

# EDUCATION



Singapore's education system aims to nurture every child and help all students discover their talents, realise their full potential, and develop a passion for life-long learning.

“Thinking Schools, Learning Nation” (TSLN) — adopted in 1997 as Singapore’s vision in education — describes a nation of thinking and committed citizens capable of meeting the challenges of the future, and an education system geared to the needs of the 21st century. Since 2003, Singapore has also focused on nurturing a spirit of Innovation and Enterprise (I&E) among students and teachers. “Teach Less, Learn More” (TLLM) was a call for all educators to teach better, improve the quality of interaction between teachers and students, and equip students with the knowledge, skills and values that prepare them for life.

A cornerstone of Singapore’s education system, the bilingual policy allows each child to learn English and his Mother Tongue, which could be Malay, Chinese or Tamil, to the best of his abilities. This enables children to be proficient in English, which is the language of commerce, technology and administration, and their Mother Tongue, the language of their cultural heritage.

There are opportunities for every child in Singapore to undergo at least ten years of general education. The school system features a national curriculum, with major national examinations at the end of the primary, secondary and junior college years. In recent years, Singapore has also moved towards a more flexible and diverse education system, aimed at providing students with greater flexibility and choice. Upon completion of their primary education, students can choose from a range of educational institutions and programmes that cater to different strengths and interests. To allow a greater range of student achievements and talents to be recognised, selected secondary schools, junior colleges, polytechnics and universities have the

flexibility to admit a percentage of their intake using school-based criteria in the direct or discretionary admission exercises.

## Primary Education

At the primary level, students go through a six-year course aimed at giving them a good grasp of English, Mother Tongue and Mathematics. In addition, students learn Science, Social Studies, Civics & Moral Education, Music, Art & Crafts, Health Education and Physical Education. They are also encouraged to participate in Co-Curricular Activities (CCAs) and Community Involvement Programme (CIP).

Starting from the 2008 Primary 5 cohort, primary schools have introduced Subject-based Banding to replace the EM3 stream. With Subject-based Banding, students can take a mix of Standard or Foundation subjects depending on their aptitude in each subject. Under the previous system of streaming, students in the EM3 stream take all academic subjects at the Foundation level, while students in the merged stream<sup>1</sup> take all academic subjects at the Standard level.

At the end of Primary 6, students take the Primary School Leaving Examination (PSLE), which assesses their suitability for secondary education and places them in the appropriate secondary school course that will match their learning pace, ability and inclination.

## Secondary Education

At the secondary level, students undergo one of three courses designed to match their learning abilities and interests:

The Express Course is a four-year course leading to the Singapore-Cambridge General Certificate of Education Ordinary Level (GCE ‘O’ Level) Examination. In this course,

<sup>1</sup> From 2004, the distinction between the EM1 and EM2 streams was removed, and schools were given the autonomy to band their pupils by ability, in ways that add the most educational value.

students learn English and Mother Tongue, as well as Mathematics, Science and the Humanities.

The Normal (Academic) Course is a four-year course leading to the GCE Normal Level ('N' Level) Examination. In the Normal (Academic) Course, students learn a range of subjects similar to those in the Express Course. Students who do well at the 'N' levels will qualify for an additional year to prepare for the 'O' levels. Selected students may offer 'O' level subjects at Secondary 4, or bypass the 'N' levels and progress directly to Secondary 5 to take the 'O' levels. Students who do well enough in their 'N' levels to meet the criteria for progression to Secondary 5 will also be given the additional option of enrolling in a new curriculum track comprising direct entry to Higher National ITE Certificate (*Higher Nitec*) courses at the Institute of Technical Education (ITE). Starting from 2013, students who do very well at the 'N' levels will have two new "through-train" pathways to the polytechnics: (i) a new one-year polytechnic Foundation Programme (FP) and (ii) a two-year Higher Nitec pathway. The latter builds on the existing ITE Direct Entry Scheme (DES).

The Normal (Technical) Course is a four-year course leading to the GCE 'N' Level Examination. In this course, students learn English, Mother Tongue, Mathematics and subjects with technical or practical emphases. Since 2005, schools have also been offering Elective Modules, which cover a wide range of subjects including nursing, hospitality, digital animation and precision engineering. To enhance experiential and practice-oriented learning, a revised Normal (Technical) curriculum has been implemented in all schools from 2007.

Since 2006, secondary schools have also been offering Advanced Elective Modules in collaboration with polytechnics, to allow students to experience and benefit from practice-oriented learning in fields as diverse as digital media and entrepreneurship. Upper

secondary students in participating schools are eligible to offer these modules.

Starting from January 2008, secondary schools have also partnered the polytechnics to offer new 'O' level subjects in applied disciplines. These new Applied Subjects will be reflected in the students' GCE 'O' level Examination Certificates and will be recognised for admission into Junior Colleges and Polytechnics. The introduction of Applied Subjects will allow students to benefit from being exposed to applied learning options in their secondary school years.

### **Specialised Schools**

To better cater to students who can benefit from a more customised and vocational curriculum, NorthLight School was established. The school offers a three- or four-year enhanced vocational programme. Graduates of the school can progress to further education at the ITE, employment or apprenticeship with the industries. In 2009, the remaining vocational training centre, Assumption Vocational Institute, was remodeled to form the Assumption Pathway School to offer a similar vocational programme.

From 2013, two new specialised secondary schools for Normal (Technical) students will be set up. The schools will adopt a strong focus on interactive, practice-oriented and ICT-enabled teaching methods.

### **Integrated Programme**

Students who are clearly university-bound, and could do well in a less structured environment, also have the choice of enrolling in the Integrated Programme (IP), which spans secondary and junior college education without intermediate national examinations at the end of secondary school. Time previously used to prepare students for the GCE 'O' Level Examination would be used to engage them in broader learning experiences. Selected schools also offer alternative curricula and qualifications (e.g. International Baccalaureate).

## Specialised Independent Schools

Specialised Independent Schools (SIS) have been set up to cater to students who are talented in sports, mathematics and science, and the arts to allow such students to further develop their talents with customised curricula. The Singapore Sports School was started in 2004 while the School of the Arts was opened in January 2008. The NUS High School of Mathematics and Science opened its doors to students in 2005, providing a six-year education with students graduating with the school's own diploma. In 2010, a new SIS, the School for Science and Technology was set up to provide capable students with a strong foundation in both academic and applied learning.

## Post-Secondary Education

On completing secondary education, students can enter a junior college for a two-year pre-university course or a centralised institute for a three-year course. At the end of the pre-university course, students sit for the GCE Advanced Level ('A' Level) Examination.

Students interested in technical and commercial studies can enrol in the polytechnics or the Institute of Technical Education (ITE). Polytechnic graduates who do well may pursue degree courses at the universities, while ITE graduates who perform well may pursue diploma courses at the polytechnics.

Students interested in the creative arts can choose to enrol in the LASALLE College of the Arts or the Nanyang Academy of Fine Arts which offer diploma programmes in Visual and Performing Arts. These are funded by the Ministry of Education and include programmes in music, theatre, dance, interior design and fashion design.

## Institute of Technical Education

The Institute of Technical Education (ITE) was established on 1 April 1992 as a post-secondary institution, providing pre-employment training for secondary school leavers, as well as part-time education and skills training for adult learners.

At ITE, full-time training and traineeship programmes are offered to school leavers with GCE 'O' and 'N' qualifications.

