



**Guidebook to
Education Systems and
Reforms in Southeast
Asia and China**

National Institute of Education Sciences of China

ASEAN-China Centre

Southeast Asian Ministers of Education Organization

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Reforms in Southeast Asia
and China**

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FOREWORD

Since 2012 my colleagues have been working with the Southeast Asian Ministers of Education Organization (SEAMEO) and ASEAN China Centre (ACC) to actively explore the potential of conducting joint programmes that are beneficial to education reform and development in China and Southeast Asian countries. We are deeply aware of the significance of strengthening research collaboration between us in the field of education, especially when we are facing new challenges and common problems, such as how to build a sound modern education system, improve the quality of education, and enhance students' innovative ability. We both believe that deepening education research and strengthening research collaboration are playing an increasingly important role in education development for each country.

In the era of globalisation, we have an urgent need to draw upon international experiences to use as a reference, while understanding the education system and policy of a country as a prerequisite for such learning. However, smooth channels and stable cooperation has yet to materialize between the educational research institutions of ASEAN member countries and China, and comparative studies of education systems and policies are essentially non-existent. This is why we have decided to set up the “SEAMEO-China Educational Research Network” to serve as a platform to exchange ideas, share information and promote cooperation for mutual benefit, including developing the Guidebook to Education System and Education Reform in Southeast Asian countries and China.

China is a developing country with a large population, running the world's largest education system, with 260 million students receiving various levels and types of education. The National Institute of Education Sciences is a comprehensive,

national educational research institution under the Ministry of Education of China. Our mission is to promote education reform and development by facilitating policy making, advancing theoretical innovation and providing practical guidance. China is carrying out comprehensive reform and promoting modernisation in the field of education. As a national-level education think-tank, we are currently undertaking research into major issues concerning educational policy making in our country, such as the overall strategy to promote fairness in education, national standards for education quality, evaluation systems of degree of satisfaction with education, and indicators systems of education modernisation. Meanwhile, we are also working to enhance our basic capacity and strengthen the ranks of the research team. Additionally, we have made steady progress in building a simulation platform for education policy decision-making and a data platform for educational research as well as experimental zones, schools and laboratories. We understand that compared with some international counterparts, our research capacity and level of services still lag behind in the face of new circumstances and new tasks of reform and development in education. As an old Chinese saying goes, “there are other hills whose stones are good for working jade.” Southeast Asian countries have achieved fast progress in education and have accumulated rich experiences in education reform and policy innovation, from which we have much to learn.

Towards that end, our institute, together with SEAMEO and ACC, organized the “Southeast Asia-China Education Research Network” and “Workshop on Southeast Asia-China Education Systems and Reforms” on June 5, 2014. The representatives from the three collaborative parties and 28 representatives from SEAMEO, including Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, Timor-Leste, and Singapore discussed the goals, objectives,

methods, activities, and plans of work. Afterwards, “The ASEAN-China Education Policy and Research Conference as well as the First Southeast-Asia Education Research Network Meeting” were held successfully at Guiyang during the Seventh China-ASEAN Education Exchange Week from 1-2 September 2014. The representatives from SEAMEO, ACC and the NIES as well as Brunei Darussalam, Cambodia, Laos, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, and Vietnam participated in the meeting and reached consensus on the purpose, content, way of writing, and timetable.

Together with colleagues from the ACC, SEAMEO and Southeast Asia, we have since engaged in writing, design and editing to have the Guidebook published. Hereby, I would like to thank the colleagues who have contributed to the Guidebook and sincerely hope that the Guidebook will enhance the mutual understanding, education systems and policies, and learning from each other, therefore pushing education reform and development towards the goal of mutual benefits and common prosperity in Southeast Asia and China.

Tian Huisheng
President
National Institute of Education Sciences of China

FOREWORD

The leaders of China and ASEAN have set forth strategic goals to strengthen cooperation and partnership in various fields to promote prosperity, peace and stability, as well as enhance mutual understanding and friendship. The ASEAN-China Centre (ACC) is the first and only inter-governmental international organisation which was co-founded by the Governments of ASEAN Member States and China in 2011. ACC is mandated to enhance functional cooperation in the five priority areas namely, trade, investment, education, culture and tourism, by implementing a wide range of result-oriented programs and activities as well as providing a comprehensive information bank on related areas.

ACC is very pleased with the publication of the Guidebook to Education Systems and Reforms in Southeast Asia and China, which is a joint effort between the National Institute of Education Sciences of the People's Republic of China (NIES), the Southeast Asian Ministers of Education Organisation (SEAMEO) and ACC. The Guidebook, co-edited by experts and scholars from Southeast Asian countries and China, contributes to mutual learning among the member states. At the same time, this collaborative effort reinforces our education systems through sharing of systemic and updated knowledge and information by identifying both the similarities and differences of education systems and reforms in Southeast Asian countries and China.

We are optimistic that the Guidebook will serve as a useful guidance, source of information as well as inspiration to its readers, especially the academic community and the general public who are keen to advance their understanding about the latest education development in Southeast Asia and China. Finally, it is our fervent hope that the Guidebook will strengthen people-to-people connections and contribute to an even brighter future for ASEAN-China relations.

H.E. Mme. Yang Xiuping
Secretary General of ASEAN-China Centre

FOREWORD

The year 2015 is the year that Southeast Asia Ministers of Education Organization (SEAMEO) celebrates its 50th Anniversary. Throughout the past 5 decades, SEAMEO, as an inter-governmental organisation working for the promotion of education culture and science development in Southeast Asia, has created and implemented a plethora of programmes for regional development. SEAMEO works collaboratively with regional partners and member countries in the region and research networks.

One of our newly established research networks is the Southeast Asia-China Education Research Network (SEA-CERN). Endorsed by the SEAMEO High Officials Meeting, the ASEAN-China Centre (ACC) and the National Institute of Education Sciences (NIES) of the People's Republic of China, SEA-CERN aims to serve as a platform for education researchers to seek, share, exchange and generate knowledge, raise awareness on the importance of education research, promote a research culture in Southeast Asia and China, enhance the research and development capacities within Southeast Asia and China, and build a regional community of education research experts and advocates.

The Guidebook on Education Systems and Reforms in Southeast Asia and China is the pioneering product of SEA-CERN. It presents information on education systems and reforms of Southeast Asia countries and the People's Republic of

China including administration, provisions and pathways, basic education curriculum, recent policies, and key statistics.

As director of SEAMEO Secretariat, I am sincerely thankful to all members of the network, especially the NIES, which has provided continual support to this project. It is my honour to not only be a witness but also be a part of this first achievement of the network. This book is indeed the first testament of the collaboration. I propose the Southeast Asia-China Education Research Network to proceed on its projects for the Harmonisation in Higher Education and Research, one of SEAMEO 7 priority areas. It will be my pleasure to hear of the network's continued success in all its collaborative endeavours in the near future.

Gatot Hari Priowirjanto
Director
Southeast Asia Ministers of Education Organization

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CONTENTS

Foreword (National Institute of Education Sciences of China).....	i
Foreword (Secretary General of ASEAN-China Centre)	iv
Foreword (Southeast Asia Ministers of Education Organization).....	vi
Acknowledgements	viii
Contents.....	xii
List of Figures	xiv
List of Tables	xv
Acronyms and Abbreviations	xxi
Education Systems and Reforms In Southeast Asia and China....	1
Brunei Darussalam	2
Kingdom of Cambodia	34
The Republic of Indonesia.....	54
Lao People’s Democratic Republic	90
Malaysia	119
The Republic of the Philippines	162
Republic of Singapore	189

Kingdom of Thailand	238
Socialist Republic of Vietnam	271
People’s Republic of China	312
About the Contributors	338
Appendix	xxxiii
National Institute Of Education Sciences (NIES)	xxxiii
ASEAN-China Centre	xxxv
Southeast Asian Ministers Of Education Organization (SEAMEO)	xxxvi

LIST OF FIGURES

Figure 1.1 Organisational Structure of Ministry of Education, Brunei Darussalam	6
Figure 1.2 The Education Pathways in Brunei Darussalam	11
Figure 1.3 The Curriculum Model of SPN21	16
Figure 1.4 The New Course Structure of TVET in Brunei Darussalam	24
Figure 2.1 Education System of Kingdom of Cambodia.....	37
Figure 2.2 Student’s enrolment by educational level from 2010 to 2015.....	42
Figure 2.3 Students’ flow rates.....	43
Figure 4.1 Schooling Chart	93
Figure 5.1 Students’ Progression from School to Work	153
Figure 7.1 The Singapore Education Journey	201
Figure 8.1 The Schooling Chart	250
Figure 8.2 Organization of the Ministry of Education at Central Level.....	253
Figure 9.1 Structure of the National Educational System of Vietnam	279
Figure 9.2 University Entrance Exam Before and After 2015.....	295

LIST OF TABLES

Table 1.1	The Total Number of Students and Teachers under MoE, MoRA and Private Schools in 2013.	4
Table 1 A.1	Literacy Rate, Educational Attainment & Mean Years of Schooling (2013)	29
Table 1A.2	Number of Schools/Institutions by Level and by Type (Government).....	29
Table 1A.3	Enrolment by Level and Type of School/Institution (Government)	30
Table 1A.4	Number of Teacher by Level (Government).....	30
Table 1A.5	Ratio of Students to Teaching Staff in Primary Schools and Secondary Schools (Government and Private).....	31
Table 3.1	Schooling system in the Indonesia’s education system.....	62
Table 3.2	The number and distribution of students by education level.....	65
Table 3.3	Structure of subject matter in the curriculum	71
Table 3.4	Overview of subject matter offered by Academic Interest Profile	72

Table 3.5	References for generating education policy agenda.....	78
Table 4.1.	Comparison of some key indicators for Early Childhood Education (ECE) over the past five years	116
Table 4.2.	Comparison of some key indicators for primary Education over the past five years	117
Table 4.3.	Comparison of some key indicators for secondary Education over the past five years.....	118
Table 5.1	Framework for Pre-school Curriculum.....	131
Table 5.2	Framework for Primary School Curriculum.....	132
Table 5.3	Framework for Secondary School Curriculum.....	134
Table 5.4	Higher Education Qualification levels, Entry Requirements & Duration of Study	140
Table 5A.1	Enrolment in Primary and Secondary Schools (2008 – 2013)	158
Table 5A.2	Gender Parity (2008 – 2013)	158
Table 5A.3	Expenditure as % of GDP (2008 –2011).....	158
Table 5A.4	Average class size and Teacher Student Ratio (2008 – 2013)	159

Table 5A.5 Completion Rate for Upper Secondary Education (2008 – 2013)	159
Table 5A.6 Educational Attainment (2009 – 2012).....	159
Table 5A.7 Number of Schools, Enrolment and Teachers (2014)	160
Table 5A.8 The Number of Student Intake, Enrolment and Graduates in Higher Learning Institutions (HLIs) (2014).....	160
Table 6.1 Education System in the Philippines	165
Table 6.2 Curriculum for Basic Education	174
Table 6.3 Objectives and Features of the K to 12 Curriculum.....	177
Table 6 A.1 Elementary schools and enrolment	185
Table 6 A.2 Secondary Schools and Enrolment	186
Table 6 A.3 TVET Institutions, Enrolment and Graduates.....	186
Table 6 A.4 Higher Education Institutions and Enrolment.....	187
Table 7.1 Pre-school Curriculum.....	211
Table 7.2 Subjects taught in Primary School.....	214
Table 7.3A Express Course Subjects	217

Table 7.3B Normal (Academic) Course Subjects.....	218
Table 7.3C Normal (Technical) Course Subjects	219
Table 7.4 Subjects offered in Junior Colleges/Centralised Institutes	222
Table 7.5 Components of Character and Citizenship Education.....	226
Table 7A.1 Literacy Rate, Educational Attainment & Mean Years of Schooling.....	231
Table 7A.2 Number of Schools by Level and by Type.....	232
Table 7A.3 Number of Teachers by Level.....	232
Table 7A.4 Enrolment by Level and School Type.....	232
Table 7A.5 Government Recurrent Expenditure on Education per student (SGD).....	233
Table 7A.6 Pass Rate for PSLE, and GCE ‘N-’ or ‘O’ - Level Examinations in %	233
Table 7A.7 Ratio of Students to Teaching Staff in Primary Schools and Secondary Schools	234
Table 8. Education Indicators of Thailand.....	269
Table 9.1 Primary Education Curriculum: Weekly Lesson Timetable	300

Table 9.2 Lower Secondary Education Curriculum: Weekly Lesson Timetable.....	301
Table 9.3 Upper Secondary Education Curriculum: Weekly Lesson Timetable.....	302
Table 9A.1 The Development of Pre-school Education (2007 – 2013)	303
Table 9A.2 The Development of General Education (2007 – 2013)	304
Table 9A.3 Development of Professional Education (2007 – 2013)	306
Table 9A.4 Development of Higher Education (2007 – 2013)	307
Table 9A.5 Development of Continuing Education (2007 – 2013)	309
Table 9A.6 Government Budget on Education and Training (2008 – 2012) (Billion VND)	310
Table 10A.1 Number of Schools by Level and Type.....	333
Table 10A.2 Total Enrolment in Number of Students by Level and by Type	334
Table 10A.3 Gross Enrolment Ratio of Education by level	334

Table 10A.4 Number of Full-time Teachers of schools (millions)	335
Table 10A.5 Student-Teacher Ratio by Level of Regular Education.....	336
Table 10A.6 Education Expenditure in Chinese Yuan (CNY)..	337

ACRONYMS AND ABBREVIATIONS

10MP	10 th Malaysia Plan
11MP	11 th Malaysia Plan
3Rs	Reading, Writing and Arithmetic
AI	Arts Institution
AP	Applied Programme
ASEAN	Association of Southeast Asian Nations
BAM	Business, Accountancy and Management
BC GCE	Brunei-Cambridge General Certificate of Education
BDNAC	Brunei Darussalam National Accreditation Council
BDQF	Brunei Darussalam Qualifications Framework
BTEC	Brunei Technical Education Certificate
CCA	Co-Curricular Activities
CCE	Character and Citizenship Education

CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CET	Continuing Education and Training
CHED	Commission on Higher Education
CI	Centralised Institutes
CoPR	Certificate of Program Registration
CPD	Continuing Professional Development
CPE	Continuing Professional Education (Philippines)
CPE	Council for Private Education (Singapore)
CSIs	CHED Supervised Schools
DEB	District Education Bureau
DepEd	Department of Education
DPDR	Department of Policy, Development and Research
DSWD	Department of Social Welfare and Development
ECCE	Early Childhood Care and Education

ECDA	Early Childhood Development Agency
ECE	Early Childhood Education
EFA	Education for All
EMIS	Educational Management Information System
EPRD	Educational Planning and Research Division
ESDP	Education Sector Development Plan
ESWG	Education Sector Working Group
FGTP	Form Teacher Guidance Period
GDP	Gross Domestic Product
GEC	General Educational Curriculum
GEP	Gifted Education Programme
GP	General Paper
HED	Higher Education Division
HEI	Higher Education Institution
HESS	Humanities, Education, Social Sciences

HLI	Higher Learning Institute
HNTec	Higher National Technical Education Certificate
IAL	Institute of Adult Learning
IBTE	Institute of Brunei Technical Education
ICT	Information and Communications Technology
IEP	Individualised Education Plan
IP	Integrated Programme
ISEAS	Institute of Southeast Asian Studies
ISQ	Industrial Skills Qualification
ITB	Institut Teknologi Brunei
ITE	Institute of Technical Education
JC	Junior College
JTWG	Joint Technical Working Group
KI	Knowledge and Inquiry
KUPUSB	Kolej Universiti Perguruan Ugama Seri Begawan

LAN	Lembaga Akreditasi Negara (National Accreditation Board)
LGUs	Local Government Units
LLL	Lifelong Learning
MEB (HE)	Malaysia Education Blueprint (Higher)
MIB	Malay Islamic Monarchy
MOE	Ministry of Education
MOES	Ministry of Education and Sports
MoEYS	Ministry of Education, Youth and Sport
MoRA	Ministry of Religious Affairs
MQA	Malaysian Qualifications Agency
MQF	Malaysian Qualifications Framework
MQR	Malaysian Qualifications Register
MSC	Malaysian Skills Certificate
MSF	Ministry of Social and Family Development

MSPSBS	Maktab Sains Paduka Seri Begawan Sultan
MT	Mother Tongue
MTB-MLE	Mother Tongue-Based Multilingual Education
NC I	National Certificate Level I
NC II	National Certificate Level II
NEA	National Entrepreneurship Agenda
NESRS	National Education System Reform Strategy
NGO	Non-Governmental Organisation
NHESP	National Higher Education Strategic Plan
NIE	National Institute of Education
NITEC	National ITE Certificate
NSAW	National Strategy for Advancement of Women
NSEDP	National Socio-Economic Development Plan
NTec	National Technical Education Certificate
NTESDP	National Technical Education and Skill Development Plan

NTU	Nanyang Technological University
NUS	National University of Singapore
OECD	Organisation for Economic Co-operation and Development
OER	Office of Education Research
OIC	Organisation of Islamic Cooperation
OSPD	Outline of Strategies and Policies for Development
PB	Politeknik Brunei
PED	Private Education Division
PES	Provincial Education Service
PISA	Programme for International Student Assessment
PJN	Pengiran Jaya Negara Secondary School
POLISAS	Politeknik Sultan Ahmad Shah (Sultan Ahmad Shah Polytechnic)
PRC	Professional Regulatory Commission

PSLE	Primary School Leaving Examination
PSR	Primary School Assessment
PW	Project Work
REP	Remedial Education Plan
SAP	Special Applied Programme (Brunei)
SAP	Special Assistance Plan (Singapore)
SBA	School-Based Assessment
SCS	Science Centre Singapore
SEN	Special Educational Needs
SETARA	Rating System for Malaysian Higher education Institutions
SHBIE	Sultan Haji Hassanal Bolkiah Institute of Education
SHS	Senior High School
SIM	Singapore Institute of Management
SIT	Singapore Institute of Technology

SKM	Sijil Kemahiran Malaysia (Malaysian Skills Certificate)
SMU	Singapore Management University
SPA	Student Progress Assessment
SPE	Student Progress Examination
SPED	Special Education Schools
SPM	Sijil Pelajaran Malaysia (Malaysian Certificate of Education)
SPN21	National Education System for the 21 st Century
STEM	Science, Technology, Engineering and Mathematics
STPM	Sijil Tinggi Persekolahan Malaysia (Malaysian Higher School Certificate)
SUCs	State Universities and Colleges
SUTD	Singapore University of Technology and Design
TECH-VOC	Technical-Vocational

TESDA	Technical Education and Skills Development Authority
TIMSS	Trends in international Mathematics and Science Study
TLLM	Teach Less Learn More
TR	Training Regulations
TTIs	TESDA Training Institutes
TVET	Technical and Vocational Education and Training
TVI	Technical Vocational Institutes
UBD	University Brunei Darussalam
UIAM	Universiti Islam Antarabangsa Malaysia (International Islamic University Malaysia)
UKM	Universiti Kebangsaan Malaysia (National University of Malaysia)
UNESCO	United Nations Educational, Scientific, and Cultural Organisation

UNICEF	United Nations Children’s Fund
UNIFAST	Unified Financial Assistance System for Higher and Technical
UNISSA	University Islam Sultan Sharif Ali
UPM	Universiti Putra Malaysia
USD	United States Dollar
USM	Universiti Sains Malaysia (University of Science Malaysia)
UTM	University Teknologi Malaysia (University of Technology Malaysia)
UUM	Universiti Utara Malaysia
VEDC	Village Education Development Council
VIA	Values in Action
VWO	Voluntary Welfare Organisations
WDA	Workforce Development Agency
WSQ	Workforce Skills Qualifications

Education Systems and Reforms in Southeast Asia and China

Brunei Darussalam

Education at a Glance

Kifle, H., Daud, N., Yusof, M. & Tejudin, J.

Ministry of Education of Brunei Darussalam

I. OVERVIEW

Brunei Darussalam, ‘The Abode of Peace’, is located on the northern shore of Borneo Island, bordered by the South China Sea and the Malaysian state of Sarawak. With a total area of 5,765 sq km, Brunei is divided into four districts: Brunei Muara, Tutong, Belait and Temburong. Its capital city is Bandar Seri Begawan, which is located in Brunei Muara District. The population is approximately 406,200¹ (as of 2014) comprising 66% Malay, 10% Chinese and 24% others. The majority of the population is concentrated in and around the capital city. Although the official language is Malay, English is widely spoken and is the principal language of business. Meanwhile, Belait is the activity hub of the country’s oil and gas, which are Brunei’s primary sources of income. The country’s GDP (Gross Domestic Product) per capita is estimated at B\$52,614 (as of 2014)¹.

Brunei Darussalam has a high literacy rate of 97.2% for those aged 10 years and above. The mean years of schooling is 8.7 (refer to Annex, Table 1A.1). Currently, under the purview of Brunei Darussalam’s Ministry of Education (MoE), there are 125 pre-primary and primary schools, 33 secondary schools, 5 sixth form centres, 9 technical and vocational institutions, 1 polytechnic and 3 universities (Refer to Annex, Table 1A.2).

¹Department of Economic Planning and Development Brunei Darussalam. (2014).

Under the purview of the Ministry of Religious Affairs (MoRA), there are 8 schools (5 primary schools, 2 secondary and 1 sixth form centre) and 1 university; along with 74 private schools. By 2013, the country’s student population had reached around 25% of the national population, which in that year was approximately 100,001 (under MoE, MoRA and private schools), with a total of 9,519 teachers employed, as shown in Table 1.1. The student teacher ratio was 10.3 at the primary level and 9.4 at the secondary level (Refer to Annex, Table 1A.5).

Table 1.1 The Total Number of Students and Teachers under MoE, MoRA and Private Schools in 2013².

Total		Teachers		Students
MoE	Pre-Primary	205	6,799	64,359
	Primary	2,885		
	Secondary	3,191		
	Sixth Form	518		
MoRA		518		3,363
Private		2,202		32,279
Total		9,519		100,001

²Ministry of Education Brunei Darussalam (2013a).

Note: Statistics for students' enrolment and teachers' employment for the government schools from 2009 to 2013 are stated in Tables 1A.3 and 1A.4.

This chapter will describe an overview of the administrative system, basic education curriculum, recent education policies and key indicators, and statistics for education system in Brunei Darussalam.

II. EDUCATION ADMINISTRATION SYSTEM

2.1 Organisational Structure

Formal education in Brunei Darussalam has come a long way since 1914. Being a nation with a small population, education plays a critical role in equipping the young generation with relevant skills to become successful and responsible citizens who can contribute to the social development of the community and economic progress of the country³.

With MoE's vision, "Quality Education towards a Developed, Peaceful and Prosperous Nation" and mission, "To Provide Holistic Education to achieve Fullest Potential for All"; the Ministry emphasises change through the provision of a more meaningful, effective and relevant education system in

³Ministry of Education Brunei Darussalam. (2013b).

preparing students for challenges in the modern digital era. As illustrated in Figure 1.1, MoE is headed by a Minister followed by a Deputy Minister and two Permanent Secretaries, responsible for core and higher education respectively.

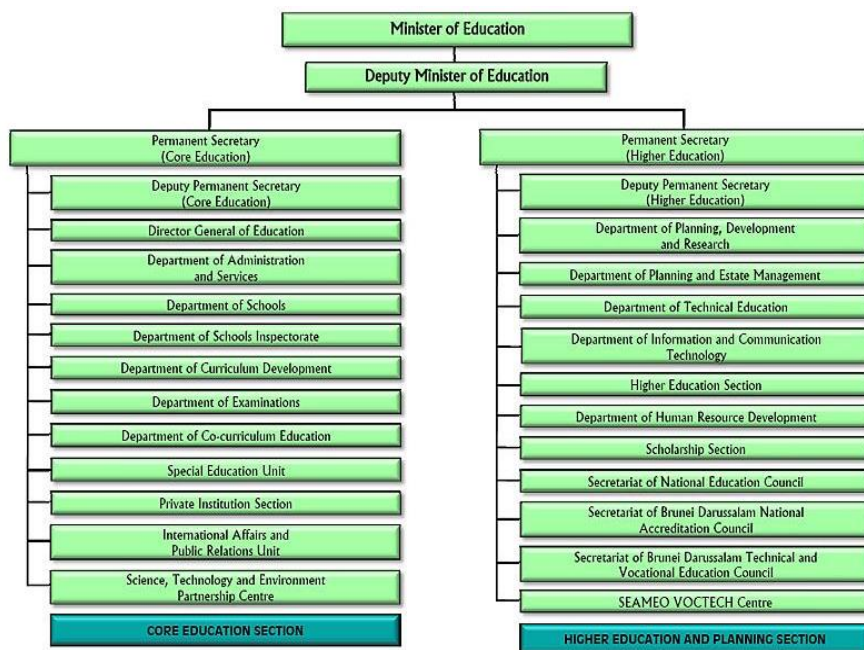


Figure 1.1 Organisational Structure of Ministry of Education, Brunei Darussalam

2.2 Educational Policy Research and Development

The Department of Policy, Development and Research (DPDR) is the main department responsible for planning and developing educational policies. It serves to conduct researches to support the formulation as well as to evaluate the relevance of educational policies and strategic decision-making(s) through evidence-based data.

As an effort to provide professional support, DPDR has been working closely with other departments within the ministry (e.g. Department of Examination, Department of Schools, etc) and other government agencies in projects related to students' needs and performance and other education related issues. In the aspect of addressing the professional development of teachers, DPDR has continuously worked in collaboration with Sultan Haji Hassanal Bolkiah Institute of Education (SHBIE), Universiti Brunei Darussalam (e.g. in 21st Century Teaching & Learning and Teachers & the Teaching of Literacy and Numeracy).

DPDR has also been mandated to champion Brunei Darussalam's participation in Programme for International Students Assessment (PISA) starting 2018. As the think-tank of MoE, DPDR has always played an active role in monitoring the performance of all MoE projects under the National Development Plan (NDP) and as the Secretariat for the MoE's affairs with the Legislative Council.

2.3 Brunei Vision 2035

Brunei Vision 2035 aspires to gain recognition for the accomplishments of its educated and highly skilled people, high quality of life, and dynamic as well as sustainable economy with an income per capita ranking among the top 10 countries in the world.

To realise this vision, eight strategic policy directions for education have been formulated under the Outline of Strategies and Policies for Development (OSPD) 2007-2017⁴:

- Investing in early childhood education;
- Adopting international best practices in teaching and learning;
- Having first class secondary and tertiary education, including vocational schools, that produce experts, professionals and technicians required in commerce and industry;
- Strengthening the competency in info-communication technology (ICT) for students, teachers and educational administrators including integration of ICT in school curriculum;
- Devising programs that promote life-long learning and widen access to higher education;
- Promoting research, development and innovation both in government-funded institutions and through public-private and international partnerships;

⁴Department of Economic Planning and Development Brunei Darussalam. (2012).

- Adopting cost-effective methods of educating the people through the use of technology; and
- Improving the management of all educational institutions.

In ensuring the quality of learning and relevance of education to the national agenda, MoE has embarked on a major reform to its national education system known as the National Education System for the 21st Century (SPN21). Prior to outlining the current education system (Part IV), the Education Reform brought upon by SPN21 will be explained in the next section (Part III).

III. EDUCATION REFORM: SPN21

MoE plays a critical role in equipping the country with highly-skilled and marketable human resources to achieve economic diversification. For this reason, the education reformation SPN21 was implemented in 2009 to transform the education landscape and to cater for the aforesaid 8 policy directions outlined under the Education Strategy of the Brunei Vision 2035. It aims to equip students with 21st Century skills to meet the social and economic challenges and uphold and develop desired values and attitudes amongst students in Brunei Darussalam in line with the national philosophy – Malay Islamic Monarchy (MIB).

