## Singapore

### 1. Outline of Employment and Unemployment Situation

Singapore had a population of 4,185,200 (including citizens residing abroad) in the same year. Its resident population was 3,437,300, and those aged 15 or above accounted for 2,723,100 of the whole resident population. The economically active population was 2.15 million and the number of unemployed was 140,000, which resulted in an unemployment rate of 4.7%. In terms of the economically active population among young people, 15 to 19 years old accounted for 35,000 and 20 to 24 years old for 217,000. Together, these people constituted 11.7% of the economically active population as a whole. The unemployment rate among young people was particularly high. The unemployment rate for 15 to 19 years old stood at 13.0% and that for 20 to 29 years old was 5.2%.

#### 2. Background of Manpower Training Policy

Amidst the intensifying global competition, Singapore has been pursuing industrial advances to sustain its robust economic growth. Industries that accounted for a large part of GDP for 2003 included manufacturing (26.3%), retail trade (13.1%), financial service (11.6%), and transportation and communication (11.1%). Shipbuilding and petrochemical products had accounted for a large part of GDP till the end of the 1970s. Electronics products have shown remarkable growth since then.

Singapore considers technical education and training, and vocational training as an important political agenda. It aims to make the best of its manpower, because it has a small population. In August 1999, the Ministry of Manpower (MOM) launched the "Manpower 21 Plan" to present a vision for manpower development in an attempt to improve the lifelong employability of the people of Singapore. The Workforce Development Agency (WDA), which operates under the control of MOM, estimated the manpower shortage in 2009 by school types. According to its estimation, there will be a shortage of approximately 230,000 workers who are graduates of commercial high schools or industrial high schools (graduates of post secondary education), a shortage of approximately 75,000 workers who are junior college graduates (with a diploma) and a shortage of approximately 47,500 workers who are university graduates (with a degree). According to the breakdown of the number of graduates who entered employment by school types in 2003, 2,470,000 people entered employment upon graduation from commercial or industrial high schools, 1,320,000 people upon graduation from junior colleges, and 2,440,000 people upon graduation from universities.

#### 3. Vocational Training System

In Singapore, vocational training is planned and implemented largely by the Ministry of Manpower (MOM) and the Ministry of Education (MOE). MOM established the Workforce Development Agency (WDA) in October 2003 by consolidating its departments in charge of vocational training and the Skills Development Fund (SDF), one of the units of the Productivity and Standards Board (PBS) that was operating under the control of the Ministry of Trade and Industry. Its mission is to enhance the employability and competitiveness of employees and job seekers, thereby building a workforce that meets the changing needs of Singapore's economy.

In the meantime, the Ministry of Education provides technical education and training (the term "technical education and training" is used to distinguish it from vocational training conducted by MOM) mainly through the Institute of Technical Education (ITE) that is operating under its control. Technical education and training are conducted as part of academic education to help learners acquire a broad range of technical skills.

## 4. Vocational Training Program

### (1) Vocational Training Provided by WDA

WDA does not operate a vocational training institute such as a vocational school. Instead, it subsidizes companies that provide vocational training and private vocational training schools. One of its primary roles is to determine the qualifications obtained by trainees of various training courses. WDA considers it important to offer vocational training that would enable trainees to meet the needs of industries in which employment growth is expected.

The most profound characteristic of WDA is that it closely works with the industries to plan and implement vocational training policies. The Industry Division of WDA ensures that vocational training programs are developed to meet the needs of the industries. In addition, it pursues policies to facilitate the redeployment of manpower by transferring workers from depressed industries to industries faced with a serious shortage of manpower. The person in charge of vocational training at WDA stated that industries such as medical, financial service and insurance sectors, in particular, require more workers (as of August 2004).

WDA plans and implements a comprehensive range of vocational training programs, covering basic skills to professional skills. The table below shows the state of implementation of vocational training programs.