Full-time programmes, which lead to the award of the Higher National ITE Certificate (*Higher Nitec*) and National ITE Certificate (*Nitec*), are offered in the areas of applied & health sciences, business & services, design & media, engineering, hospitality and info-communications technology. In collaboration with overseas institutions, ITE offers Technical Diploma programmes in niche areas as another pathway for upgrading.

Traineeship is an 'earn-as-you-learn' scheme for secondary school leavers. It has two training components, namely On-the-Job Training (OJT) and Off-the-Job Training (Off-JT). OJT is conducted by the company on its premises. Off-JT, however, could be provided by ITE, industry training centres or companies certified by ITE as Approved Training Centres.

For adult learners, skills training and academic education programmes are offered. Employees can also undergo OJT in companies that are Certified OJT Centres. In addition, ITE conducts skills evaluation tests for public candidates and instructional skills and related programmes for industry trainers.

Adult learners may choose from a range of *Master Nitec*, *Higher Nitec*, *Nitec* and ITE Skills Certificate (ISC) programmes to upgrade their skills. The programmes are offered in modules of six months' duration, giving adult learners the flexibility to sign up

for training based on their needs. Those who have acquired the *Nitec/Higher Nitec* qualification may continue to update their skills and knowledge through the *Post-Nitec* programmes.

For adult learners who wish to upgrade themselves academically, ITE offers a part-time General Education Programme from Secondary One Normal to GCE 'N' and GCE 'O' levels.

### Higher Learning

The institutions of higher learning in Singapore are the National University of Singapore, Nanyang Technological University (including National Institute of Education), Singapore Management University, Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic.

The *National University of Singapore* (NUS) was established in August 1980 with the merger of the University of Singapore (founded in 1962) and Nanyang University (founded in 1955).

NUS has 14 faculties and schools, of which nine offer courses leading to first degrees and higher degrees. They are, namely, Arts and Social Sciences, Business, Computing, Dentistry, Design and Environment, Engineering, Law, Medicine and Science. The University Scholars' Programme offers courses leading to first degrees only; the Yong Siew Toh Conservatory of Music offers Graduate Diploma programmes in addition to courses leading to first degrees. The other three schools: Duke-NUS Graduate Medical School Singapore, NUS Graduate School for Integrative Sciences and Engineering, and Lee Kuan Yew School of Public Policy, offer higher degree courses only. There is also a teaching institute known as the Institute of Systems Science.

NUS has also established Research Centres of Excellence, as well as specialist research institutes and centres to promote research and advanced training in areas of strategic importance to the nation's development. These include biomedical and life sciences, translational medicine, nanoscience and nanotechnology, quantum information and technology, environment and water technology, interactive and digital media, maritime research and transportation, logistics and supply chain management, and defence-related research.

*Nanyang Technological University* (NTU) is a research-intensive university with globally-acknowledged strengths in science and engineering. The university has roots that go back to 1955 when Nanyang University was set up. In 1981, Nanyang Technological Institute (NTI) was established on the premises of the former Nanyang University. In 1991, NTI was inaugurated as NTU with the absorption of the National Institute of Education. The alumni rolls of the former Nanyang University were transferred to NTU in 1996.

The University is organised into four colleges with 12 schools, and four autonomous entities:

- College of Engineering (comprising the *School of Chemical and Biomedical Engineering*, *School of Civil and Environmental Engineering*, *School of Computer Engineering*, *School of Electrical and Electronic Engineering*, *School of Materials Science and Engineering*, and *School of Mechanical and Aerospace Engineering*)
- College of Business (*Nanyang Business School*)
- College of Science (comprising the *School of Biological Sciences*, and *School of Physical and Mathematical Sciences*)

- College of Humanities, Arts & Social Sciences (comprising the *School of Art, Design and Media, School of Humanities and Social Sciences, and Wee Kim Wee School of Communication and Information*)
- National Institute of Education, S Rajaratnam School of International Studies, Earth Observatory of Singapore and Singapore Centre on Environmental Life Sciences Engineering

The schools offer undergraduate programmes as well as a range of graduate programmes leading to Master's degrees, Doctor of Philosophy degrees and graduate diplomas.

NTU started a life sciences graduate school at its one-north campus in 2009 and partnered the Faculty of Medicine of Imperial College London in 2010 to set up a new medical school in Singapore, the Lee Kong Chian School of Medicine, which is Imperial's first medical school outside the United Kingdom.

NTU also has links with over 390 overseas universities and institutes leading to joint academic and research programmes, as well as interactions among faculty and students.

*The National Institute of Education* (NIE), formed on 1 July 1991 through the amalgamation of the Institute of Education and the College of Physical Education, became part of NTU on the same day. NIE provides professional training for teachers as well as the study of a wide range of academic subjects.

NIE offers four-year Bachelor of Arts (Education) and Bachelor of Science (Education) programmes, and part-time Bachelor of Education Programme, as well as one-year or two-year Diploma in Education and Diploma in Physical Education Programmes for those with GCE 'A' Level and Polytechnic

Diploma qualifications. It also offers the Postgraduate Diploma in Education Programme for university graduates. In addition to initial teacher preparation programmes, NIE also offers over 30 other programmes leading to Master's, Doctor of Philosophy (PhD) and Doctor of Education (EdD) degrees. The Master of Education programme has 18 specialisations while the EdD is a Dual Award Degree with the Institute of Education, University of London. There is also a wide range of professional development programmes for serving teachers and executive leadership programmes for Principals, Heads of Departments and other school leaders.

*The Singapore Management University* (SMU) is Singapore's first autonomous university to offer an American-style education modeled after the Wharton School of the University of Pennsylvania. SMU comprises six schools: *Lee Kong Chian School of Business, School of Accountancy, School of Economics, School of Social Sciences, School of Information Systems* and *School of Law*. Together, they offer Bachelor's, Master's and PhD degree programmes in business and other disciplines. Executive education brings business leaders and executives back to school for professional development and competency training. SMU is a mid-sized university comprising 7,000 undergraduate and postgraduate students.

At SMU, students undergo a distinctive pedagogy of broad-based learning and interactive seminar-style teaching in small classes.

SMU emphasises multi-disciplinary, industry-relevant research that generates evidence-based solutions derived from insights that cross disciplines, addresses Asian issues of global relevance, and bridges theory and practice. Many research centres and institutes are established, in partnership with the business community, to carry out research, thought-leadership and industry engagement.

*Singapore Institute of Technology* (SIT) was established by the Ministry of Education in September 2009 to provide upgrading opportunities primarily for polytechnic graduates. In consultation with various government agencies, SIT has brought to Singapore degree programmes through partnerships with reputable overseas universities. These industry-focused programmes are targeted at key growth sectors of the economy and cover the areas of Engineering & Applied Sciences, Allied Health & Nursing, Digital Media, Hospitality and Design.

SIT is committed to a unique tripartite collaborative model with the overseas university partners and the five local polytechnics to offer polytechnic graduates more opportunities for learning at the tertiary level.

To date, SIT has partnered seven overseas universities, offering 17 degree programmes. In its first Academic Year 2010, SIT commenced operations with 500 students. At steady state, SIT aims to take in at least 2000 full-time students per academic year. SIT will also offer part-time degree programmes catered to working professionals.

*The Singapore University of Technology & Design* (SUTD) was incorporated as Singapore's fourth publicly-funded university in July 2009. It is positioned as a top-tier research-intensive university, whose mission is to produce technically-grounded leaders and innovators to serve societal needs. SUTD will start its first academic year in April 2012 with an initial intake of 500 undergraduate students, and will admit 1,000 students at steady state.