SPN21 entails the following benefits:

- Greater emphasis on character building

- No retention from Year 1 to Year 10/11 (except for those with less than 85% attendance)
- Multiple pathways offering choices of educational programmes based on students' interests, needs and abilities
- Progression and opportunities to pursue 4-year or 5-year programmes before sitting for the Brunei-Cambridge General Certificate of Education (BC GCE) 'O' Level examination
- Continuous and seamless curriculum
- Opportunities for acquisition of valuable and marketable skills including basic technical, vocational and business skills that is useful for self-employment and other career opportunities
- Opportunities for continuity to technical and vocational education and/or higher institutions
- Improvement in students' achievement - teaching and learning standards
- Improvement in national standards with benchmarking against international standards.

There are three major changes brought by SPN21: (i) Education Structure; (ii) Curriculum & Assessment; and (iii) Technical Education.

3.1 Education Structure

With SPN21, students are educated under a common curriculum from Year 1 to Year 8 (Year 1-6 for primary; and Year 7-8 for secondary). However, to cater to the diversification of

students' capabilities and needs, SPN21 offers multiple pathways at the secondary level in which, students are channelled according to their capabilities and School Progress Assessment (SPA) score. This will be described further in Part IV. Subsequent to this, the progression of education level offered by SPN21 from the pre-primary, primary, secondary, post-secondary (including Technical and Vocational Education and Training - TVET) to higher education level is captured in Figure 1.2 (in which, the descriptions will also be found in Part IV).

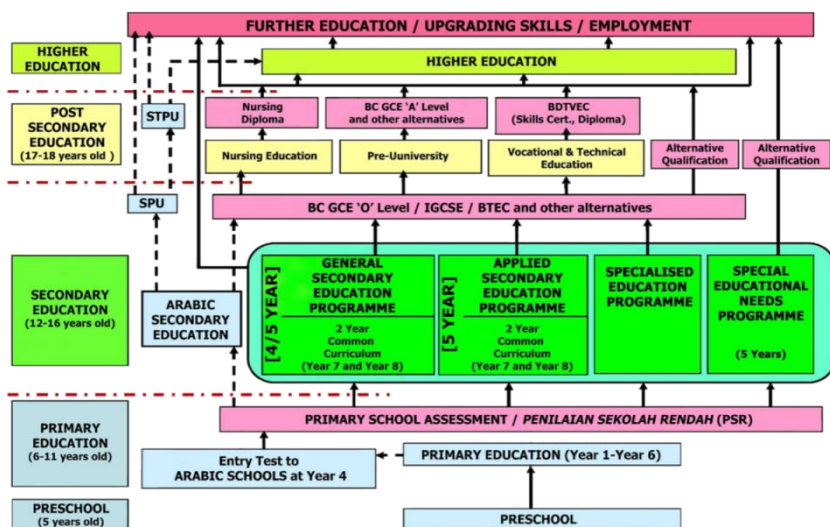


Figure 1.2 The Education Pathways in Brunei Darussalam

3.2 Curriculum and Assessment

3.2.1 Curriculum Approaches

SPN21 provides improvement in curriculum approaches and instructional principles to cater for the primary and secondary levels of schooling. These approaches include:

- Diverse methods and techniques based on the learning approach of “Fun, Play and Learn more”.
- Learner-centred whereby:
 - i. The change in teacher’s role to that of a resource person, a facilitator, a consultant, a counselor, and an assessor.
 - ii. Promotes student active participation and interactive learning.
- Integration across the curriculum.
- Integration of values and value-added skills.
- Maximum focus on various learning styles.
- Emphasises on application of knowledge, understanding and generic skills.
- Wider use of ICT across the curriculum.

SPN21 Basic Education Curriculum

In terms of Basic Education Curriculum, the teaching and learning process is described by the year level of schooling: Preschool; Year 1-3; Year 4-6; Year 7-8; and Year 9-10/11.

Preschool

This reception/foundation stage emphasises the development of socio-emotional and personality and prepares the learner for primary education.

- Inculcate interest in exploring the environment;
- Spiritual, emotional and social development;
- Cognitive development;
- Motor skills and coordination;
- Language and numeracy skills; and
- Creativity and fun in every activity.

Year 1-3

Reception/ foundation stage, socio-emotional development, personality development, preparation for Primary Education - formal reading/writing.

- Develop the 3Rs (reading, writing and arithmetic) skill and communicate effectively in Malay and English;
- Foster a culture of love for reading;
- Foster social skills and cooperative attitudes, mutual respect for others, reasoning ability and problem solving skills;
- Equip basic skills of utilizing information and communication technology (ICT) to learn; and
- Identify concepts, objects and develop ideas and creativity; and develop spiritual and aesthetic sensitivities.

Year 4-6

Application of the 3Rs, essential/complexity skills and knowledge, manipulation of intellectual, logical and critical thinking, and development of personality, attitudes and values.

- Master and apply 3Rs skills and communicate effectively in Malay and English;
- Master and understand the basic scientific and mathematical concepts;
- Participate actively in group work and strengthen the emotional growth and physical fitness;
- Develop knowledge, ability to think and solve problems independently;
- Develop positive attitudes and values, learn to care about the society and environment and recognise and understand their identity, race, religion and nation; and
- Develop and foster interest in culture and arts

Year 7-8

General education, consolidation of various knowledge and skills and development of aptitude and interests, personality, attitudes and values

- Learn independently;
- Be confident in applying ICT in learning;
- Develop capability for reasoning, problem-solving, knowledge application and creativity;
- Strengthen the mastery of Malay and English Language;

- Gain experience in the following aspects: academic, social, values and cultural;
- Master basic concepts in all key learning areas;
- Inculcate a deeper love for the country and a good understanding of the Malay Islamic Monarchy or Melayu Islam Beraja (MIB) concept as the national philosophy;
- Appreciate and develop health consciousness; and
- Develop interest and appreciation of culture and arts.

Year 9-10/11

Mastering learning areas in general education, consolidation of life skills/basic employment, development of aptitude and interests, personality, attitudes and values, specialisation, career and higher education.

- Strengthen the skills of lifelong learning;
- Strengthen the mastery of science, mathematics, languages and other areas to prepare them for pre-vocational and higher education;
- Develop an understanding of the career pathway available in the job market either in government or private sectors;
- Acquire knowledge in entrepreneurship; and
- Strengthen their interest and appreciation of culture and arts.

In general, SPN21 curriculum is designed to provide learners with broad, balanced, relevant and differentiated learning experiences and it takes into account each learner’s needs whilst making provision for progression and continuity. It is intended to be more responsive to the changes in the society and the economy, and will lead learners towards life-long learning. The SPN21 curriculum places learners at the heart of teaching and learning based on an appreciation of their individual needs (see Figure 1.3). Optimal opportunities are provided to accelerate individuals who can progress faster whereas special guidance is given to those who need help.

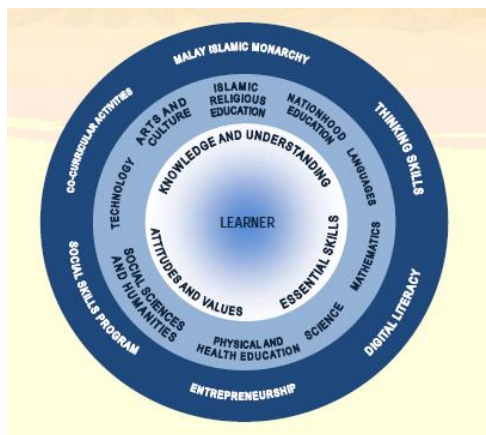


Figure 1.3 The Curriculum Model of SPN21

3.2.3 Assessment

SPN21 has made some changes to the education assessment system to enhance the teaching and learning process, particularly in giving constructive feedback and reporting of student's achievement in order to stimulate student's motivation. Following this, the Student Progress Assessment (SPA) was implemented in Year 1 to Year 8. The SPA for Year 1 to Year 6 consists of School-Based Assessment (SBA) and Primary School Assessment (PSR). On the other hand, the Student Progress Assessment (SPA) for Year 7 to Year 8 consists of School-Based Assessment (SBA) and Student Progress Examination (SPE). The School-Based Assessment (SBA) is an internally assessed school based formative assessment, whereas the Student Progress Examination (SPE) is a summative assessment conducted at the student's completion of Year 8.

3.3 Technical and Vocational Education and Training (TVET)

In recognising the important role of TVET and its challenges in supporting social and economic development, the Ministry of Education has formulated a strategic plan to fundamentally restructure and transform the existing TVET system in Brunei Darussalam. TVET transformation is embedded as one of the three pillars of SPN21 and will play an integral role in complementing the schools. A new institution called 'Institute of Brunei Technical Education (IBTE)' was established in 2014 replacing the former TVET system, which has operated under the Department of Technical Education since 1993.

Amongst the proposed changes are: the restructuring and reconfiguration of existing courses to match the economic needs; expanding the apprenticeship options, more progression opportunities; new scheme of teaching service; and major infrastructure campus development. With well-equipped and up-to-date facilities (and technology), these modern and purposefully–designed campuses will support a more “holistic” education and training aimed at the total development of each individual.

The current focus is on training the technicians and skilled personnel along with the award of National Certificates. Training is competency-based, practical and “hands-on”; whereby, any school leaver who has completed 10 or 11 years of schooling under SPN21 would have the opportunity to continue in technical and vocational training. While there are pathways for further progression, the key priority is the employability of the graduates to ascertain the alignment of the system with labour market priorities. On the other aspect, TVET stands as an attractive pathway for post-secondary education in the country.

Empowered by greater autonomy along with better alignment between the education system and manpower needs, IBTE is better positioned to meet the aspirations of the young and recognises the diversity of talents and values of those who perform better hands-on.

IV. EDUCATION SYSTEM

4.1 Government Preschools

Government preschool education started formally in 1979 for all children aged 5 years old. Early Childhood Education as part of the Education Strategy has been prioritised in the outline of Strategies and Policies for Development 2007–2017. Subsequently, the Early Childhood Care and Education (ECCE) Unit was established in 2010 to bolster the investment in the aforesaid national education plan.

Other than presenting early language skills in both Malay and English, the one year preschool programme concentrates on the holistic development of children in four areas: basic skills; socio-emotional development; self-confidence; and preparation for primary schools.

4.2 Private Preschools

Private education institutions are registered under Private Education Section, MoE to follow the Education Act (Cap 210) and its subsidiary regulations. They provide kindergarten classes (Kindergarten 1, 2 and 3) for children aged 3 to 5 years. Presently, the curriculum offered at private kindergartens is not standardised by MoE.

4.3 Primary Education

From the age of six years onwards, students follow six years of primary education (lower primary, Year 1-3; upper primary, Year 4-6). All students will have a common curriculum,

and at the end of Year 6 they will sit for the Primary School Assessment [Penilaian Sekolah Rendah (PSR)]. Students attaining 5'A's in their PSR will be streamed to the elite schools [e.g. Maktab Sains Paduka Seri Begawan Sultan (MSPSBS) or Pengiran Jaya Negara Secondary School (PJN)].

Those who have been identified from primary as having special educational needs require a curriculum that is modified or/and adapted according to their ability and needs. They will either be placed under the Individualised Education Plan (IEP) or Remedial Education Plan (REP). IEP is for students who have been identified with special educational needs in particular, those with high support needs. These students will require adaptations and/or modifications in the curriculum as well as changes in learning/teaching strategies according to the nature of their individual needs. REP is mainly for students with learning difficulties mostly in basic skills such as reading, writing and numeracy.

4.4 Secondary Education

Generally, there are four different pathways offered at the secondary level:

General Secondary Education;

Applied Secondary Education;

Specialised Education; and

Special Education Needs Programmes.

The channeling is based on criteria stipulated by SPN21, which is based on the School Progress Assessment (SPA) marks at the end of Year 8. Whilst the identified students are channeled to the Specialised Education and the Special Education Needs Programmes at Year 7, others will only be channeled after Year 8 (i.e. in Year 9) to either the General Secondary Education or Applied Secondary Education Programme. The descriptions for each of the pathways are as follows:

4.4.1 General Secondary Education Programme

This programme is for students who are inclined towards academic subjects. Most students will complete the 5-year programme before sitting for BC GCE ‘O’ Level examination. A selected number of students will complete the 4-year programme before sitting for the same examination.

4.4.2 Applied Secondary Education Programme

This is a 5-year programme (within which has two categories), designed for the less academically-inclined students, including two types

a. Applied Programme (AP):

This programme is slightly less demanding than the General Secondary Education Programme by which, instead of

sitting for GCE ‘O’ Level, they will be sitting for iGCSE ‘O’ Level Examination for most of their subjects.

b. Special Applied Programme (SAP):

This programme caters for the least academically inclined in the education system. Students in this programme will take up vocational education that adopts a practical and hands-on teaching and learning approach. Work attachment is incorporated into the programme and the students will sit for the Brunei Technical Education Certificate (BTEC) Examination.

4.4.3 Specialised Education Programme

This is a programme for the gifted and talented students who are capable of exceptional performance in general or specific ability areas. The designed curriculum focuses on differentiating the content, process, product and/or the learning environment with increased breadth and depth of the subject matter. This ensures that it covers the same content as the mainstream curriculum (only deeper) to enable the students to reach or exceed their full potential.

4.4.4 Special Educational Needs Programme

Special Educational Needs Programme at the secondary level is a continuity of the Individualised Education Plan (IEP) in primary schools. One of the Special Educational Needs Programme that is currently implemented in secondary schools is the Pre-Vocational Programme.

Pre-Vocational Programme is a five-year programme that caters for the selected/identified students with special educational needs at the secondary level. Besides developing their basic academic, living and social skills, the programme seeks to instill vocational and work skills through appropriate work placements. Upon completion of the programme, an individual student is anticipated to have become independent and reached their fullest potential.

4.4.5 Post-Secondary Education

After completing the secondary school, students are able to choose different programmes and learning modes according to their abilities, interests, inclination and needs. However, students have to meet certain requirements set by the respective institutions. The various programmes offered at the Post-Secondary Education are Nursing Education, Pre-University, Specialised Education and Vocational and Technical Education.

