies to establish a Manpower Skills and Training Council (MSTC) and related Skills Technical Committees. This high level council is in charge of looking into the manpower skills and training needs of various industry sectors. It advises the WDA on

new qualifications, the design of the WSQ system, occupational competency standards, and so on. Members of the MSTC are usually senior management staff of Multi-National Corporations (MNCs) and Small and Micro Enterprises (SMEs), industry experts, union representatives, government ministry and agency representatives, or independent practitioners and business owners. Skills Technical Committees support the MSTC by providing design input and validation to WSQ qualifications and competency standards.

The WSQ system is underpinned by a tripartite representation of unions, employers and the government. This helps to ensure the industry relevance of WSQ programmes.

The WSQ system benefits from an extensive network of training providers, both large and small. There are currently more than 500 training providers offering WSQ training and assessment programmes. Through these providers, the WSQ system has benefited more than 600,000 workers, and more than 1.7 million WSQ modular certificates and 32,000 full WSQ qualifications have been awarded.

Larger providers include well-established institutions such as the Institute of Technical Education (ITE), polytechnics and institutes of higher learning. About 50 larger training providers, called Continuing Training Centres (CTCs), represent key access points for subsidized training programmes, career advice and counselling and training placement and employment services. CTCs also serve as assessment centres where both local and foreign workers can gain qualifications on the basis of assessment and recognition of their existing capabilities. Both modular and full WSQ programmes are also offered by major private training institutes.

Smaller WSQ providers concentrate on customizing programmes for corporate accounts, particularly those who wish to incorporate Competency-Based Training (CBT) principles and WSQ programmes into their staff training and development. Smaller training providers and in-house training departments tend to concentrate on niche areas.

The WSQ quality assurance framework includes pre-accreditation and continuous accreditation mechanisms. During the pre-accreditation stage, potential WSQ training providers are subjected to checks on their organizational status and track record, processes and systems. Once accredited, training providers undergo annual review audits.

Singapore lays great emphasis on improving the capability of trainers. The Training and Adult Education (TAE) framework was developed to support the capability development of WSQ trainers, assessors and curriculum developers (collectively referred to as adult educators). The WDA set up the Institute for Adult Learning (IAL) to look into capability development of adult educators, deliver programmes under the TAE framework and conduct research in the area of adult learning and workforce development. It is the WDA's policy to ensure that most if not all adult educators attain the relevant qualifications for their role (or equivalent) under the TAE framework by 2015. The IAL has also launched the Adult Educator Network (AEN) to support the professional development of its members and bring adult educators together to share practices with the purpose of improving the quality of adult learning.

In addition to this work, the IAL hosts overseas Masters programmes in the areas of CET and competency-based training and assessment. It has set up an Academy for Continuing Education Specialists (ACES) which is intended to provide a platform for engagement, collaboration and sharing among the CET community, offering both face-to-face workshops (e.g. on competency standard writing, recognition of prior learning, etc.) and a virtual learning environment online.

4. LEVELS AND DESCRIPTORS AND THE USE OF LEARNING OUTCOMES

The shift from a subject-based to a competency-based qualifications system is seen by the WDA as an essential stage in the development of the WSQ system. The system covers both broad foundational competences and industry-specific occupational competences.

The WSQ system comprises six levels of occupation-based qualifications, ranging from Certificates and Higher Certificates (targeted at operational or technical jobs) through Advanced Certificates and Diplomas (targeted at supervisory or managerial jobs) to Specialist Diplomas and Graduate Certificates/Diplomas (targeted at professional and specialist jobs).

Figure 1. Workforce Skills Qualifications (WSQ) Framework
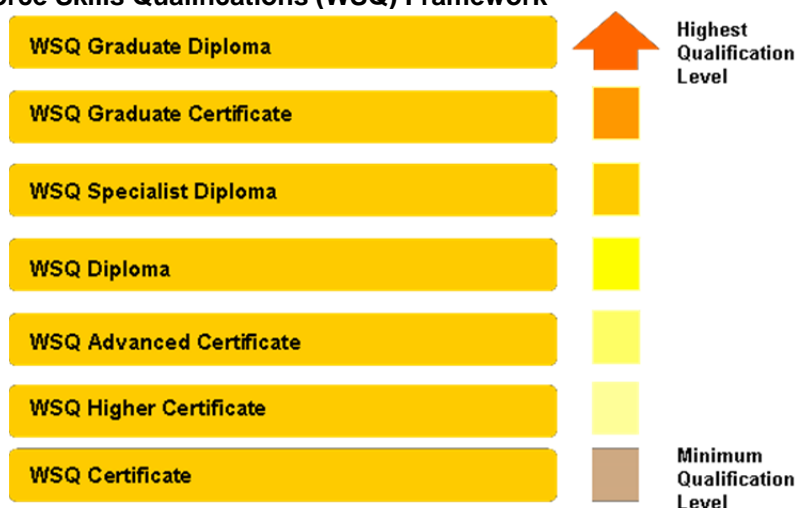
Source: Lee, 2011.