SUTD is distinguished by a unique, high quality educational programme, with a strong focus on innovation and entrepreneurship. Established in collaboration with the Massachusetts Institute of Technology (MIT), it will offer a novel multi-disciplinary curriculum, with design thinking as a strong horizontal that serves to integrate its four pillars of undergraduate study:

- Architecture and Sustainable Design
- Engineering Product Development
- Engineering Systems and Design
- Information Systems Technology and Design

*Polytechnics:* There are five polytechnics offering a wide range of courses at diploma and advanced diploma levels. They are the Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic. Each polytechnic specialises in specific fields, in addition to various courses in engineering (aeronautical, civil and structural, electrical, electronics, mechanical & manufacturing), chemical & life sciences and other sciences, design, business, management, accountancy, media and communication, tourism and hospitality management, performing arts, humanities and information technology.

The specialised fields include architectural studies, applied drama, maritime studies, publishing, law and management, library studies, health sciences and psychology studies, optometry, cardiac technology, sonography, police studies and security management, insurance practice and pre-school education. Some of the courses are conducted on a part-time basis for working adults.

## 19.1 ENROLMENT IN EDUCATIONAL INSTITUTIONS

|   | Number  |         |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|---------|---------|
|   | 2000    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    |
| Total   | 633,451 | 680,619 | 688,310 | 700,774 | 704,117 | 704,719 | 698,544 |
| Primary Schools                               | 305,705 | 290,261 | 284,600 | 285,048 | 279,272 | 272,254 | 263,906 |
| Secondary Schools                             | 175,405 | 213,063 | 215,097 | 218,062 | 217,081 | 217,230 | 214,388 |
| Junior Colleges <sup>1</sup>                  | 24,804  | 28,901  | 30,726  | 31,627  | 32,579  | 32,110  | 32,420  |
| Institute of Technical Education <sup>2</sup> | 15,974  | 20,855  | 22,954  | 23,465  | 24,367  | 24,846  | 24,789  |
| Polytechnics <sup>3</sup>                     | 58,372  | 64,422  | 67,667  | 72,379  | 76,756  | 80,635  | 83,542  |
| National Institute of Education <sup>4</sup>  | 3,335   | 3,676   | 4,348   | 4,447   | 5,034   | 4,934   | 4,965   |
| Universities <sup>5</sup>                     | 49,856  | 59,441  | 62,918  | 65,746  | 69,028  | 72,710  | 74,534  |

Source : Ministry of Education, Institute of Technical Education, Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic, Republic Polytechnic, National Institute of Education, National University of Singapore, Nanyang Technological University, Singapore Management University and Singapore Institute of Technology.

Note : Data for primary, secondary and junior college exclude private schools.

1 Includes Centralised Institutes.

2 Data refer to full-time peak student enrolment.

3 Data refer to students in full-time and part-time polytechnic diploma and advanced diploma courses offered by Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic.

4 Data refer to students in full-time and part-time diploma, postgraduate diploma and higher degree courses.

5 Data refer to full-time and part-time undergraduate and postgraduate students in National University of Singapore,

Nanyang Technological University, Singapore Management University and Singapore Institute of Technology (from 2010).

## 19.2 STUDENTS AND TEACHERS IN EDUCATIONAL INSTITUTIONS, 2010

|                                  | Number       |          |         |         |          |        |         |
|----------------------------------|--------------|----------|---------|---------|----------|--------|---------|
|                                  | Institutions | Students |         |         | Teachers |        |         |
|                                  |              | Total    | Males   | Females | Total    | Males  | Females |
| Total                            | 369          | 698,544  | 363,189 | 335,355 | 41,502   | 15,796 | 25,706  |
| Primary Schools                  | 173          | 256,801  | 133,023 | 123,778 | 13,318   | 2,422  | 10,896  |
| Secondary Schools                | 155          | 196,220  | 100,239 | 95,981  | 12,183   | 4,165  | 8,018   |
| Mixed Levels <sup>1</sup>        | 15           | 37,225   | 19,711  | 17,514  | 2,572    | 912    | 1,660   |
| Junior Colleges <sup>2</sup>     | 13           | 20,468   | 9,156   | 11,312  | 1,789    | 733    | 1,056   |
| Institute of Technical Education | 3            | 24,789   | 15,933  | 8,856   | 1,645    | 1,084  | 561     |
| Polytechnics <sup>3</sup>        | 5            | 83,542   | 44,303  | 39,239  | 5,059    | 3,000  | 2,059   |
| National Institute of Education  | 1            | 4,965    | 1,658   | 3,307   | 716      | 337    | 379     |
| Universities <sup>4</sup>        | 4            | 74,534   | 39,166  | 35,368  | 4,220    | 3,143  | 1,077   |

Source : Ministry of Education, Institute of Technical Education, Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic, Republic Polytechnic, National Institute of Education, National University of Singapore, Nanyang Technological University, Singapore Management University and Singapore Institute of Technology.

Notes : Data for primary, secondary and junior college exclude private schools.

Except for the Institute of Technical Education, data for institutions of higher learning include part-time students and teachers.

1 Refers to institutions that offer multiple educational levels, namely: primary & secondary (P1-S4/5), secondary & junior college (S1-JC2), and upper secondary & junior college (S3-JC2).

2 Includes Centralised Institutes.

3 Refers to Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic.

4 Refers to National University of Singapore, Nanyang Technological University, Singapore Management University and Singapore Institute of Technology.

## 19.3

**ENROLMENT IN GOVERNMENT AND GOVERNMENT-AIDED PRIMARY SCHOOLS  
BY LEVEL AND AGE**

|                       | Number  |         |         |         |         |         |         |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|
|                       | 2000    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    |
| Total                 | 305,705 | 290,261 | 284,600 | 285,048 | 279,272 | 272,254 | 263,906 |
| <b>Level</b>          |         |         |         |         |         |         |         |
| Primary 1             | 50,204  | 43,492  | 43,914  | 47,964  | 42,880  | 42,489  | 39,595  |
| Primary 2             | 49,844  | 47,348  | 43,652  | 44,370  | 47,994  | 42,765  | 42,405  |
| Primary 3             | 50,019  | 49,070  | 47,697  | 44,502  | 45,019  | 48,218  | 43,022  |
| Primary 4             | 52,116  | 49,217  | 49,368  | 48,345  | 44,926  | 45,200  | 48,418  |
| Primary 5             | 48,749  | 50,010  | 49,314  | 49,784  | 48,307  | 44,789  | 45,141  |
| Primary 6             | 54,773  | 51,124  | 50,655  | 50,083  | 50,146  | 48,793  | 45,325  |
| <b>Age (in years)</b> |         |         |         |         |         |         |         |
| Under 7               | 49,593  | 42,531  | 42,729  | 46,837  | 41,548  | 41,272  | 38,634  |
| 7 & Under 8           | 49,413  | 46,837  | 43,124  | 43,690  | 47,538  | 42,147  | 41,785  |
| 8 & Under 9           | 49,441  | 48,471  | 47,132  | 43,762  | 44,138  | 47,851  | 42,395  |
| 9 & Under 10          | 51,531  | 48,618  | 48,703  | 47,720  | 44,158  | 44,274  | 47,990  |
| 10 & Under 11         | 48,297  | 49,753  | 48,902  | 49,257  | 48,006  | 44,189  | 44,376  |
| 11 & Under 12         | 53,632  | 50,044  | 49,939  | 49,276  | 49,360  | 47,917  | 44,094  |
| 12 & Under 13         | 2,415   | 2,450   | 2,395   | 2,966   | 2,854   | 3,138   | 3,204   |
| 13 & Under 14         | 1,034   | 1,124   | 1,229   | 1,058   | 1,248   | 1,040   | 1,062   |
| 14 & Over             | 349     | 433     | 447     | 482     | 422     | 426     | 366     |