4.5 Technical and Vocational Education and Training (TVET)⁵

The three levels of courses offered are: Industrial Skills Qualification (ISQ); National Technical Education Certificate (NTec); and Higher National Technical Education Certificate (HNTec). Graduates of the HNTec courses are trained as

⁵Department of Technical Education, Ministry of Education. (2014).

“technicians” whereas those in NTec and ISQ will qualify as “skilled personnel.” The ISQ courses are industrial short courses ranging from three months to one year depending on the nature of the occupation. The NTec full-time courses are of one or two-year duration depending on the nature and depth of the training required (see Figure 1.4).

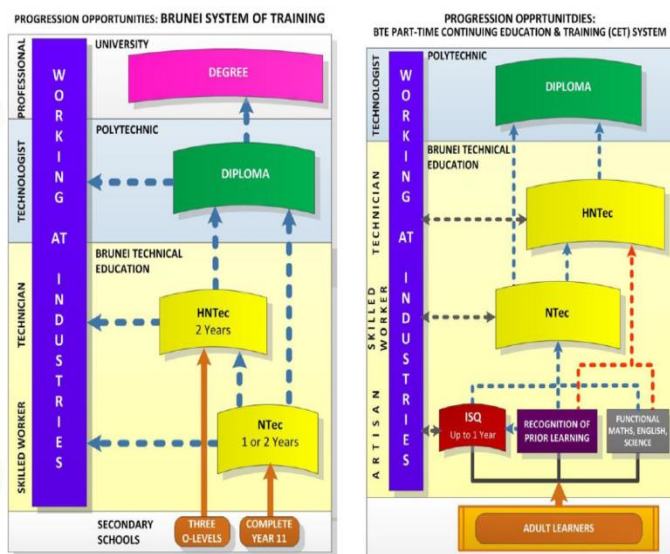


Figure 1.4 The New Course Structure of TVET in Brunei Darussalam

4.6 Tertiary Education

The higher educational system in Brunei Darussalam comprises of universities, polytechnic and colleges that offer

programmes from advanced diplomas to doctoral degrees. Currently, there are four universities and one polytechnic. Three universities [Universiti Brunei Darussalam (UBD), Institut Teknologi Brunei (ITB) and Universiti Islam Sultan Sharif Ali (UNISSA)] and Politeknik Brunei (PB) are under the purview of the Ministry of Education through the Higher Education Division (HED) and the Permanent Secretary (Higher Education). Meanwhile, Kolej Universiti Perguruan Ugama Seri Begawan (KUPU SB) falls within the purview of the Ministry of Religious Affairs (MoRA). Under SPN21, the net enrolment target set for higher education is 30%, to be achieved within the next ten years.

4.7 Lifelong Learning

At present, lifelong learning programmes (under MoE) are offered by IBTE and Universiti Brunei Darussalam (UBD). Targeted audiences are citizens and permanent residents aged 15 and above, including school leavers, government employees, pensioners and housewives.

4.8 Brunei Qualification Framework

The Brunei Darussalam Qualifications Framework (BDQF) was established 2013. The guardian of the BDQF is the Brunei Darussalam National Accreditation Council (BDNAC), Ministry of Education. BDQF secures the standards of the nation's qualifications, reinforces the need to have policies to promote the quality of teaching, learning and assessment; ensures accuracy and consistency in the use of nomenclature for qualifications; supports flexible learning, fair credit transfer and

the recognition of prior learning; encourages partnerships among the providers of education and training services; links technical and vocational to undergraduate and post-graduate learning; and encourages parity of esteem amongst the academic, professional, religious and vocational qualifications.

V. RECENT EDUCATION POLICIES

5.1 Education Policies

The first education policy introduced in was the First National Development Plan (1954-1959) in which provides the foundation for Brunei Darussalam's education system. Initially, the framework was 6-3-2, representing six years of primary education, three years of lower secondary and two years of upper secondary. Six years of free education was provided for Brunei Malay children aged 6-14 years. Starting in 1979, preschool was made compulsory for all children aged 5 years prior to entering Primary 1. The Bilingual Education Policy was introduced and implemented a year later. In 1993, the 12-Year Education Policy was created to replace the 9-Year Education Policy. It mandated that every student will be provided with 12 years of education, which includes 7 years in preschool and primary, 3 years in lower secondary and 2 years in upper secondary.

From 1994 to 1997, the Inclusive Education and Special Education Policy were implemented to include students with special educational needs in mainstream schools. Later, in 2003, the new Education Order (The Education Order 2003) was initiated with the purpose of achieving an effective, efficient and

equitable system of education, aligned with the national philosophy of Malay Islamic Monarchy (MIB) and the needs of the modern era. The Compulsory Education Order was enacted in 2007, mandating that every Bruneian child and those residing in Brunei at the age of six years and above until 14 years should receive compulsory education for at least nine years. In 2009, the new education system, the National Education System for the 21st Century or ‘Sistem Pendidikan Negara Abad ke-21’ (SPN21) was launched. Through the provision of quality education, SPN21 serves as platform and driving force in achieving the goals of Brunei Vision 2035. Since 2013, compulsory religious schooling has been provided by MoRA to all Muslims from age 7 to 13 years.

5.2 National Entrepreneurship Agenda

A National Entrepreneurship Agenda (NEA) was launched in 2013 by MoE in collaboration with Universiti Brunei Darussalam (UBD). NEA is a platform of the Ministry to inculcate entrepreneurial mindsets to the nation. It is built upon the simple notion that successful entrepreneurship requires the three elements of Mindset, Community and Experience. The NEA initiatives include activities and events for K-12 students (Year 1 – Year 12), a new ‘Entrepreneur’s Village’ focused on university as well as polytechnic and TVET (technical and vocational education and training) students and others in the community, workshops and simulations, and networking events for established entrepreneurs who seek to optimize and grow their ventures. Over time, the NEA initiatives intend to positively change the mindsets of young people and build a stronger and more successful (entrepreneurial) community in the country.

VI. BEYOND SPN21: THE WAY FORWARD

In order to meet the objectives of SPN21 and Brunei Vision 2035, MoE will continuously ensure that its vision and strategic initiatives are transformative, realistic and time-bound to achieve the highest level of educational performance. It is envisioned that the students in Brunei Darussalam are able to achieve globally benchmarked national standards of education to prepare them with various pathways and opportunities in life. Ultimately, the young generation will be creative, resourceful, have stronger mindset, productive, independent, and most importantly, possess the entrepreneurial ability to produce and create jobs instead of seeking for one.

ANNEX: KEY INDICATORS AND STATISTICS

Table 1 A.1 Literacy Rate, Educational Attainment & Mean Years of Schooling (2013)

	Males	98.1
Literacy Rate (Aged 10 years & above)	Females	96.3
	Total	97.2
Mean Years of Schooling	8.7	

Source: Department of Economic Planning and Development Brunei Darussalam. (2013); United Nations Development Programme. (2014).

Table 1A.2 Number of Schools/Institutions by Level and by Type (Government)

	2009	2010	2011	2012	2013
Pre-Primary & Primary	121	122	124	123	125
Secondary	33	34	31	33	33
Sixth Form Centre	4	4	4	5	5
Technical & Vocational	9	9	9	9	9
Polytechnics	-	-	-	1	1
Universities	4	4	4	4	4

Source: Ministry of Education Brunei Darussalam. (2009-2013a); Ministry of Education Brunei Darussalam. (2009-2013b).

Table 1A.3 Enrolment by Level and Type of School/Institution (Government)

	2009	2010	2011	2012	2013
Pre-Primary & Primary	31,981	31,774	31,177	30,104	28,966
Secondary	33,985	34,308	34,637	34,303	32,654
Sixth Form Centre	5,098	5,112	5,206	6,025	6,102
Technical & Vocational	2,659	2,715	3,283	4,311	4,900
Universities	6,128	5,821	6,378	7,588	8,470

Source: Ministry of Education Brunei Darussalam. (2009-2013a); Ministry of Education Brunei Darussalam. (2009-2013b).

Table 1A.4 Number of Teacher by Level (Government)

	2009	2010	2011	2012	2013
Pre-Primary & Primary	2,804	3,026	3,225	3,255	3,216
Secondary	3,604	3,364	3,513	3,564	3,520
Sixth Form Centre	304	521	538	572	581

Source: Ministry of Education Brunei Darussalam. (2009-2013a); Ministry of Education Brunei Darussalam.(2009-2013b).

Table 1A.5 Ratio of Students to Teaching Staff in Primary Schools and Secondary Schools (Government and Private)

	2009	2010	2011	2012	2013
Ratio of Students to Teaching Staff in Primary Schools	11.9	11.3	11.3	10.6	10.3
Ratio of Students to Teaching Staff in Secondary Schools	10.6	10.3	10.2	9.9	9.4

Source: Ministry of Education Brunei Darussalam. (2009-2013a); Ministry of Education Brunei Darussalam. (2009-2013b).

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Kingdom of Cambodia

Education Landscape

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I. OVERVIEW

The Kingdom of Cambodia has a constitutional monarchy. In addition to having a king, the government consists of a Senate, a National Assembly and an executive body led by a Prime Minister. The country has a land area of 181, 035 square kilometers with a total population of around 15 million. The population annual growth rate is 1.4 percent and the percentage of the total population aged 15-64 is 66 percent. Cambodia shares borders with Thailand, Viet Nam, and Laos. The national language is Khmer and the national religion is Buddhism. According to the National Strategic Development Plan 2014-2018, the country is composed of 24 provinces with 159 districts and 1 municipality. The capital city is Phnom Penh.

The fiscal year is from January to December and the school year is from October to July. The currency is Riel, which is 4,000 Riels is equivalent to 1 US\$. Cambodia experienced the GDP growth rate with an average of 7.0 percent from 2010 to 2014 and the GDP per Capita is US\$1,139 in 2014. The literacy rate of youth aged 15-24 is 92 percent.

This chapter gives an overview of the education system, administration and some basic information of the educational development in Cambodia. It attempts to outline the educational development achievements and reform priorities that address the issues in education.

II. EDUCATION SYSTEM AND ADMINISTRATION

2.1 The System Setting

Under the framework of the 2007 Law on Education, Education in Cambodia is classified as formal, non-formal and informal systems. Cambodia has used the 6+3+3 school system since 1996 with the intention of adjusting to international trends in educational development. Children begin their primary schooling (grades 1-6) at the age of 6 and go through 12 years of general education as lower secondary level (grades 7-9) and upper secondary level (grades 10-12). Students who complete 9-years of basic education have the choice to continue to the upper secondary level on an academic or technical and vocational education and training (TVET) track (certificates 1-3).

Gaining a level-3 certificate is equivalent to completion of the upper secondary education level. The higher education level is for students who complete upper secondary school, but fail the end-of-grade 12 national exam, to enroll in an associate degree program (2 years). Those who pass the final grade-12 national exam are eligible to be admitted to the bachelor degree program commonly 4 years in length, except medical and dental sciences, which are 5-7 years). The graduate degree program is composed of masters (2 years) and doctoral (3 years) programs (see figure 2.1).

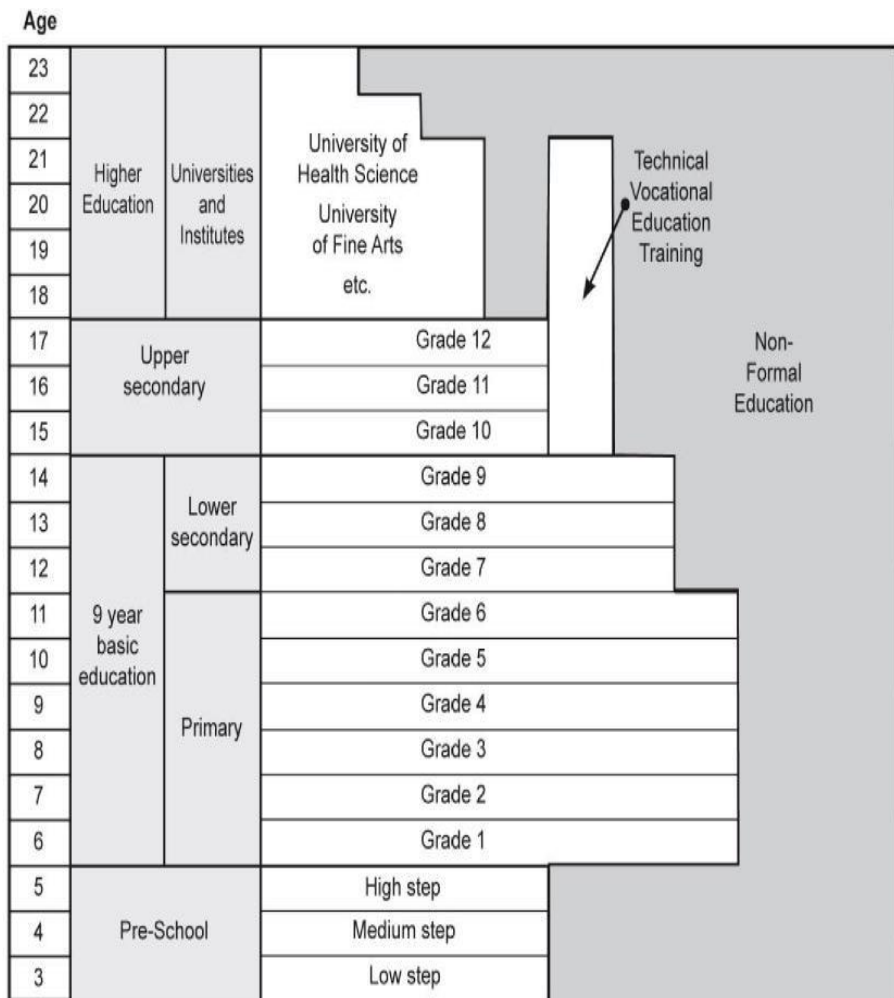


Figure 2.1 Education System of Kingdom of Cambodia

2.2 The Administration

The Ministry of Education, Youth and Sport (MoEYS) stands at the central level of leadership and management of the national government for education, youth and sport sector development. The Ministry's top management level is classified vertically from the Minister to Secretary of State, and to Under-Secretary of State. They are political appointees.