The WSQ system now covers 26 industry clusters such as aerospace, security, digital animation and tourism, and interdisciplinary frameworks that include areas such as business management, leadership, people management and service excellence.

5. PROGRESSION PATHWAYS AND RECOGNITION AND VALIDATION OF NON-FORMAL AND INFORMAL LEARNING

Workforce education and development in Singapore comprises two main components: Pre-employment Education and Training (PET) and Continuing Education and Training (CET).

The PET system is supported by a robust world class education system covering early childhood to university education. The PET system is for children and young adults. It equips them with broad-based education and life skills, develops them as individuals and prepares them for adulthood and the workforce.

The CET system is more diverse in provision and is aimed at adults, including all members of the workforce. The aim of CET is to support Singapore's economic growth by equipping the workforce with the competences they need to remain employable, so that industries benefit from the high-level performance of skilled workers. CET is thus targeted to the specific needs of learners and industries.

The WSQ framework is designed to promote progression pathways between the different types and levels of qualifications, allowing individuals to continually re-skill and upgrade. Modular and flexible training programmes enable individuals to acquire new skills and knowledge leading either to Statements of Attainment or to full qualifications which are recognized by industry and awarded by the WDA and other established awarding bodies. Assessment and certification are based on the candidate's ability to demonstrate the capabilities required by industry. WSQ qualifications are comparable to credentials issued by international and local awarding bodies.

6. REFERENCING TO REGIONAL FRAMEWORKS

In 2007 and 2008 the WDA commissioned UK NARIC[1] to conduct a benchmarking study to compare the WSQ framework to Singapore's academic system under the Singapore Ministry of Education, as well as to the national qualifications frameworks of Australia, New Zealand, Canada, United Kingdom (England and Scotland), The Netherlands and Japan. The findings of the study indicate that the WSQ system is comparable both to Singapore's academic system and to other national qualifications systems. These findings encouraged increasing numbers of industry stakeholders, employers and institutions to recognize WSQ awards as admissions qualifications for the purposes of employment and further study. The Singapore Department of Statistics has also included WSQ awards in the Singapore Standard Educational Classification alongside Singapore's academic awards.

7. IMPORTANT LESSONS AND FUTURE PLANS

The shift towards adoption of the WSQ system as Singapore's chief qualifications system for vocational skills did not come about easily, as many employers and institutions were inclined to give preference to traditional academic qualifications and needed first to be convinced of the value of WSQ qualifications. Yet year on year since the inception of the system, the WDA has seen a steady increase in the number of WSQ certifications being issued. Companies and individuals alike have reported the positive impact of the WSQ system. One lesson to be learned from the WSQ experience is that it is crucial to involve the right mix of partners and stakeholders in the development and implementation of a qualifications system. Government agencies need to work hand-in-hand to address and resolve manpower development issues in any given sector.

In future, Singapore plans to broaden WSQ coverage to cater to workers of all levels, including professionals, managers and executives: the so-called 'PMEs' who are growing in proportion to rank-and-file workers. In the immediate term, the WDA will be working more closely with other local institutions to make CET truly seamless for individuals, using research to identify and incorporate new and best practices to enhance CET provision through the WSQ system.

MAIN SOURCES OF INFORMATION

Institute for Adult Learning (IAL). http://www.ial.edu.sg/
Labour statistics and indicators are available at http://www.mom.gov.sg/Pages/default.aspx Lee, T. 2011. *Singapore's CET qualifications framework: The Singapore workforce skills qualifications system.* (International Seminar on National Qualification Framework (NQF) Policies and Strategies, April 27-28 2011, Bangkok, Thailand). Singapore, Workforce Development Agency.
Low, L. 2000. *Education, Skills Training and National Development: Experience and lessons from Singapor*e. Tokyo, Asian Productivity Organization.
Low, L. 2006. *The Political Economy of a City-State Revisited*. Singapore, Marshall Cavendish Academic.

---

[1]UK NARIC is the National Agency responsible for providing information, advice and expert opinion on qualifications world-wide.