Source : Ministry of Education

# 19.4 ENROLMENT IN GOVERNMENT AND GOVERNMENT-AIDED SECONDARY SCHOOLS AND JUNIOR COLLEGES BY LEVEL AND AGE

|                               | Number  |         |         |         |         |         |         |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|
|                               | 2000    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    |
| Total                         | 200,209 | 241,964 | 245,823 | 249,689 | 249,660 | 249,340 | 246,808 |
| <b>Level</b>                  |         |         |         |         |         |         |         |
| Secondary 1                   | 44,417  | 50,230  | 50,772  | 50,687  | 50,214  | 50,083  | 48,670  |
| Special                       | 4,182   | 4,379   | 4,262   | 4,238   | -       | -       | -       |
| Express                       | 22,585  | 26,514  | 26,973  | 27,396  | 30,873  | 30,808  | 29,785  |
| Normal (Academic)             | 9,855   | 12,468  | 12,419  | 11,981  | 12,811  | 12,489  | 12,394  |
| Normal (Technical)            | 7,795   | 6,869   | 7,118   | 7,072   | 6,530   | 6,786   | 6,491   |
| Secondary 2                   | 38,985  | 50,856  | 50,807  | 52,026  | 51,830  | 51,043  | 50,935  |
| Special                       | 3,766   | 4,745   | 4,316   | 4,277   | 4,156   | -       | -       |
| Express                       | 19,939  | 26,768  | 26,747  | 27,473  | 27,781  | 31,159  | 31,296  |
| Normal (Academic)             | 9,472   | 12,357  | 13,191  | 13,282  | 12,879  | 13,445  | 12,978  |
| Normal (Technical)            | 5,808   | 6,986   | 6,553   | 6,994   | 7,014   | 6,439   | 6,661   |
| Secondary 3                   | 43,486  | 53,910  | 53,027  | 53,660  | 54,557  | 54,440  | 53,178  |
| Special                       | 4,329   | 4,995   | 5,155   | 4,818   | 4,751   | 4,626   | -       |
| Express                       | 22,573  | 28,493  | 27,541  | 27,856  | 28,456  | 28,959  | 32,933  |
| Normal (Academic)             | 10,609  | 14,329  | 13,557  | 14,386  | 14,481  | 13,932  | 14,048  |
| Normal (Technical)            | 5,975   | 6,093   | 6,774   | 6,600   | 6,869   | 6,923   | 6,197   |
| Secondary 4                   | 41,111  | 48,462  | 51,463  | 51,525  | 50,919  | 52,186  | 52,073  |
| Special                       | 4,100   | 4,370   | 4,764   | 4,894   | 4,629   | 4,535   | 4,053   |
| Express                       | 21,299  | 25,542  | 27,503  | 26,771  | 26,648  | 27,488  | 28,356  |
| Normal (Academic)             | 10,058  | 12,014  | 13,377  | 13,072  | 13,333  | 13,479  | 13,003  |
| Normal (Technical)            | 5,654   | 6,536   | 5,819   | 6,788   | 6,309   | 6,684   | 6,661   |
| Secondary 5 Normal (Academic) | 7,406   | 9,605   | 9,028   | 10,164  | 9,561   | 9,478   | 9,532   |
| Junior College 1 / Pre-U 1    | 12,191  | 16,173  | 15,144  | 17,156  | 16,836  | 16,739  | 16,898  |
| Junior College 2 / Pre-U 2    | 12,324  | 12,499  | 15,258  | 14,080  | 15,423  | 15,014  | 15,165  |
| Pre-U 3                       | 289     | 229     | 324     | 391     | 320     | 357     | 357     |
| <b>Age (in years)</b>         |         |         |         |         |         |         |         |
| Under 12                      | 33      | 11      | 13      | 15      | 9       | 13      | 8       |
| 12 & Under 13                 | 41,677  | 47,168  | 47,803  | 47,451  | 46,657  | 46,363  | 45,011  |
| 13 & Under 14                 | 37,569  | 48,434  | 48,552  | 49,585  | 49,432  | 48,673  | 48,563  |
| 14 & Under 15                 | 41,451  | 50,957  | 49,077  | 49,910  | 50,632  | 50,686  | 49,740  |
| 15 & Under 16                 | 40,195  | 47,991  | 51,551  | 50,427  | 50,923  | 51,816  | 51,604  |
| 16 & Under 17                 | 22,059  | 29,384  | 27,117  | 30,425  | 28,284  | 28,949  | 28,836  |
| 17 & Under 18                 | 14,608  | 15,060  | 18,366  | 17,775  | 18,938  | 17,557  | 17,916  |
| 18 & Under 19                 | 2,139   | 2,281   | 2,614   | 3,238   | 3,676   | 4,027   | 3,787   |
| 19 & Under 20                 | 405     | 574     | 639     | 749     | 966     | 1,070   | 1,119   |
| 20 & Over                     | 73      | 104     | 91      | 114     | 143     | 186     | 224     |

Source : Ministry of Education

Note : The Special and Express streams were merged, starting from Secondary 1, 2008.

# 19.5 ENROLMENT IN POLYTECHNIC DIPLOMA COURSES BY TYPE OF COURSE

| Type of Course                              | Number |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|
|   | 2000   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
| <b>MALES</b>                                | 31,108 | 34,266 | 36,123 | 38,625 | 40,583 | 42,030 | 42,960 |
| Education                                   | 11     | 15     | 17     | 63     | 92     | 155    | 212    |
| Applied Arts <sup>1</sup>                   | 841    | 1,056  | 1,356  | 1,583  | 1,821  | 2,071  | 2,352  |
| Humanities & Social Sciences                | -      | 10     | 17     | 40     | 90     | 154    | 229    |
| Mass Communication &<br>Information Science | 180    | 399    | 411    | 439    | 485    | 526    | 516    |
| Business & Administration <sup>2</sup>      | 3,064  | 3,267  | 3,810  | 4,605  | 5,672  | 6,471  | 6,958  |
| Legal Studies                               | 109    | 123    | 133    | 131    | 137    | 133    | 156    |
| Science & Related Technologies              | 444    | 1,169  | 1,286  | 1,487  | 1,504  | 1,535  | 1,605  |
| Health Sciences                             | 350    | 1,075  | 1,360  | 1,396  | 1,619  | 1,856  | 2,124  |
| Information Technology                      | 4,801  | 6,879  | 6,740  | 7,063  | 7,054  | 6,932  | 6,758  |
| Architecture & Building <sup>3</sup>        | 745    | 596    | 667    | 724    | 792    | 828    | 924    |
| Engineering Sciences                        | 20,097 | 19,155 | 19,873 | 20,500 | 20,670 | 20,706 | 20,486 |
| Services <sup>4</sup>                       | 466    | 522    | 453    | 594    | 647    | 663    | 640    |
| <b>FEMALES</b>                              | 24,936 | 28,858 | 30,420 | 32,358 | 34,179 | 36,424 | 37,940 |
| Education                                   | 194    | 469    | 517    | 575    | 612    | 712    | 874    |
| Applied Arts <sup>1</sup>                   | 864    | 1,543  | 1,859  | 2,150  | 2,355  | 2,656  | 2,952  |
| Humanities & Social Sciences                | -      | 73     | 136    | 222    | 360    | 501    | 647    |
| Mass Communication &<br>Information Science | 456    | 1,052  | 1,042  | 989    | 1,036  | 1,131  | 1,215  |
| Business & Administration <sup>2</sup>      | 7,929  | 7,268  | 7,524  | 8,400  | 9,465  | 10,468 | 11,153 |
| Legal Studies                               | 229    | 236    | 238    | 238    | 233    | 238    | 245    |
| Science & Related Technologies              | 1,168  | 1,682  | 1,777  | 2,076  | 2,207  | 2,397  | 2,647  |
| Health Sciences                             | 1,793  | 4,159  | 4,694  | 4,814  | 5,247  | 5,739  | 6,028  |
| Information Technology                      | 2,898  | 5,144  | 5,153  | 5,216  | 5,024  | 5,100  | 5,002  |
| Architecture & Building <sup>3</sup>        | 917    | 870    | 955    | 972    | 982    | 991    | 969    |
| Engineering Sciences                        | 8,352  | 6,173  | 6,303  | 6,435  | 6,341  | 6,139  | 5,846  |
| Services <sup>4</sup>                       | 136    | 189    | 222    | 271    | 317    | 352    | 362    |