The highest technical management and coordination level is at the Directorate General level, such as the Directorate General for Education, Directorate General for Higher Education, Directorate General for Administration and Finance, Directorate General for Youth, and Directorate General for Sport – in which the leadership is ranked from Director-General to the level of Deputy Director-General. They are supervised by the top management level, led by the Minister. This Directorate General level supervises the technical department level. The Technical department level is a front-line technical coordination and implementation body of the Ministry. Currently, there are 33 technical departments at central level and 25 provincial/municipal departments at the provincial and municipal levels.

At the sub-national level, provincial/municipal departments of education supervise district education offices and general/technical secondary schools. The district offices of education supervise primary schools and pre-schools. Both provincial and district education offices are technically supervised and supported by the central technical departments on school administration, finance, and management.

The fundamental missions of the MoEYS are as follows:

- Make policies for sustainable human resource development;
- Develop laws and regulations for the implementation of the education, youth and sport sectors;
- Develop strategic plan, implementation, monitoring and evaluation in line with the policies and regulations set forth by the national directions and measures for improvement;
- Improve quality of education sector in response to the national and international socioeconomic development in an effort to build knowledge, skills, moral and civics;
- Orient technical education, life-skills and vocational training in all education levels;
- Review proposals for creation, termination, closure, merging, innovation, transformation and accreditation of academic establishments at all levels;
- Promote research and development in education, youth and sport;
- Manage, monitor and evaluate the learning process, writing, disseminating and importing textbooks and related documents on teaching and learning at all levels of education system;

- Check on issuance, confiscation, refusal of the certificates or degrees and provide accreditation and equivalence of the certificates offered by local and overseas academic establishments;
- Promote understanding on national and international cultures; and
- Review and advise on the laws, legislations, policies on education, youth and sport sectors.

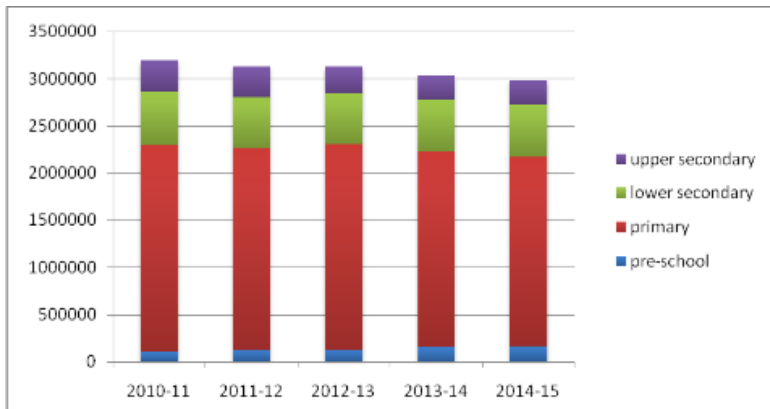
III. DEVELOPMENT PARTNERS IN EDUCATION SECTOR

Under the general leadership of the Minister, a Joint Technical Working Group (JTWG) has been formed to enhance policy dialogues and joint decision-making between the Ministry of Education, Youth and Sport and its development partners. The JTWG meets every quarter. Within the JTWG, there are sub-working groups on (i) Teacher Training, (ii) Decentralisation and De-concentration, (iii) Public Financial Management Reform, (iv) Non-Formal Education, and (v) Higher Education. Members of the subgroups are from MoEYS central management levels and its development partners. These subgroups meet regularly every month or every fortnight depending on issues and urgent needs, or as requested by the JTWG.

Donor and development partner coordination takes place through the Education Sector Working Group (ESWG), which is composed of multilateral and bilateral donors and non-governmental organisations. The European Union, World Bank, Asian Development Bank, UNESCO and UNICEF are key players in the group especially in supporting and working with the emerging NGO Education Partnership. The ESWG meets every month, currently chaired by the lead facilitator, the UNESCO country representative in Cambodia.

IV. THE SECTOR DEVELOPMENT

Under the development framework of the Education Strategic Plan 2014-2018, the education sector is broken down into sub-sectors: (i) Early Childhood Education, (ii) Primary Education, (iii) General and Technical Secondary Education, (iv) Higher Education, and (v) Non-Formal Education. In the school year 2014-2015, compared to the school year 2013-2014, the number of students in preschool increased from 157,288 to 163,468, the number of students in primary school remained relatively stable as it was 2,073,811 and it is now 2,012,175. At post-primary education level, the number of students in lower secondary schools increased from 538,626 to 546,864 during school years of 2013-2014 and 2014-2015 respectively. The number of students enrolled in the upper secondary level remained a challenge as seen in a declining stage from 288,789 down to 266,293 and further down to 262,072 during the school years of 2012-2013, 2013-2014 and 2014-2015 respectively (see Figure 2.2).



Source: MoEYS-Statistics 2014/2015

Figure 2.2 Student’s enrolment by educational level from 2010 to 2015

The Figure 2.3 illustrates that the primary school completion rate is 84 percent, and those at lower secondary and upper secondary education levels are 40 and 20 percentage respectively. The dropout rates at lower and upper secondary education levels, 21 and 27.5 percentage respectively pose a mounting concern in terms of the relevance and quality of the education provision (Figure 2.3).

	Enrolment	Dropout	Completion
Primary education	94.5	8.3	84.1
Lower secondary	55.3	21	40.3
Upper secondary	24.6	27.5	20

Source: MoEYS – Education Indicators, 2014/2015

Figure 2.3 Students' flow rates

Cambodia espouses a free-market economy. Private and community participation in the development of educational services has been expanded, with private investment in higher education being remarkably high compared to secondary education. The number of private providers in the K-12 system is limited. The private sector largely invests in pre-school and primary education, mostly for the urban residents. The following sections will discuss the general description and development by each sub-sector ranging from pre-school to higher education.

4.1 Early childhood education

The preschool system is classified into kindergarten and community pre-school aiming at preparing students to do well when they begin their new school life at the primary education level. Community preschools are thought to be more effective for

the rural residents. There are around 5,000 preschools, most of which are either public or community. In 2012, the percentage of five-year-old children enrolled in the early childhood education program was less than 60 percent (MoEYS, 2012). However, the number of children enrolled in pre-school increased from around 90,000 to almost 160,000 from school years 2010-2011 to 2014-2015.

Investment in early childhood education remains low from both parents and the Government due to several reasons, such as high costs, quality of services and teacher effectiveness. Pre-schooling, especially for those who reach the age of 5 years of age, is drawing strong attention from the Government and its development partners.

4.2 Primary education

Primary education is not compulsory, but the Government is committed to universalising primary school service under the framework of the Millennium Development Goals. Currently, there are 6,993 public primary schools enrolling around 2 million students in which 48 percent are girls. The overall net enrolment rate for primary education in Cambodia is over 95 percent. However, it was found that during the school years of 2009-2010 and 2013-2014, there was on average a 5 percent dropout rate. In the school year 2014-2015, the promotion and completion rates were 86.5 and 84 percent respectively (MoEYS, 2015). The quality of teachers, quality of schools and curriculum and the teaching methods are considered key areas for reforms to address this issue.

4.3 Lower secondary

Universalising nine years of basic education and developing opportunities for functional literacy is one of four key policy areas of the MoEYS. There are about 1,240 lower secondary schools with an enrolment of around 538,000 students, half of which are girls. The transition rate from primary to lower secondary schools is around 77 percent (MoEYS, 2014). The gross enrolment rate of lower secondary schools is 53 percent, and the transition rate from lower secondary to upper secondary schools is around 70 percent (MoEYS, 2014).

Expanding opportunities for lower secondary education or for all children to complete their basic education is an ambition of the current policy. Basic education for all is part of the Post 2015 EFA agenda. Considering that the lower secondary education completion rate has remained at less than 50 percent for the past five years, while dropout rate has remained over 20 percent over this same period of time, actions and commitments for reform in the basic education system with a strong emphasis on strengthening quality and expanding access to lower secondary education are greatly needed.

4.4 Upper secondary education

Upper secondary education is designed for three years of schooling for those who complete their nine-year basic education, which is composed of primary and lower secondary education. There are 444 upper secondary schools enrolling about 266,300 students. The enrolment rate is about 25 percent, with a 23

percent completion rate (MoEYS, 2014). Between the school years of 2013-2014 and 2014-2015, student enrolment in private upper secondary education increased from 5,961 to 11,947 respectively.

Technical upper secondary education for those who complete their basic education has been established as technical high school beginning from external funded schools to the government funded school. The Vocational Orientation Department under the MoEYS oversees the technical high schools. This technical department plays an important role in enhancing the coordination of skills promotion at high school level.

4.5 Technical and vocational education and training (TVET)

Technical and vocational education and training (TVET) is provided for those who complete their 9-year basic education and mainly targets those who wish to link education and employment. Two ministries are in charge of the vocational education and training: the Ministry of Education, Youth and Sport and the Ministry of Labor and Vocational Training (MoLVT). In 2013, there were 255 public and private TVET establishments in forms of technical and vocational schools, training centers, and institutes enrolling around 151,000 students.

There are provincial vocational training centers in all provinces supervised by the MoLVT. MoLVT also oversees TVET provisions in post-secondary education, including

polytechnic institutes and schools. The National Training Board (NTB), which is under the Office of the Council of Ministers, coordinates, approves and makes decisions regarding the training plan of all TVET related programs and projects. The National Employment Agency, which is under the supervision of the NTB, conducts labor market needs and assesses training needs, links employees and employers and also projects further labors and skills needed for national development.

4.6 Non-formal education

Non-formal education program is prepared for those who drop out of or are too old to attend the formal school system. Basic and functional literacy have been enhanced through the equivalency and community learning center development programs. In 2011, the literacy rate for those aged 15 years and older was 80 percent and 91.5 percent for those aged 15-24 years (MoEYS, 2014).

The key challenge for Cambodia is literacy among its labor force. The 2010 Cambodia Socio-Economic Survey reveals that about 18 percent of the labour force (aged 15-64) are either illiterate or have only basic literacy skills, while 35 percent have not completed primary education. The adult literacy rate for the population aged 15 years is slow to improve, with just one percentage point gain from 75 percent in 2007 to 76 percent in 2010. Illiteracy poses a serious threat to economic growth, especially in Cambodia, where only 2.1 percent of the workforce holds post-secondary education diplomas or higher education degrees.

4.7 Higher education

The Directorate General of Higher Education is the regulatory body for higher education in Cambodia. Currently, there are 105 higher education institutions (HEIs) enrolling 237,916 students and offering a range of degrees from associate to doctoral. Among the 105 HEIs, forty are public higher education institutions enrolling 96,460 students. In addition, there are 65 private HEIs enrolling students, with 123,717 associate to bachelor programs and 17,739 enrolling in graduate degree programs (Khieng, Srinivasa and Chhem, 2015).

All HEIs provide bachelor's degrees; some private and small HEIs provide associate and bachelor's degrees only. Large private universities provide programmes at all levels from associate to doctoral degrees. Many public HEIs provide mostly bachelor and master's degree programmes and some such as the Royal University of Law and Economics, National University of Management, and Royal University of Agriculture offer doctoral degree programmes.

Associate's degree programmes are for those who complete grade 12, but fail the national grade-12 examination. The programme lasts for two years and students are allowed to continue to a bachelor's degree programme on the condition that they pass the exams and spend six months or one semester studying preparatory courses.

4.8 Teacher training and recruitment

Public school teachers are recruited through their training centers and institutes and must be trained one to two years to become classroom teachers. Those who complete general secondary education can take an entrance examination to be pre-school teachers at the Pre-School Teacher Training Center for their two-year preparation program. Those who pass the national grade-12 exam take an entrance examination to be primary school teachers at the Provincial Teacher Training Centers for their 2-year preparation programme. Those who want to be lower secondary school teachers must take an entrance exam at the Regional Teacher Training Centers for their 2-year preparation programme. The National Institute of Education provides a 1-year training programme for those with bachelor degrees to become upper secondary teachers.

4.9 Curriculum development

Current core textbooks and other related education materials were produced under the framework of the Curriculum Policy for 2005-2009. The Department of Curriculum Development regulates and coordinates the curriculum framework and syllabus design for the school system from grades 1-12. The new curriculum framework is under development with a collective effort from the academia and the MoEYS to adjust it to the education and skills framework of the 21st Century and other high-performing economies of the ASEAN members.

V. THE EDUCATION REFORM PRIORITIES

Equitable access for basic education remains an issue in promoting basic education for all in Cambodia. School construction and renovation are ongoing. Under the current reform agendas (2014 and 2015) eight measures have been proposed. They are as follows:

Measure 1: Improving education quality at all levels in response to the need for economic diversification. Quality depends on the following factors:

- Teachers – incentives, qualifications and career pathways. These key areas are to be reviewed and developed for the betterment of teachers.
- Students – healthy and friendly school environment for their regular attendance and retention
- Curriculum – standards, student-centered, teaching-learning hours, reading, numeracy and life skills
- Environment – budget, classroom, library, textbook, teaching aid, management, leadership, information technology, safety, teacher attitudes and pedagogy
- Service delivery – health service, community participation, parent’s involvement, inspection, lifelong learning.

Measure 2: Implementing in-depth reform on public financial management, strengthening financial management aimed to use the existing resources with high effectiveness.

Measure 3: strengthening personnel management through implementing the civil service reform and introducing performance-based promotion and personnel management based on staff experiences and capacity, especially eliminating under-table culture in order to remove the discontentment among the personnel.

Measure 4: Reforming examinations: strengthen the quality of exam administration by enforcing four principles: law, justice, transparency and accountability. Eliminating cheating to promote the respect for teachers and to make students learn.

Measure 5: Creating Education Research Council, a think-tank on education policy to improve research capacity and develop policy and prepare reform measures based on evidence.