	Year 2003(*1)	Year 2004
Site of subsidized	1,165,518	1,196,518
vocational training program		
(number of sites)		
Vocational training related	186.9 million	198.7 million
fund (S\$)		

(\*1) WDA was established on September 1, 2003, upon which the Human Capital Development Programme and the Labour Market Development Programme were consolidated into WDA. These two programs were counted separately between April 1, 2003 and August 31, 2003.

# ①SMCP (The Strategic Manpower Conversion Programme)

SMCP is very popular because trainees are assured of a job before they are sent for training. As for the SMCP Healthcare Course launched in April 2003, trainees will obtain the qualification of nurse or radiological technician upon their graduation. In the case of a nurse, trainees receive training through Nanyang Polytechnic (\*2) and then start their career at a healthcare institution upon graduation. Nanyang Polytechnic usually offers a three-year training program. However, the SMCP Healthcare Course finishes within a year. To qualify for SMCP, applicants should have a junior college degree (diploma) and a certain amount of years of professional career in non-healthcare positions. Training can be conducted in a short period of time, because trainees have a certain level of skill and are assured of a job before they begin training. WDA and healthcare institutions that are the potential employers share part of the training costs.

About 100 applicants are to be admitted to the Nursing Diploma Course at one time, and there is more than one opportunity to apply for the course in a year. In 2003, 14 healthcare institutes sponsored trainees through SMCP and there were 115 trainees admitted to the Nursing Diploma Course.

(\*2) There are four polytechnics (under the control of the Ministry of Education) in Singapore including Nanyang Polytechnic. Polytechnics offer a three-year course and trainees receive a diploma upon their graduation to start working as a middle-ranking engineer or manager.

There are other courses that are related to IT and designed to provide specific training programs centered on programming, networks or databases. These programs are offered in two courses, Infocomm and e-learning. A total of 235 companies sponsor 897 trainees in the two courses. The table below shows the number of sponsor companies and trainees.

	2000	2001	2002	2003	Total
Companies participating	ng 85	55	28	9	177
in Infocomm					
Trainee					
	142	204	303	90	739
Companies participating	ng —	16	30	12	58
in e-learning	_				
Trainee					
		40	85	33	158

## 3 Skills Development Fund

The Skills Development Fund (SDF) was founded in 1979 and placed under the authority of WDA upon its establishment in September 2003. Its primary objective is to offer subsidies to companies that provide vocational training to their employees. It does not offer subsidies to individuals who take on vocational training. Most of its financial resources consist of Skills Development Levy collected from business proprietors. Whether domestic companies or foreign companies, all employers have an obligation to pay this levy. They are liable to pay one percent of the total amount of remuneration paid to employees whose monthly income is less than S\$1,800 (as of August 2004). Employees include part-time employees, short-term contract employees and foreign employees. The table below shows funding provided by SDF in 2003.

(Year 2003)

	Total	Production/quality	Computer	Engineering	Technical
		related funding	related funding	related	service related
				funding	funding
Amount of	108,841,951	15,663,208	10,334,928	8,705,451	45,240,708
subsidy	(100.0%)	(14.4%)	(9.5%)	(8.0%)	(41.6%)
(S\$)					
Number of	651,274	171,847	98,440	81,227	204,636
training	(100.0%)	(26.4%)	(15.1%)	(12.5%)	(31.4%)
sites that					
received					
funding					

Management/	Skilled	Other
Supervision	worker/	
related	Low skill	
funding	worker	
	related	
11,041,004	10,994,151	6,862,501
(10.1%)	(10.1%)	(1.6%)
74,496	10,104	10,474
(11.4%)	(1.6%)	(1.6%)

### (2) Technical Education and Training Provided by ITE

ITE provides technical education and training targeted at secondary school graduates. There are two types of training, the full-time programs offered at vocational schools and the traineeship scheme that offers in-company on-the-job training. ITE recently began providing technical education and training to secondary school leavers. It spent S\$171.21 million out of the 2003 budget of the Ministry of Education.