Source : Singapore Polytechnic      Temasek Polytechnic      Republic Polytechnic  
 Ngee Ann Polytechnic      Nanyang Polytechnic

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time polytechnic diploma courses.

Data include students who are concurrently enrolled in advanced diploma courses.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation, Nautical Studies and Police Studies.

## 19.6

## ENROLMENT IN UNIVERSITY FIRST DEGREE COURSES BY TYPE OF COURSE

| Type of Course                               | Number |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|
|  | 2000   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
| <b>MALES</b>                                 | 19,556 | 23,220 | 24,657 | 25,191 | 26,063 | 27,532 | 28,375 |
| Education                                    | 211    | 249    | 212    | 234    | 301    | 406    | 465    |
| Applied Arts <sup>1</sup>                    | 22     | 143    | 223    | 282    | 342    | 408    | 469    |
| Humanities & Social Sciences                 | 1,477  | 1,823  | 2,135  | 2,388  | 2,701  | 2,986  | 3,098  |
| Mass Communication                           | 136    | 137    | 130    | 147    | 145    | 176    | 185    |
| Accountancy                                  | 715    | 829    | 1,087  | 1,100  | 1,120  | 1,163  | 1,129  |
| Business & Administration                    | 1,159  | 1,914  | 2,141  | 2,372  | 2,534  | 2,696  | 2,903  |
| Law  | 248    | 345    | 409    | 457    | 494    | 610    | 640    |
| Natural, Physical &<br>Mathematical Sciences | 1,153  | 1,846  | 2,041  | 2,243  | 2,592  | 2,917  | 3,159  |
| Medicine                                     | 611    | 690    | 685    | 671    | 670    | 682    | 685    |
| Dentistry                                    | 83     | 72     | 70     | 65     | 70     | 77     | 76     |
| Health Sciences                              | 66     | 81     | 94     | 128    | 176    | 242    | 281    |
| Information Technology                       | 1,236  | 1,278  | 1,429  | 1,570  | 1,775  | 1,966  | 2,178  |
| Architecture & Building <sup>2</sup>         | 578    | 609    | 582    | 579    | 600    | 639    | 669    |
| Engineering Sciences                         | 11,861 | 13,176 | 13,359 | 12,872 | 12,447 | 12,461 | 12,326 |
| Services <sup>3</sup>                        | -      | 28     | 60     | 83     | 96     | 103    | 112    |
| <b>FEMALES</b>                               | 18,092 | 22,133 | 23,449 | 25,372 | 26,535 | 27,826 | 28,742 |
| Education                                    | 616    | 695    | 652    | 791    | 1,174  | 1,329  | 1,376  |
| Applied Arts <sup>1</sup>                    | 26     | 212    | 334    | 429    | 503    | 549    | 607    |
| Humanities & Social Sciences                 | 3,966  | 4,331  | 4,887  | 5,697  | 6,058  | 6,435  | 6,511  |
| Mass Communication                           | 361    | 507    | 555    | 546    | 543    | 516    | 490    |
| Accountancy                                  | 1,567  | 1,732  | 1,845  | 1,734  | 1,645  | 1,488  | 1,492  |
| Business & Administration                    | 2,593  | 3,098  | 3,271  | 3,543  | 3,688  | 3,868  | 4,190  |
| Law  | 350    | 499    | 463    | 547    | 649    | 711    | 783    |
| Natural, Physical &<br>Mathematical Sciences | 2,295  | 3,203  | 3,513  | 3,925  | 4,227  | 4,457  | 4,481  |
| Medicine                                     | 336    | 479    | 503    | 536    | 567    | 596    | 620    |
| Dentistry                                    | 56     | 67     | 78     | 89     | 93     | 103    | 108    |
| Health Sciences                              | 223    | 352    | 489    | 617    | 711    | 800    | 783    |
| Information Technology                       | 688    | 722    | 743    | 768    | 804    | 920    | 1,029  |
| Architecture & Building <sup>2</sup>         | 847    | 870    | 877    | 966    | 973    | 1,032  | 1,117  |
| Engineering Sciences                         | 4,168  | 5,286  | 5,122  | 5,021  | 4,743  | 4,862  | 4,968  |
| Services <sup>3</sup>                        | -      | 80     | 117    | 163    | 157    | 160    | 187    |

Source : National University of Singapore  
Nanyang Technological University

Singapore Management University  
Singapore Institute of Technology (from 2010)

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time first degree courses.

- 1 Includes Industrial Design.
- 2 Includes Real Estate.
- 3 Includes Maritime Studies