Measure 6: Reforming higher education to enhance the management of public higher education institutions and to regulate the private higher education institutions aiming at building human capital and human resource development to meet high skills demand and linking universities with industries.

Measure 7: Developing technical skills and soft skills for youth in response to the needs to labour market.

Measure 8: Reforming the physical education and sport in order to prepare for the South-East Asia Games in 2023.

The MoEYS is committed to teacher education and curriculum reforms for the improvement of the education quality under its Strategic Plan 2014-2018. The school-based management reform, in terms of the school director and school environment measures, aims to enable timely implementation of a national curriculum and for classroom teachers to fully use their competence and professional development. The Teacher Policy Action Plan, a flagship of reform under the current administration, has been developed and implemented. .

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Republic of Indonesia

The Education System of Indonesia: Features and Policies

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I. OVERVIEW

With about 30 million students enrolled from the primary level to higher education, Indonesia's education system is the largest of ASEAN countries by student number. Indonesia's education system is also complex, as its student body hails from about 126 ethnic groups who live in twelve thousand islands and carry their own unique cultures and dialects. These differences, however, do not result in variations of the medium of instruction, n.l. the Indonesian language (Bahasa Indonesia). Article 33 section (1) of Act number 20, 2003 on National Education System states that, "Bahasa Indonesia as the language of the nation shall be the medium of instruction in national education", while, as stated in Article 33 section (2) "Local language can be used as a medium of instruction in the early stage of education, if needed in the delivery of particular knowledge and/or skills".

These differences are unique characteristics of Indonesia's education system, but are not a cause for segregation in the nation of Indonesia, since the Indonesian people have been united by the slogan *Bhineka Tunggal Ika* (Diversity in Unity).

Ever since Indonesia declared its independence from the Dutch and the Japanese, the education system has been a component of nation building together with economic and political systems. United efforts were directed towards empowering Indonesian people to be a competent and democratic people, to support the establishment of Indonesia as an independent country which could stand equally among other

nations. These principles have been implicitly indicated in the preamble of the 1945 constitution.

The education system carries a specific constitutional mandate to enhance the intellectual level of the nation. In order to accomplish this goal, the government has a mandate to establish an education system which guaranties that every citizen receives adequate education to develop their intellectual potential. Although the current Indonesian education system was established with the implementation of the 1945 constitution, the governance of Indonesia's education system was conducted prior to the declaration of independence by Muslim priests and other prominent people such as Ki Hadjar Dewantara, then known as the founding father of Indonesian education. The beginnings of education by Muslim priests started with the teachings of Islam to local dwellers. Their teachings were run through a non-formal Islamic education institution called Pesantren. As their educational aspirations grew along with the rise of their awareness of subjugation by the Dutch and Japanese, some of the modern Muslim priests began to establish formal education in schools called Madrasah. The Islamic community organisation Muhammadiyah even established formal schools from the primary to the higher educational level.

Among the initiatives undertaken by the Muslim priest, Ki Hadjar Dewantara, who later became the first Minister of Education, was the establishment of the national education system, which was intended to equip the Indonesian people with the intellectual competence necessary to oust the Dutch and

Japanese colonizers from Indonesia's territory. Education, in his view, did not only augment one's intellectual capacity, but also strengthened one's character. Teachers not only transformed knowledge, but also transmitted values of Indonesia nationhood. In promoting his ideas about the direction of the national education system, he proposed the following three philosophical themes: First, "when standing in front, become a role model" (Inggarso sung tulodo); second, "when standing in the middle, be a motivator" (Ingmadyambangunkarso); and third, "when standing in the back, provide support and encouragement" (Tut wurihandayani) (Anonim, 1977).

The objective of this chapter is to elaborate further about the features of the Indonesian education system and current education policies. The term education system, as defined in the general provision of Act nr. 20, 2003 "means the overall components of education, which are interrelated in an integrated way in the pursuit of national education objectives". The features of the education system and education policies work in tandem to support the nation's education objectives.

II. FEATURES OF THE EDUCATION SYSTEM

The Indonesian education system must accommodate social differences caused by its geography as an archipelago. In order to accommodate those who live in isolated areas, the government of Indonesia offers a non-conventional system, while those who can attend school on a regular basis are provided with non-formal education options called Package A, B, and C. The

discussion of this division will consist of three parts: the schooling system, the management system, and the curriculum.

2.1 Schooling system

The school system in Indonesia is comprised of several levels: pre-school, basic education, secondary education, and higher education. Historically, Indonesia's education system was founded by Muslim priests, and as a result current the schooling system includes both general and Islamic schools. Although both systems are similar in terms of the age of students enrolled in each level and their curriculum, the general schools are managed by the Ministry of Education and Culture (MOEC), whereas the Islamic schools are managed by the Ministry of Religious Affairs (MORA). In addition, Islamic schools put more emphasis on Islamic teaching.

Since the Indonesian education system provides education to all school-age children, regardless of geographical, religious or social background, or physical condition, the schooling system is set up in a particular fashion. Non-formal education intends to support students who are unable to attend schools on a regular basis due to economic reasons, as, for example, they might be engaged in helping their parents at work. Likewise, under the home-schooling program, parents can teach their children by themselves. Children who are taught by their parents at home have more flexibility in terms of effective teaching time and teaching methods, but the parents must use the same curriculum as students who are enrolled in formal schools. This requirement is to ensure that children who are taught at home acquire equal

competencies to their counterparts in formal schools. Under Indonesia's schooling system, the home-schooling program is categorized as informal education, and package A, B, and C are categorized as non-formal education.

While those who cannot attend school on a regular basis are accommodated through the non-formal track, those who want to learn at home are also accommodated through the informal track. Another consequence of being an archipelago nation is that some people live in isolated areas that are difficult to access. Children in these areas have equal rights to education, like their counterparts who live in more developed urban and / or rural areas. Children who live in isolated areas are served by a non-conventional school system, the characteristics of which bear similarities to regular schools. The difference, however, lies in method of instruction and the learning processes that are conducted. Pedagogy is similar to regular schools, but teachers often teach more than one subject. To manage the teaching-learning program and ensure the quality of education, the non-conventional school is closely affiliated with a regular school. The principal of this school is also responsible for the management of educational programs in the non-conventional schools in the vicinity of his/her school. The government of Indonesia also guarantees that children with physical disabilities have adequate provision of education. Their education is facilitated by a special educational program, in spite of the limited number of the students.

The provision of education for all school-aged children with different characteristics and social backgrounds is conducted within four levels of the schooling system. As is shown in Table 1, the four levels of the schooling system comprise of pre-schooling, basic education, secondary education, and higher education. At both the basic and secondary education levels there are formal, informal, and non-formal tracks. In contrast, in pre-primary and higher education there is only the formal track. At the pre-school and higher education levels, the number of students enrolled in informal as well as non-formal systems is small. This is partly due to the government initiative to launch a compulsory nine-year basic education program in the 90s, which mandated that all children in the basic education age bracket be enrolled in basic education institutions. In 2015, the government of Indonesia under the leadership of President Joko Widodo launched a 12-year compulsory education program, which guaranteed junior secondary school graduates (junior high school) seats in senior secondary education (senior high school). This matter will be discussed in more detail below.

The term basic education as defined in Act nr. 20, 2003 consists of 6-years of primary school and 3-years of junior secondary school. The formal school age at this level covers 7 to 15 years old. Thus, the term basic education is proposed to provide the legal basis for the implementation of the compulsory a 9-year basic education program for pupils aged between 7 and 15 years old.

The subsequent secondary education level is a 3-year program offering a general and a vocational program. The general program is more academically oriented. Graduates are encouraged to continue to tertiary education, more specifically universities and or institutes of higher education. Graduates from vocational programs are expected to enter job market. This, however, does not mean that the vocational education is a terminal point in one's education. Graduates can still pursue further, higher education in the form of a non-degree program. Opportunities to continue to higher education are open wider as the government promulgated Act number.12, 2012 on Higher Education. This act encourages local governments to open community colleges which are based on more local needs. The community college is, therefore, intended to support local economic growth by providing human resource skills at the mid-skill level.

Table 3.1 Schooling system in the Indonesia's education system

Level	Track	School
Tertiary Education: School age: 19-24 year old		<ol style="list-style-type: none"> 1. Institutes, universities, and colleges for specialisation offer degree programs at the bachelor, master and doctorate levels. 2. Universities also offer professional programs equal to a master degree. 3. Academies and polytechnics offer diploma programs starting from diploma 1 up to diploma 4. 4. In-service education institutions offer specialized bachelor and master degrees.
Secondary Education School age: 16-18 year old	Formal	<ol style="list-style-type: none"> 1. General Senior Secondary School 2. Vocational Senior Secondary School 3. Islamic Senior Secondary School (<i>Madrasah Aliyah</i>)
	Non-Formal	Package C equals to a 3-year senior secondary school
	Informal	Home schooling
Basic Education: <input type="checkbox"/> Consisting of a 6-year primary school and a 3 year junior secondary school. <input type="checkbox"/> School age: Primary school 7-12 year old; Junior secondary school 13-15 year old.	Formal	<ol style="list-style-type: none"> 1. Primary School 2. Islamic Primary School (<i>Madrasah Ibtidaiyah</i>)
	Non-Formal	<ol style="list-style-type: none"> 1. Junior Secondary School 2. Junior Islamic School (<i>Madrasah Tsanawiyah</i>).
	Informal	<ol style="list-style-type: none"> 1. Package A equals to a 6 year primary school 2. Package B equals to a 5-year junior secondary school
	Informal	Home schooling
Pre-school School age: 4-5		<ol style="list-style-type: none"> 1. Kindergarten 2. Islamic Kindergarten

In the context of Indonesian education, institutions of higher education, as stipulated by Article 20, section (1) “can take the form of academy, polytechnic, college for specialisation (sekolah tinggi), institute, or university”. It is prescribed that institutions of higher education in the form of sekolah tinggi, institute, and university provide three higher education missions called Tri Dharma consisting of education, research, and community service. These institutions can offer bachelor, master and doctorate degrees. Some universities may also offer master and doctoral programs, as well as professional programs equal to master programs, provided they meet certain accreditation requirements. Examples of such programs include e.g. professional Accountancy, Law, and specialized medical training.

Institutions of higher education managed by Ministries other than the Ministry of Education and Culture, offer programs called “in-service higher education”. These institutions, as regulated by Article 29 section (2) of Act nr. 20, 2003 “function to enhance the ability and skills in carrying out duties for government official and for official candidates in concerned department or non-departmental government institutions”.

This stipulation also applies to the institutions of higher education under the Ministry of Religious Affairs. This Ministry manages Islamic universities and or institutes offering Islamic teaching and other programs such as Psychology or Economics, which are essentially the same with programs offered in regular universities and institutes of higher education.

The Indonesian education system is one of massive scale by size, enrolling more than 63.5 million students. As shown in Table 3.2, the majority of them are enrolled at the basic education level. This is true for both regular (non-Islamic schools) and Islamic schools. Of the total number of students, 66.1% are enrolled at the basic education level. This figure may reflect the demographic structure of Indonesia population, the majority of which is still below the age of 20 years. On the other hand, it may also indicate the successful implementation of compulsory 9-year basic education. The success of implementing the earliest initial programs, which eventually culminated in the promulgation of compulsory 9-year basic education law, started in mid-80s. Among these programs was compulsory 6-year primary education. This program was supported by massive construction initiative of primary schools, which began in the early 1970s. Building on the success story of earlier compulsory primary education programs, the implementation of the latter compulsory basic education program was supported by massive construction of schools. This strategy proved to be effective when school participation rates were still below 60%. Today, with participation rates over 60%, there should be a compensation funding scheme for school-aged children from low income families to continue encouraging school participation.

Although Islamic schools both at primary schools (Madrasah Ibtidaiyah) and Islamic Junior Secondary Schools (Madrasah Tsanawiyah) are also instruments in supporting the compulsory 9-year basic education, the acceleration of developing Madrasah was not as massive in scale as the building

of regular schools. Consequently the student body of regular schools far outnumbers those of the Madrasah. It is estimated that the number of students from Islamic schools only counts for about one fifth of those from regular schools.

Analysing the distribution of students both in regular schools and Madrasahs reveals the diametrical differences of the two types of schools. In regular schools, the public school enrolment dwarfs private school enrolment. In contrast, the data from Madrasahs reveals the opposite trend. This indicates that the government plays a significant role in constructing public schools, while the community plays more dominant role than the government in the construction of Madrasahs. This is not surprising, since in the past the establishment of Madrasahs was predominantly the affair of Muslim priests. It seems this pattern has continued into the present.

Table 3.2 The number and distribution of students by education level

Type of school	Status of school				Total
	Public	%	Private	%	
<i>1. Regular Schools</i>					
<i>1. Kindergarten</i>	3,829,360	95.67	172,222	4.30	4,002,561
<i>2. Primary Schools</i>	23,911,525	90.22	2,592,635	9.78	26,504,160
<i>3. Junior Secondary Schools</i>	7,379,033	75.95	2,336,170	24.05	9,715,203
<i>4. General Senior Secondary Schools</i>	2,790,445	65.01	1,501,843	34.99	4,292,288
<i>5. Vocational Senior Secondary Schools</i>	1,576,056	37.53	2,623,601	62.47	4,199,657
<i>6. Institutions of Higher Education</i>	4,012,347	68.71	1,827,240	31.29	5,839,587

Type of school	Status of school				
<i>II. Madrasah</i>					
<i>7. RadiyatulAfial</i>	--	--	1,174,257	100.00	1,174,257
<i>8. Madrasah Ibtidaiyah</i>	434,727	13.21	2,855,513	86.79	3,290,240
<i>9. Madrasah Tsanawiyah</i>	685,893	24.34	2,131,945	75.66	2,817,838
<i>10. Madrasah Aliyah</i>	362,797	33.00	736,569	67.00	1,099,366
<i>11. Institutions of Higher Education</i>	349,740	56.99	263,925	43.01	613,665

Sources: MOEC (2014a). Indonesian Education Statistic in Brief 2013/2014

Senior secondary schools consist of general and vocational schools. As data in Table 3.2 show the proportion students enrolled in general schools and vocational schools is relatively equal. This, however, was not the case before 2005. Starting in 2005, the Minister of National Education shifted the ratio of general schools and vocational schools to 35: 65. (note: during the period of 2005 – 2009, the name of the Ministry which managed educational programs at central level was the Ministry of National Education. Ever since the Directorate General of Culture joined the Ministry in early 2014, its name became the Ministry of Education and Culture). As a result of this policy, it is estimated that there are about 112 programs offered by vocational schools all over Indonesia. This might also explain why the proportion of students of general and vocational schools is relatively equal. The current Minister, however, will shift back the ratio between general schools and vocational schools, aiming for the general schools to outnumber the student body of vocational schools. The exact proportion has not yet been decided.