### ①Full-Time Programs

Presently, vocational schools (10 schools across the country as of 2003) offer 29 training programs. Trainees receive both theory and practical training five days a week. In 2003, 11,113 trainees registered for the full-time programs, of which 8,201 completed the programs. Qualifications obtainable upon graduation and the training period of the full-time programs are listed below.

- OIndustry-Specific Certificate: Engineering courses such as electricity and electronics (2 years).
- OBusiness Certificate: Courses including accounting and service skills required in the office (2 years).
- OHigher National ITE Certificate 2 (NITEC-2): Courses including precision machinery and metal processing (2 years).
- O National ITE Certificate 3 (NITEC-3): These courses cover the same fields as the NITEC-2, but are designed to acquire lower level skills through the traineeship and other schemes.
- ONational Certificate Course: These courses are designed to provide knowledge and skills required for healthcare and nursing (2 years).
- Office Service Skills Certificate: It can be obtained upon completion of office skills related courses (1 year).

#### 2 Traineeship Scheme

The training received by a trainee comprises of off-the-job training and on-the-job training. This scheme, which was modeled after the Dual System developed in Germany, enables trainees to "learn as they work (earn as they learn)." On-the-job training is offered at a sponsoring company and off-the-job training is provided at ITE or a training center accredited by ITE. Traineeship programs cover extensive fields, including aerospace, automotive, management, electrical, electronics and healthcare, and there are 83 traineeship programs. Trainees can obtain nationally recognized certificates such as National Certificate 2 and 3 upon completion of most of the traineeship programs. Many sponsoring companies continue to employ the trainees after the completion of the traineeship programs.

#### 5. Certification System

This section examines the certification systems that WDA oversees. WDA established a framework for recognizing vocational skills in September 2000, when it launched the National Skills Recognition System (NSRS). Drawing on the experiences of the National Vocational Qualifications System, NSRS aims to establish a national framework of job skill competencies for students with no working experience and for workers in all industries. Its establishment was prompted by the fact that there were some 1 million workers who perform jobs that do not have clear competency standards. These workers include clerical, sales and service workers, production operators and cleaners. Without the standards, they were unable to benchmark or upgrade their skills.

NSRS differs from other systems on the point that the industries lead the efforts to identify critical skills for each job. To date, a total of 592 competency standards have been established for 69 jobs, including hotel, department store, supermarket, call center, sanitary service and marine transport. Workers can obtain a National Skills Certificate when they complete the training provided by a relevant course. Skills are divided into three levels.

- O National Skills Certificate (NSC) 3: Predictable, routine jobs,
  - e.g., waiter who serves at a table.
- O National Skills Certificate (NSC) 2: Includes some complex, non-routine jobs,
  - e.g., waiter who serves at a buffet.
- O National Skills Certificate (NSC) 1: Wide range of jobs to be performed under varied circumstances,

e.g., restaurant manager.

However, it is generally recognized that NSRS has not been sufficiently responding to adult workers' needs for continuous vocational training. Reportedly, WDA started discussing the

possibility of introducing a new system.

In the meantime, ITE offers a series of Public Vocational Tests, in addition to the certification of trainees upon their completion of a full-time training program or traineeship scheme. The Public Vocational Tests are directed at meeting the skills requirements of a broad range of industry areas, and thus cover the skill levels of National Skills Certification 2 and 3. The Public Trade Test System allows workers to attain certification without taking a vocational training course.

### 6. Job Matching after Training

Nearly 100% of trainees enter employment upon the completion of their courses through SMCP, one of the vocational training programs planned and offered by WDA. This is because trainees are assured of a job before they are sent for training. A network of 22 Distributed CareerLink Centres has been set up around the country to provide information about job offers and applications.

Meanwhile, ITE's vocational training programs have a 100% placement rate, because upon completion of the traineeship scheme trainees are employed by the sponsoring company where they had received on-the-job training.