## 19.7

## GRADUATES FROM POLYTECHNIC DIPLOMA COURSES BY TYPE OF COURSE

| Type of Course                              | Number |       |       |       |        |        |        |
|---|--------|-------|-------|-------|--------|--------|--------|
|   | 2000   | 2005  | 2006  | 2007  | 2008   | 2009   | 2010   |
| <b>MALES</b>                                | 8,182  | 9,560 | 9,649 | 9,754 | 10,659 | 11,375 | 11,595 |
| Education                                   | -      | -     | 3     | 3     | 9      | 4      | 34     |
| Applied Arts <sup>1</sup>                   | 191    | 251   | 223   | 298   | 382    | 428    | 489    |
| Humanities & Social Sciences                | -      | -     | -     | -     | 8      | 9      | 22     |
| Mass Communication &<br>Information Science | 53     | 136   | 120   | 136   | 117    | 132    | 156    |
| Business & Administration <sup>2</sup>      | 832    | 840   | 882   | 1,059 | 1,108  | 1,446  | 1,662  |
| Legal Studies                               | 29     | 34    | 28    | 39    | 43     | 47     | 35     |
| Science & Related Technologies              | 113    | 324   | 301   | 311   | 409    | 452    | 407    |
| Health Sciences                             | 83     | 178   | 267   | 407   | 408    | 418    | 423    |
| Information Technology                      | 904    | 2,157 | 2,067 | 1,862 | 2,050  | 2,078  | 2,075  |
| Architecture & Building <sup>3</sup>        | 308    | 176   | 161   | 176   | 175    | 233    | 221    |
| Engineering Sciences                        | 5,525  | 5,310 | 5,375 | 5,262 | 5,728  | 5,908  | 5,826  |
| Services <sup>4</sup>                       | 144    | 154   | 222   | 201   | 222    | 220    | 245    |
| <b>FEMALES</b>                              | 6,891  | 8,511 | 8,388 | 8,799 | 9,682  | 9,784  | 10,619 |
| Education                                   | -      | 111   | 128   | 156   | 175    | 173    | 208    |
| Applied Arts <sup>1</sup>                   | 211    | 308   | 319   | 409   | 582    | 576    | 703    |
| Humanities & Social Sciences                | -      | -     | -     | -     | 67     | 66     | 84     |
| Mass Communication &<br>Information Science | 184    | 282   | 296   | 400   | 318    | 303    | 325    |
| Business & Administration <sup>2</sup>      | 2,474  | 2,388 | 2,281 | 2,294 | 2,341  | 2,597  | 3,034  |
| Legal Studies                               | 71     | 84    | 78    | 82    | 78     | 67     | 90     |
| Science & Related Technologies              | 262    | 453   | 460   | 453   | 568    | 592    | 663    |
| Health Sciences                             | 488    | 994   | 1,130 | 1,517 | 1,432  | 1,477  | 1,677  |
| Information Technology                      | 576    | 1,526 | 1,515 | 1,415 | 1,720  | 1,525  | 1,493  |
| Architecture & Building <sup>3</sup>        | 310    | 249   | 233   | 274   | 293    | 308    | 318    |
| Engineering Sciences                        | 2,279  | 2,081 | 1,887 | 1,742 | 2,035  | 2,008  | 1,917  |
| Services <sup>4</sup>                       | 36     | 35    | 61    | 57    | 73     | 92     | 107    |

Source : Singapore Polytechnic  
Ngee Ann Polytechnic

Temasek Polytechnic  
Nanyang Polytechnic

Republic Polytechnic

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time polytechnic diploma courses.

Data refer to academic year.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation, Nautical Studies and Police Studies.

## 19.8

## GRADUATES FROM UNIVERSITY FIRST DEGREE COURSES BY TYPE OF COURSE

| Type of Course                               | Number |       |       |       |       |       |       |
|--|--------|-------|-------|-------|-------|-------|-------|
|  | 2000   | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  |
| <b>MALES</b>                                 | 4,536  | 4,949 | 5,207 | 5,823 | 5,736 | 6,004 | 6,496 |
| Education                                    | 35     | 86    | 89    | 73    | 53    | 67    | 67    |
| Applied Arts <sup>1</sup>                    | -      | 11    | 11    | 28    | 31    | 47    | 84    |
| Humanities & Social Sciences                 | 574    | 351   | 412   | 441   | 478   | 547   | 703   |
| Mass Communication                           | 34     | 36    | 45    | 28    | 32    | 36    | 30    |
| Accountancy                                  | 250    | 211   | 176   | 260   | 295   | 338   | 349   |
| Business & Administration                    | 328    | 322   | 432   | 493   | 505   | 638   | 705   |
| Law  | 74     | 62    | 70    | 84    | 94    | 92    | 139   |
| Natural, Physical &<br>Mathematical Sciences | 378    | 321   | 388   | 427   | 469   | 574   | 568   |
| Medicine                                     | 119    | 123   | 135   | 144   | 131   | 122   | 134   |
| Dentistry                                    | 17     | 22    | 18    | 21    | 18    | 12    | 16    |
| Health Sciences                              | 11     | 16    | 24    | 19    | 10    | 22    | 39    |
| Information Technology                       | 348    | 363   | 389   | 303   | 308   | 370   | 419   |
| Architecture & Building <sup>2</sup>         | 101    | 138   | 166   | 131   | 148   | 135   | 97    |
| Engineering Sciences                         | 2,267  | 2,887 | 2,852 | 3,371 | 3,150 | 2,991 | 3,117 |
| Services <sup>3</sup>                        | -      | -     | -     | -     | 14    | 13    | 29    |
| <b>FEMALES</b>                               | 4,870  | 5,360 | 5,503 | 5,670 | 6,036 | 6,254 | 6,300 |
| Education                                    | 115    | 278   | 302   | 189   | 172   | 281   | 262   |
| Applied Arts <sup>1</sup>                    | -      | 11    | 13    | 41    | 50    | 88    | 121   |
| Humanities & Social Sciences                 | 1,452  | 1,027 | 1,071 | 980   | 1,203 | 1,423 | 1,474 |
| Mass Communication                           | 80     | 110   | 110   | 141   | 132   | 128   | 147   |
| Accountancy                                  | 495    | 495   | 468   | 575   | 536   | 558   | 465   |
| Business & Administration                    | 851    | 799   | 819   | 894   | 960   | 895   | 948   |
| Law  | 79     | 125   | 134   | 123   | 115   | 118   | 90    |
| Natural, Physical &<br>Mathematical Sciences | 655    | 674   | 880   | 827   | 796   | 946   | 1,091 |
| Medicine                                     | 37     | 86    | 94    | 83    | 96    | 97    | 94    |
| Dentistry                                    | 15     | 12    | 14    | 15    | 17    | 19    | 25    |
| Health Sciences                              | 30     | 69    | 57    | 67    | 77    | 107   | 196   |
| Information Technology                       | 187    | 199   | 137   | 190   | 210   | 162   | 154   |
| Architecture & Building <sup>2</sup>         | 192    | 234   | 214   | 208   | 243   | 179   | 178   |
| Engineering Sciences                         | 682    | 1,241 | 1,190 | 1,337 | 1,386 | 1,217 | 1,020 |
| Services <sup>3</sup>                        | -      | -     | -     | -     | 43    | 36    | 35    |

Source : National University of Singapore  
Nanyang Technological University  
Singapore Management University

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Cover full-time and part-time first degree courses.

Data refer to academic year.

- 1 Includes Industrial Design.
- 2 Includes Real Estate.
- 3 Includes Maritime Studies.

## 19.9

ENROLMENT IN POLYTECHNIC ADVANCED DIPLOMA COURSES BY  
TYPE OF COURSE

| Type of Course                         | Number |       |       |       |       |       |       |
|--|--------|-------|-------|-------|-------|-------|-------|
|  | 2000   | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  |
| Total                                  | 2,328  | 1,298 | 1,148 | 1,417 | 2,044 | 2,242 | 2,642 |
| Education                              | 30     | 22    | 22    | 106   | 114   | 177   | 82    |
| Applied Arts <sup>1</sup>              | 65     | 49    | 60    | 35    | 34    | 38    | 92    |
| Humanities & Social Sciences           | 18     | -     | 30    | 52    | 57    | 57    | 105   |
| Business & Administration <sup>2</sup> | 400    | 255   | 217   | 219   | 468   | 525   | 633   |
| Science & Related Technologies         | 25     | 109   | 61    | 88    | 137   | 151   | 202   |
| Health Sciences                        | 162    | 266   | 257   | 235   | 535   | 565   | 646   |
| Information Technology                 | 796    | 107   | 82    | 105   | 171   | 206   | 302   |
| Architecture & Building <sup>3</sup>   | -      | 21    | 7     | -     | 22    | 45    | 36    |
| Engineering Sciences                   | 653    | 442   | 387   | 495   | 449   | 424   | 492   |
| Services <sup>4</sup>                  | 179    | 27    | 25    | 82    | 57    | 54    | 52    |

Source : Singapore Polytechnic      Temasek Polytechnic      Republic Polytechnic  
 Ngee Ann Polytechnic      Nanyang Polytechnic

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time post diploma, advanced diploma, management diploma, specialist diploma and postgraduate diploma courses.