The Ministry of Religious Affairs also administers vocational Madrasah, but the number of such institutions is still very small, and their data is not reported in Table 3.2. The program offerings are actually similar to those offered by regular vocational schools, but the curriculum in vocational Madrasah includes a larger portion of Islamic teaching as compared to regular vocational schools.

Tertiary education is the level at which graduates from senior secondary school pursue higher levels of education in order to attain higher education credentials. In order to facilitate that demand, institutions of higher education offer both degree and non-degree programs, thereby giving graduates a broader range of opportunity to choose the program best suited their professional aspirations as well their academic competence. As data presented in Table 3.2 indicates, the government plays a dominant role in the provision of institutions of higher education. Comparing the number of students in public and private institutions of higher education shows that public institutions of higher education enroll a much larger percentage of total number of students than their private counterparts. This is true for both regular and Islamic institutions of higher education.

After President Joko Widodo took office in 2014, the Directorate General of Higher Education was moved to the Ministry of Research, Technology and Higher Education. The discussion below will exclude tertiary education and will cover only basic education and senior secondary education since the

education at these levels is still under the authority of the Ministry of Education and Culture.

2.2 Curriculum

The rationale for the development and implementation of the curricula for basic and secondary education is the actualisation of the objective of national education, as stipulated by Article nr.3 of the Act nr. 20, 2003 (MOEC, 2003) which states:

The national education functions to develop the capability, character, and civilization of the nation for enhancing its intellectual capacity, and is aimed at developing learner's potential so that they become persons imbued with human values who are faithful and pious to one and only God; who possess morals and noble character; who are healthy, knowledgeable, competent, independent; and as citizens, are democratic and responsible.

The development of curricula has to take into account the fact that the environment of education is dynamic, and that adjustment and improvement of curricula is necessary. Having considered such dynamics, the curricula are now undergoing revision. The revision more specifically gives emphasis to character building. Furthermore it also anticipates future challenges which are more progressive and competitive(MOEC, 2014b). Such challenges include:

- Globalisation: World Trade Organization(WTO), ASEAN Economic Community, Asia Pacific Economic Cooperation(APEC) and, ASEAN Free Trade Agreements (AFTA).
- Environmental issues
- Rapid progress in information technology
- Convergence of science and technology
- Knowledge-based economy
- The rise of creative industry and culture
- The shift of power in global economics
- Influence and impact of techno-science

The current curriculum is directed toward building character and preparing graduates to be more competitive and knowledgeable, having the following characteristics:

- (1) Balance on spiritual and social development, curiosity, creativity, connection between intellectual and psycho-motor ability;
- (2) Pupils apply what they learned in school in society and utilize society as learning resources;
- (3) Develop attitudes, knowledge and skills and apply them in different situations in school and society;
- (4) Allocate enough time to develop attitudes, knowledge and skills;
- (5) Directed toward achieving competencies which are divided into core competencies in all grades which

are further specified into basic competencies for every subject;

- (6) Core competencies are used to organize basic competencies. All basic competencies are developed to achieve core competencies;
- (7) Basic competencies are developed based on an accumulative principle, strengthen and enrich across subjects and level of education.

The curriculum as reference in the development of teaching programs and methods also serves to inculcate cultural values and national ideology to students in the form of the Pancasila (Five Principles). These are reflected in the structure of core subject matter taught in primary, junior secondary and senior secondary schools. Subject matter is divided into two clusters i.e. group A and B. Subject matter belonging to Group A are curricular programs intended to develop attitudes, knowledge, and skills forming the basis for strengthening students' competence to live together collectively as members of the community and nation. Subject matter belonging to Group B are curricular programs intended to develop attitudes, knowledge, and skills forming the basis for strengthening students' competence to adapt to cultural and social environments as well as their artistic sense. Although the contents of the subject matter in Group A are developed by the Ministry of Education and Culture, it is permissible and even suggested to integrate local content into the subjects.

Table 3.3 Structure of subject matter in the curriculum

Subject Matter	Primary school	Junior secondary School	Senior secondary school
Group A			
<i>1. Religious education and Ethics</i>	√	√	√
<i>2. Pancasila and Civic Education</i>	√	√	√
<i>3. Bahasa Indonesia</i>	√	√	√
<i>4. Math</i>	√	√	√
<i>5. Social Sciences</i>	√	√	√
<i>6. Sciences</i>	√	√	√
<i>7. English</i>	--	√	√
<i>8. History of Indonesia</i>	--	--	√
Group B			
Handicraft	√	√	√
Art and Culture	√	√	√
Physical education	√	√	√

The general senior secondary school introduces an academic interest system. Each new entrance to general secondary school is requested to choose the program according his/her academic interest. There are three profiles of academic interest offered by the general senior schools viz. The first is Mathematics & Science, the second, Social Sciences, and the third, Language & Culture. Subject matter offered in each program is presented in Table 3.4.

Table 3.4 Overview of subject matter offered by Academic Interest Profile

Academic Interest Profile	Subject Matter
Mathematics & Science	<input type="checkbox"/> <i>Math</i> <input type="checkbox"/> <i>Biology</i> <input type="checkbox"/> <i>Physics</i>
Social Sciences	<input type="checkbox"/> <i>History</i> <input type="checkbox"/> <i>Sociology</i> <input type="checkbox"/> <i>Economics</i>
Language & Culture	<input type="checkbox"/> <i>Bahasa Indonesia and Literature</i> <input type="checkbox"/> <i>English Language Literature</i> <input type="checkbox"/> <i>Other Foreign languages and Literature (Chinese, Japanese, Korean, German, and French)</i> <input type="checkbox"/> <i>Anthropology</i>

Each student enrolled in general senior secondary school is required to take subjects which belongs to Group A and B. After passing each of subject, they may select at least three subjects of related academic interest in order to complete graduation requirement for their selected academic interest profiles.

2.3 Education management

The Ministry of Education and Culture is the main organisation managing the national education system. In so doing it sets the national education a target to achieve over a period of time, setting national education standards, and allocating the national educational budget up to school level. Although the Ministry of Education and Culture is directly responsible institution, it does not have sole control over all education

institutions as there are other ministries which also manage their own education institutions. The Ministry of Religious Affairs, for example, manages a large number of education institutions called Madrasahs, which number fewer than the Ministry of Education and Culture, but are still more than the other ministries. Other ministries which manage education institutions include the ministries of Home Affairs, Defense, Health, and Social Affairs. The majority of education institutions managed by these ministries are institutions of higher education, except for the Ministry of Religious Affairs.

As far as governance is concerned, these ministries have full autonomy in the area of curriculum and teacher recruitment and deployment, but share education budgets. Once the budget is allocated to their education institution, they have a full autonomy to allocate and manage the budget themselves.

The case of the Ministry of Religious is slightly different. As indicated the above, there are two areas in which the Madrasah and Islamic institutions of higher education should comply with regulations decided by the Ministry of Education and Culture, namely the curriculum and teachers qualifications and competencies. Since all teachers who teach in primary, junior and senior secondary schools must have at least a bachelor degree (sarjana), the same requirement also applies to teachers who teach in the Madrasahs. Likewise, teachers who teach in universities and institutions are required to have the educational qualification equivalent of a masters degree. These requirements also apply to teachers who teach in Islamic institutions of higher education.

There are two bodies which oversee the quality of education. They are the Board of National Education Standardization and the National Board of Accreditation. The former determines the indicators of national education standards, while the latter evaluates the education institutions. In guaranteeing quality assurance, both organisations take guidance from the national education standards, as stipulated by Article 32 section (1) of Act nr.20, 2003, consisting of the standards for content, processes, graduate outcomes, educational personnel, facilities and equipment, management, funding, and educational assessment.

Another characteristic of the management of the education system in Indonesia is decentralisation. The decentralisation of education occurred since early 2000, when a reform in the political system was followed by the establishment of a governance system. The decentralisation in education took place at the provincial, district, and school levels. Based on Act No. 23, 2014 on Local Government, there is a division of labor in the area of education management between the provincial government and the district government. The provincial governments manage secondary education, while district governments manage basic education. Decentralisation at the school level is regulated by Act nr. 20, 2003 based on the school-based management mechanism. Despite the autonomy of schools, they still have to comply with both the provincial government for senior secondary schools, and the district government for primary and junior secondary schools. Compliance is required especially in the area of deployment of teachers and school principals.

To assure that the implementation of education programs by schools runs effectively, each school receives a budget from both the central government and the local government (provincial and district). In principle, the central government (represented by the Ministry of Education and Culture) still plays a major role in the provision of funding for education at school level. Such funds are allocated for education facilities and equipment, operational cost for the school management which is distributed to schools through the Operational School Subsidies program, teacher and school principal incentives, and subsidies for students from low-income families. The local government (both province and district) adds to the budget allocated by the central government and pays teachers' salaries.

There are two types of budgets allocated to teachers and principals. The first is incentive, and the second is salary. The incentive consists of a budget scheme allocated to teachers and school principals who are already certified as having professional status. This scheme is intended to motivate teachers and school principals to perform well. In order to have professional status, all teachers and principals must have at least a bachelor degree, teach 24 hours per week, and meet other professional criteria. The salary is the amount of money received by teachers and school principals per month for having the status of full teachers and school principals. The salaries of teachers and school principals working for public schools are paid by the local government, while teachers working for private schools are paid by their school foundation. Unlike the salary, the incentives are for all teachers and school principals regardless of whether they work

for public or private schools and are paid by the central government as long as they meet requirement for having professional status.

This funding mechanism also applies to the education institutions under other ministries. The decentralisation of education management only exists for education institutions under the Ministry of Education and Culture. Salaries and incentives of all teachers and education personnel are paid directly by the relevance ministries. Likewise, all the provisions for education facilities and equipment are borne directly by the relevant ministries.

III. CURRENT EDUCATION POLICIES

Political and economic changes and progresses have been reshaping education policies. The sensitivity as well as adoption capacity of the education system will serve the criteria of success of the implementation of education policy. Vanderstraeten (1997) argues these may have impact on the school management and provision. He further argues that in order to keep up with all of these changes and progresses, the education system right up to school-level will have to deal with complexities and intricacies. Despite all of these complexities, student characteristics and pedagogical aspirations should not be ignored as the mission of education policy is to ensure that all students, regardless of their social backgrounds and characteristics, are able to maximize their competencies to achieve possible highest academic achievement (Lambeir, 2005; Hincchilffe, 2006).

Indonesia's education system ensures that all school-aged children should be treated equally in order to develop their academic potential to the maximum level. Since the late 1960s, during the New Order Era, when policies were formulated in the form of Five Year Plans, education policy consisted of three policy themes, viz. Access; Quality, relevance, and efficiency; and effectiveness. Since President Joko Widodo took office, education policy is directed toward the actualisation of the political mission of the government called Nawa Cita, which literary means Nine Hopes. This mission serves as guidance for all public policies including education. The President himself emphasizes that all the programs carried out by all ministries should be directed toward the achievement of visions and missions of the President, since these are the reflection of the government policies (Kompas, October 20, 15). Out of Nine Hopes, there are seven which are relevant to the educational policy agenda. They are presented in Table 3.5.

Table 3.5 References for generating education policy agenda

Political missions	Strategies
<i>1. To assure that the government always presents to developing more democratic, effective, and reliable governance.</i>	To develop good governance.
<i>2. To develop Indonesia starting from outer regions by empowering these regions and villages within the framework of unity</i>	Asymmetric decentralisation, expansion development program including villages and border regions from the eastern part of Indonesia.
<i>3. We the government are going to improve the quality of life of the Indonesian people</i>	To launch the “smart Indonesia” program by implementing free compulsory 12-year education.
<i>4. To improve Indonesia’s productivity and competitiveness in the international arena so the nation of Indonesia will make progress and rise together with other Asian nations.</i>	To build science and techno-park for poly-technical and vocational senior secondary school by utilizing the most modern technology.
<i>5. To bring about a revolution of the national character</i>	To develop civic education, to evaluate the uniformity of national education system, to assure teachers’ welfare especially those who are assigned to isolated regions.
<i>6. To strengthen diversity and Indonesia’s social restoration.</i>	To strengthen education about diversity and to create social milieu for dialogue among people.

Generating education policy agendas to meet the political mission of the government in power is based on the premise that successfully implementation occurs when policies have a positive impact on targeted groups and support the actualisation of the political mission of the government (Baedowi, 2014; Napitupulu,

2013).The following will elaborate strategies which have a direct relation with education policies.

3.1 Developing good governance

Since democratisation has been incorporated in the public policy agenda, developing good governance is a key metric of success. Transparency and accountability are two criteria of success. Thus, the following are policy directions in order to assure good governance:

- Developing a transparent system in recruitment and deployment of teachers and education personnel
- Developing a meritocratic mechanism in teachers and education personnel promotion
- Developing just criteria in education finance to promote equality
- Developing transparent and accountable education program management

3.2 Developing Fair Education finance

Decentralisation in education management has been implemented since early 2009. The main goal of decentralisation is to generate education policies which reflect local needs. Due to the fact that there discrepancies in fiscal capacity between districts, the central government should intervene in order to avoid these disparities from widening. The intervention by the central government in the case of education

occurs through applying regressive rates in providing subsidies in order to achieve equality. With this mechanism, the lower fiscal capacity of a district, the more subsidies they receive.