Data include students who are concurrently enrolled in diploma courses.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation and Police Studies.

## 19.10

## ENROLMENT IN HIGHER DEGREE COURSES BY TYPE OF COURSE

| Type of Course                               | Number |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|
|  | 2000   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
| Total  | 12,774 | 14,958 | 16,282 | 17,059 | 18,719 | 19,483 | 19,566 |
| Education                                    | 321    | 550    | 1,075  | 1,358  | 1,681  | 1,592  | 1,603  |
| Humanities & Social Sciences                 | 1,324  | 1,613  | 1,638  | 1,659  | 1,815  | 1,945  | 1,923  |
| Mass Communication                           | 78     | 461    | 469    | 419    | 434    | 392    | 380    |
| Business & Administration <sup>1</sup>       | 2,054  | 1,667  | 2,218  | 2,525  | 2,805  | 2,826  | 2,808  |
| Law  | 136    | 253    | 279    | 316    | 341    | 239    | 244    |
| Natural, Physical &<br>Mathematical Sciences | 962    | 1,467  | 1,608  | 1,829  | 2,146  | 2,490  | 2,741  |
| Medicine & Dentistry <sup>2</sup>            | 599    | 1,152  | 1,199  | 1,107  | 1,156  | 1,141  | 1,199  |
| Information Technology                       | 919    | 1,008  | 1,112  | 1,156  | 1,439  | 1,502  | 1,455  |
| Architecture & Building <sup>3</sup>         | 617    | 456    | 478    | 497    | 500    | 545    | 581    |
| Engineering Sciences                         | 5,724  | 6,211  | 6,070  | 6,060  | 6,225  | 6,631  | 6,494  |
| Services                                     | 40     | 99     | 111    | 106    | 144    | 156    | 132    |
| Others                                       | -      | 21     | 25     | 27     | 33     | 24     | 6      |

Source : National University of Singapore      Singapore Management University  
 Nanyang Technological University      National Institute of Education

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time postgraduate diploma and higher degree courses offered by National University of Singapore, Nanyang Technological University and Singapore Management University, and higher degree courses offered by National Institute of Education.

- 1 Includes Accountancy.
- 2 Includes Pharmacy.
- 3 Includes Real Estate.

## 19.11 GRADUATES FROM POLYTECHNIC ADVANCED DIPLOMA COURSES BY TYPE OF COURSE

| Type of Course                         | Number |       |       |      |       |       |       |
|--|--------|-------|-------|------|-------|-------|-------|
|  | 2000   | 2005  | 2006  | 2007 | 2008  | 2009  | 2010  |
| Total                                  | 1,298  | 1,303 | 1,070 | 995  | 1,152 | 1,765 | 1,766 |
| Education                              | -      | 37    | 18    | 1    | 17    | 103   | 140   |
| Applied Arts <sup>1</sup>              | 27     | 9     | 31    | 34   | 15    | 17    | 19    |
| Humanities & Social Sciences           | 15     | -     | -     | 26   | 2     | 25    | 24    |
| Business & Administration <sup>2</sup> | 289    | 332   | 235   | 192  | 285   | 317   | 436   |
| Science & Related Technologies         | -      | 64    | 75    | 45   | 65    | 86    | 86    |
| Health Sciences                        | 209    | 296   | 318   | 311  | 250   | 521   | 509   |
| Information Technology                 | 239    | 193   | 115   | 109  | 133   | 241   | 224   |
| Architecture & Building <sup>3</sup>   | 16     | -     | 7     | 7    | -     | 17    | 3     |
| Engineering Sciences                   | 368    | 341   | 243   | 242  | 360   | 383   | 273   |
| Services <sup>4</sup>                  | 135    | 31    | 28    | 28   | 25    | 55    | 52    |

Source : Singapore Polytechnic      Temasek Polytechnic      Republic Polytechnic  
 Ngee Ann Polytechnic      Nanyang Polytechnic

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time post diploma, advanced diploma, management diploma, specialist diploma and postgraduate diploma courses.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation and Police Studies.

## 19.12 GRADUATES FROM HIGHER DEGREE COURSES BY TYPE OF COURSE

| Type of Course                            | Number |       |       |       |       |       |       |
|---|--------|-------|-------|-------|-------|-------|-------|
|   | 2000   | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  |
| Total                                     | 3,614  | 5,250 | 5,084 | 5,568 | 5,935 | 6,371 | 6,794 |
| Education                                 | 35     | 168   | 164   | 249   | 288   | 432   | 569   |
| Humanities & Social Sciences              | 308    | 474   | 543   | 617   | 534   | 595   | 651   |
| Mass Communication                        | 82     | 254   | 161   | 202   | 175   | 204   | 182   |
| Business & Administration <sup>1</sup>    | 827    | 647   | 791   | 1,002 | 1,216 | 1,313 | 1,426 |
| Law                                       | 85     | 148   | 155   | 205   | 238   | 287   | 168   |
| Natural, Physical & Mathematical Sciences | 165    | 269   | 278   | 268   | 337   | 366   | 383   |
| Medicine & Dentistry <sup>2</sup>         | 232    | 408   | 366   | 403   | 477   | 364   | 508   |
| Information Technology                    | 279    | 374   | 311   | 377   | 398   | 570   | 627   |
| Architecture & Building <sup>3</sup>      | 157    | 265   | 232   | 246   | 292   | 267   | 263   |
| Engineering Sciences                      | 1,424  | 2,224 | 2,022 | 1,917 | 1,913 | 1,890 | 1,928 |
| Services                                  | 20     | 19    | 44    | 62    | 37    | 61    | 82    |
| Others                                    | -      | -     | 17    | 20    | 30    | 22    | 7     |

Source : National University of Singapore      Singapore Management University  
 Nanyang Technological University      National Institute of Education

Note : Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time postgraduate diploma and higher degree courses offered by National University of Singapore, Nanyang Technological University and Singapore Management University and higher degree courses offered by National Institute of Education.

- 1 Includes Accountancy.
- 2 Includes Pharmacy.
- 3 Includes Real Estate.

## 19.13

**INTAKE OF STUDENTS/TRAINEES UNDER THE FULL-TIME INSTITUTIONAL  
TRAINING AND TRAINEESHIP PROGRAMMES AND STUDENTS/TRAINEES  
WHO COMPLETED THE PROGRAMMES, 2010**

| Type of Training/Level                                  | Number                      |       |         |  |       |         |
|---|-----------------------------|-------|---------|--|-------|---------|
|   | Intake of Students/Trainees |       |         | Student/Trainees who Completed the Programmes <sup>1</sup> |       |         |
|   | Total                       | Males | Females | Total  | Males | Females |
| Total   | 14,350                      | 8,879 | 5,471   | 11,608   | 7,000 | 4,608   |
| Engineering   |                             |       |         |  |       |         |
| Diploma   | 60                          | 51    | 9       | 42   | 39    | 3       |
| Higher National ITE Certificate ( <i>Higher Nitec</i> ) | 2,253                       | 1,867 | 386     | 1,857  | 1,485 | 372     |
| National ITE Certificate ( <i>Nitec</i> )               | 5,034                       | 4,148 | 886     | 3,802  | 3,145 | 657     |
| Info-Communications Technology                          |                             |       |         |  |       |         |
| Higher National ITE Certificate ( <i>Higher Nitec</i> ) | 660                         | 446   | 214     | 508  | 335   | 173     |
| National ITE Certificate ( <i>Nitec</i> )               | 1,321                       | 810   | 511     | 1,153  | 754   | 399     |
| Business & Services                                     |                             |       |         |  |       |         |
| Higher National ITE Certificate ( <i>Higher Nitec</i> ) | 2,072                       | 712   | 1,360   | 1,688  | 570   | 1,118   |
| National ITE Certificate ( <i>Nitec</i> )               | 2,950                       | 845   | 2,105   | 2,558  | 672   | 1,886   |

Source : Institute of Technical Education

Note : The Full-time Institutional Training and Traineeship Programmes are offered to school leavers with GCE 'O' and 'N' level qualifications.

<sup>1</sup> Refers to the number of students/trainees who graduated from Full-Time Training/Traineeship Programme.

# 19.14 TRAINING PLACES TAKEN UP BY WORKERS UNDER THE SKILLS TRAINING AND CONTINUING ACADEMIC EDUCATION PROGRAMMES AND WORKERS WHO COMPLETED THE PROGRAMMES, 2010

| Type of Training/Level                                  | Number                   |        |         |   |       |         |
|---|--------------------------|--------|---------|---|-------|---------|
|   | Training Places Taken Up |        |         | Workers who Completed the Programmes <sup>1</sup> |       |         |
|   | Total                    | Males  | Females | Total   | Males | Females |
| Total   | 20,932                   | 14,509 | 6,423   | 12,281  | 8,727 | 3,554   |
| Skills Training Programme <sup>2</sup>                  |                          |        |         |   |       |         |
| Engineering   |                          |        |         |   |       |         |
| Higher National ITE Certificate ( <i>Higher Nitec</i> ) | 1,586                    | 1,518  | 68      | 161   | 154   | 7       |
| National ITE Certificate ( <i>Nitec</i> )               | 3,469                    | 3,317  | 152     | 656   | 635   | 21      |
| ITE Skills Certificate ( <i>ISC</i> )                   | 3,815                    | 3,659  | 156     | 3,508   | 3,388 | 120     |
| Info-Communications Technology                          |                          |        |         |   |       |         |
| Higher National ITE Certificate ( <i>Higher Nitec</i> ) | 174                      | 132    | 42      | 8   | 7     | 1       |
| National ITE Certificate ( <i>Nitec</i> )               | 300                      | 192    | 108     | 24  | 19    | 5       |
| Business & Services                                     |                          |        |         |   |       |         |
| Higher National ITE Certificate ( <i>Higher Nitec</i> ) | 1,431                    | 240    | 1,191   | 386   | 59    | 327     |
| National ITE Certificate ( <i>Nitec</i> )               | 834                      | 118    | 716     | 261   | 29    | 232     |
| ITE Skills Certificate ( <i>ISC</i> )                   | 916                      | 435    | 481     | 518   | 253   | 265     |
| Others <sup>3</sup>                                     | 4,626                    | 3,632  | 994     | 4,404   | 3,442 | 962     |
| Continuing Academic Education Programme                 |                          |        |         |   |       |         |
| Continuing Education (Secondary 1-5)                    | 3,781                    | 1,266  | 2,515   | 2,355   | 741   | 1,614   |

Source : Institute of Technical Education

1 Data refer to number of workers who graduated or completed the programmes.

2 Most of the Skills Training programmes are offered in modules of 6 months' duration. A worker may attend more than one module a year.

3 Includes short courses and customised courses.

# 19.15 GOVERNMENT EXPENDITURE ON EDUCATION

|   | Thousand Dollars |           |           |           |           |           |           |
|---|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | 2000             | 2005      | 2006      | 2007      | 2008      | 2009      | 2010      |
| Total   | 5,867,507        | 6,082,278 | 6,959,285 | 7,527,668 | 8,229,695 | 8,685,056 | 9,910,357 |
| Recurrent Expenditure                               | 4,276,896        | 5,215,299 | 6,351,717 | 6,785,625 | 7,476,521 | 7,837,909 | 9,031,096 |
| Primary Schools                                     | 995,279          | 1,125,876 | 1,290,409 | 1,496,718 | 1,553,535 | 1,573,321 | 1,850,655 |
| Secondary Schools &<br>Junior Colleges <sup>1</sup> | 1,166,827        | 1,566,401 | 1,832,547 | 2,121,570 | 2,175,783 | 2,235,912 | 2,570,323 |
| Institute of Technical<br>Education                 | 148,416          | 203,973   | 249,154   | 253,506   | 281,262   | 262,509   | 334,918   |
| Tertiary  | 1,506,313        | 1,765,894 | 2,548,043 | 2,410,232 | 2,865,478 | 3,072,091 | 3,566,036 |
| Universities <sup>2</sup>                           | 898,505          | 1,058,239 | 1,719,156 | 1,491,076 | 1,808,987 | 2,014,807 | 2,299,898 |
| National Institute of<br>Education                  | 83,753           | 84,722    | 100,147   | 102,243   | 110,378   | 112,474   | 129,201   |
| Polytechnics  | 524,055          | 622,933   | 728,741   | 816,913   | 946,113   | 944,810   | 1,136,937 |
| Others <sup>3</sup>                                 | 460,061          | 553,154   | 431,564   | 503,598   | 600,463   | 694,076   | 709,164   |
| Development Expenditure                             | 1,590,611        | 866,978   | 607,569   | 742,043   | 753,174   | 847,148   | 879,261   |

Source : Ministry of Education

Note : Data refer to the financial year which begins in April and ends in March of the following year.

1 Includes Centralised Institutes.

2 Includes National University of Singapore, Nanyang Technological University, Singapore Management University, Singapore University of Technology and Design (wef FY2008), and Singapore Institute of Technology (wef FY2009).

3 Includes MOE Headquarters, Institute of Southeast Asian Studies, Science Centre Board and SIM-Open University Centre, Special Education, Nanyang Academy of Fine Arts and Laselle College of Arts.

With effect from 2003, data include Singapore Examinations and Assessment Board.

## 19.16

## GOVERNMENT RECURRENT EXPENDITURE ON EDUCATION PER STUDENT

|                                  | Dollars |        |        |        |        |        |        |
|----------------------------------|---------|--------|--------|--------|--------|--------|--------|
|                                  | 2000    | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
| Primary Schools                  | 3,137   | 3,820  | 4,243  | 5,026  | 5,397  | 5,537  | 6,659  |
| Secondary Schools <sup>1</sup>   | 5,104   | 5,793  | 6,246  | 7,230  | 7,551  | 7,736  | 9,084  |
| Junior Colleges <sup>2</sup>     | 7,304   | 9,445  | 10,161 | 12,386 | 11,094 | 10,772 | 12,410 |
| Institute of Technical Education | 8,076   | 9,249  | 10,209 | 10,543 | 11,106 | 10,129 | 12,019 |
| Polytechnics                     | 9,546   | 10,843 | 11,903 | 12,482 | 13,479 | 12,598 | 14,641 |
| Universities <sup>3</sup>        | 15,384  | 17,793 | 18,472 | 19,011 | 19,664 | 18,868 | 20,584 |

Source : Ministry of Education

Note : Data refer to the financial year which begins in April and ends in March of the following year.

1 Excludes Independent Schools.

2 Includes Centralised Institutes.

3 Includes National University of Singapore, Nanyang Technological University, Singapore Management University and Singapore Institute of Technology (from FY2010) but excludes Singapore University of Science & Technology.