In addition, inequality due to different social stratification is a perennial problem. The government does not pretend to be able get rid of the problem, aims rather, to minimize the negative impact.

- Assuring education finance based on districts' fiscal capacities
- Establishing affirmative action in the provision of education to children who live in isolated and or marginalized areas.
- Developing an effective education provision such as non-conventional and or non-formal education programs to assure the provision of education for children who live in isolated areas.

3.3 Implementing free compulsory 12-year education

“Free and compulsory” is the current paradigm shift in the educational policy in Indonesia. Based on this paradigm, education is considered the right of every citizen, and the government is tasked with the responsibility of providing adequate and sufficient education to all school-aged children without discrimination. The government emphasizes the term adequate and sufficient since the provision of education is not merely education without quality assurance. The government

believes that education is a means for every citizen to attain a better life. Support for implementing the compulsory 12-year education is not purely pedagogical. It rather has broader perspectives to ensure that the demographic dividends currently being enjoyed by Indonesia will not become a demographic catastrophe. Education plays a key role to ensure that implementing a 12-year compulsory education provides indiscriminative opportunity to all school aged children to be skillful and productive human resources (Ministry of National Planning (2015a; Kompas; Ministry of National Planning,2015a). Indonesia will then be able to harvest its investment by 2045 when it celebrates its 100th independence anniversary, and becomes a developed and prosperous country. Given that compulsory 12-year education is a means to maximize the demographic dividend for future development strategy, emphasis therefore will not only focus on access but also, equally importantly, on quality improvement. The following is the strategy which will be taken by the government of Indonesia to ensure access and quality simultaneously.

- Assuring the equal distribution of competent teachers and school principals to all regions.
- Developing a financial scheme to help students from low-income families through the Smart Indonesia Card.
- Developing an education financial mechanism to support free compulsory education.

- Assuring adequate and sufficient educational facilities and equipment to all schools.
- Developing a standardized evaluation system to facilitate continuous quality improvement.

The strategy outlined the above takes into considerations equality and equity at the same time. The equality aspect focuses on guarantying that every student is treated equally. This tenant does not mean that every child will have similar portion of treatment, but one proportional with the social stratification of their family and location in which they live. The lower social stratification, the more aid they should receive as compared to their counterparts from higher social economic status. Likewise, those who live in isolated areas shall be provided more education facilities compared to their counterparts living in urban areas. The complexity of social class or geographic factors is omnipresent in policy issues that every government deals with. All education policies therefore cannot negate such complexities if the effectiveness of implementation is based on equality and equity criteria simultaneously (Benavides and Hernández 2007; Hincchilffe,2006; and Omona, 2010). The differences facing each government are in the intensity and the level of complexities.

3.4 Strengthening vocational education

By design, the objective of vocational education is to provide skills to students in order for them to be ready to enter job market. Students who enroll in vocational schools should acquire hands-on experience in addition to better knowledge of

concepts of the vocational domain they study. This can be achieved if vocational schools are equipped with adequate and sufficient equipment, and employ professional teachers. While vocational education, by law, is ideally designed so that every graduate, with his/her skills, should be able to enter job markets, realities show that many skills and competencies achieved by graduates still do not match job market requirements. As a consequence, many graduates are not immediately accepted by employers. In many cases, they still have to go through more training programs to find employment ((Ministry of National Planning, 2015b; OECD, 2015). In response to those challenges, the government has been taking the following policy strategies:

- Providing adequate and modern equipment to support students to practice.
- Establishing cooperation between vocational schools and industries to enrich students' hands-on experience.
- Developing standardized vocational test to measure students' vocational competences.
- Setting up benchmarks in order to keep up date with the development of science and technology as well as industries' vocational requirements.

3.5 Implementing new curriculum

The government is undergoing curriculum revision. The revised curriculum is called “Curriculum 2013” and currently is in the stage of gradual implementation. With regard to school

readiness to implement the curriculum, there are still wide gaps between schools. Less than 60% of schools especially those located outside the island of Java are not ready to implement as yet. Teacher competence is a main factor, which is exacerbated by a lack of educational equipment and textbooks, as well as school management support.

The government hopes that by the end of 2020 all schools should be able to implement the curriculum effectively. To achieve the objective, the policy strategies which are being undertaken are to conduct massive teacher training and equip schools with equipment needed for the implementation of the Curriculum 2013. The government conducts training for school principals so that they will be able to facilitate the implementation of Curriculum 2013.

3.6 Developing teacher professionalism

One determinants for the quality improvement of education, the assurance of teacher professionalism, has become a high priority. Every teacher who wants to reach the professional status is required, as a starting point, to have a bachelor degree. Teachers who already have a bachelor degree need to meet the following sequential requirements, which include a minimum teaching load of 24 hour per week, and conduct a series of classroom action research. The results of this research should be written in an academic paper and should be presented in a seminar. Furthermore, a teacher still has to attend a series of workshops and or seminars which are related to their teaching jobs.

Introducing a professional status for teachers is a mechanism to increase their income in a more accountable manner. Teachers who already have professional status receive a salary which is twice that of teachers who have not reached that status. Furthermore, teachers are encouraged to explore new and innovative teaching methods which are suitable to the local context in which they teach; and as a result teacher professionalism will increase students' academic performances.

By considering that there are some teachers, especially those who teach in isolated areas, may still not have minimum education qualification, let alone opportunity to attend series of professional workshops or seminar, the government develops variety policy strategies. They are as follows:

- Providing scholarships for teachers to take education to obtain a bachelor degree
- Providing technical assistance for teachers to conduct classroom action research
- Providing special incentives for teachers who are willing to teach in isolated areas
- Developing teacher assessment as a basis in establishing a meritocratic promotion system
- Developing a system of incentives which can promote teachers' performance.

3.7 Strengthening character development

One of criticisms addressed directed towards the previous curriculum was that it did not proportionally emphasize character development. To be educated persons is to have intellectual capacity and good character in equal proportion (Santoso, 1981; MOEC, 2014b).

It has been observed by many that students are lacking in nationalism and a spirit of heroism. Local wisdom no longer serves as a moral standard of conduct. On the contrary, students tend to be comfortable with instant results. Realizing that all these may result in moral decadence and a deterioration of the struggling spirit of young generations, the government has accelerated the implementation of character development by integrating the domain of character as part of standard of content in Curriculum 2013as follows:

- Setting character as one of standard of competencies of every student
- Launching a program called the habituation of nationalism and cultural values for students
- Developing an assessment system to measure the character dimension as one indicator of education outcomes

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**Lao People's
Democratic Republic**
Education Systems and Policies

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I. OVERVIEW

The Lao People's Democratic Republic (Lao PDR or Laos) is situated in the centre of the Indochina Peninsula in Southeast Asia. Lao PDR covers a total land area of 236,800 square kilometres (91,430 square miles). It is bordered by China to the north, Vietnam to the east, Cambodia to the south, Thailand to the west and Myanmar to the northwest. The capital of Lao PDR is Vientiane. Some 70 percent of the country is comprised of mountains and high plateau areas. The plain regions are situated along the Mekong River. Lao PDR has a tropical climate. The country consists of 18 provinces, including the capital city, 148 districts and 10,500 villages. Lao PDR is administratively structured into four levels: central, provincial, district, and village levels. The provincial administration level is run by a governor, the municipality by a mayor, the district by a chief administrator, and the village by a village chief.

The population of the Lao PDR is around 6.8 million (2015) comprised of 49 different ethnic groups. The official language is Lao.

II. EDUCATION SYSTEM

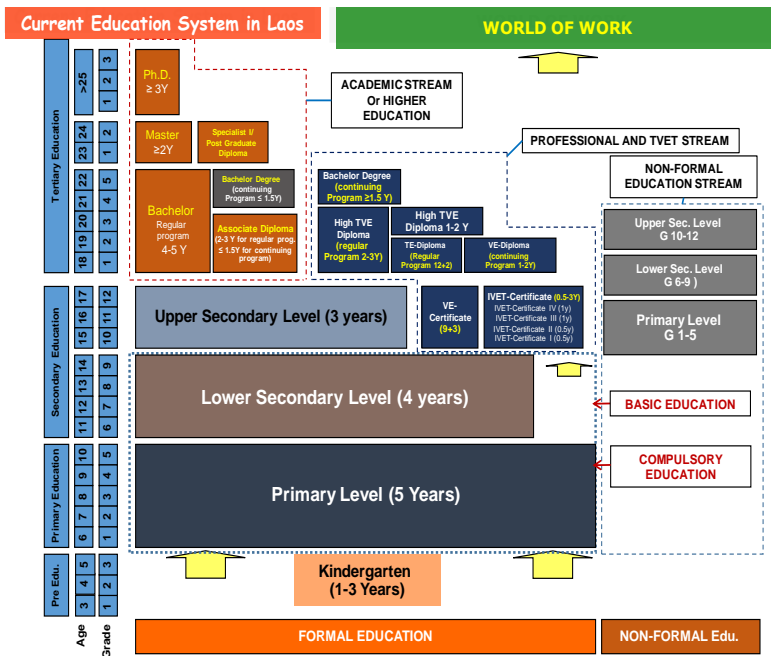
Currently, the education system of Lao PDR consists of pre-school education (ages of 3-5), five years of compulsory primary education, four years of lower secondary education, and three years of upper secondary education. In the near future, compulsory education of Laos will be extended to nine years (five years of primary education and four years of lower

secondary education). Based on the National Education System Reform Strategy for 2006-2015, the Ministry of Education and Sports has moved from the 5+3+3 system with just eight years of basic education, to the international standard of nine years of basic schooling through a 5+4+3 structure. Thus, the school system in Lao PDR consists of Pre-school Education, Primary Education, Lower Secondary Education, Upper Secondary Education, Post-secondary Education and Tertiary Education. Specialised education is offered following lower secondary or upper secondary levels, in three strands: technical, vocational, and teacher training.

One to two year post-secondary education programs are offered in technical schools. Tertiary education programs requiring three to seven years of study are offered by Technical and Teacher Training College and the Universities.

Private Education is also an important part of the national education system. Currently, the private sector is contributing to the rapid growth of all levels from pre-primary through vocational education and post-secondary education. Private colleges mainly offer programs in business, computing, tourism and English language.

Non-formal education also complements and supplements the general schooling provision. Non-formal education and training includes basic literacy and numeracy training, and a wide range of other vocational and skill-based training programs for youth and adults out of school.



Source: MOES/EMIS.

Figure 4.1 Schooling Chart

III. EDUCATION ADMINISTRATION SYSTEM

In the Lao context, the Ministry of Education and Sports (MOES) is responsible for education at all levels. The MOES has authority over universities, higher technical education and teacher training and education. There is also a private education sector provision, for which the MOES has the responsibility of oversight. The Ministry of Education and Sports shares

responsibilities with the Provincial Education Services and District Education Bureau. The decentralized education management covers: planning management, budgeting and financial management, personnel and human resource management, academic management, property and procurement (including school construction) management. In addition, the Village Education Development Council (VEDC) supports school decision-making.

The Educational Administration System in Laos is the shared responsibility of the departments of the Ministry of Education and Sports and Local Education Services. The local services, Provincial Education Service (PES) and District Education Bureau (DEB) are vertically linked to the MOES, but are under provincial and district administration committees, whose chiefs are appointed by and report to the council of ministers. Pursuant to Agreements of the Minister of Education and Sports on Establishment and Implementation of Provincial Education Service, issue No.:2350/moes.dop, released on July 10th 2012 and of District Education Bureau, issue No.:2347/moes.dop, released on July 10th 2012, the PES are directly responsible for upper secondary education and vocational education, the DEB for pre-primary, primary, lower secondary and non-formal education and lifelong learning. What follows below are the details of the education administration system of Laos.

3.1 Pre-school and Primary Education

The Department of Pre-school and Primary Education is directly responsible for the Pre-school and Primary Education at the Ministry level. This department is responsible for administration, control and development of pre-school and primary education, including inclusive education in both the public and private sector nationwide. The main functions of the Department are to direct, support and supervise pre-school and primary and inclusive education and to direct, inspect and monitor the implementation of national curriculum and content of learning and teaching of pre-school, primary, and inclusive education throughout the country. The District Education Bureau which is located in every district and under the Provincial Education Service also has the role and function to implement, control, inspect, and evaluate the pre-school, basic education and sports in the District sites.

Over the past five years (2011-2015), Early Childhood Education (ECE) has significantly improved and resulted in greater student enrolment, and increased numbers of teachers and classrooms. Under the policy of expanding access through pre-primary and community-based school readiness programmes with support of Development Partners, the enrolment rate of five-year-old children increased to 66%, which is higher than the 2015 target of 55% set in the Education Sector Development Plan 2015. In addition to the expansion of ECE school networks, Ministry of Education and Sports also focuses on developing pre-school curricula and provides teaching and learning materials. The table 1 in the annex section indicates that over the past five

years, access to ECE has significantly increased resulting in the increased enrolment rate of five year children at an average of 5-6% per annum.

In pursuance of the policy on making incomplete primary school complete through the implementation of multi-grade teaching and the provision of more teachers and additional classrooms, 77% of a total number of primary schools across the country now provide all 5 grades of primary education (increased from 57% in 2009). The Government of the Lao PDR, with support from development partners, has paid close attention to developing primary education by increasing the financing for infrastructure, especially for the construction and renovation of schools, training of teachers and school principals, teaching and learning materials, school meals and so forth. As a result, primary education in Lao PDR has improved in terms of quality and quantity see table 2).

3.2 Secondary Education

The Department of Secondary Education is responsible for Secondary Education at Ministry level. The role of the Department of Secondary Education is to administer, control and develop secondary education across the nation. The function of the Department of Secondary Education is to set up a secondary education development plan in both public and private sectors; provide direction, support and supervision for secondary education, including the provision of learning-teaching materials to the students and teachers; direct, inspect and monitor the implementation of national curriculum and content of learning

and teaching of secondary education; and provide direction and organize the national examination and control the issuance of certificates for both lower secondary education and upper secondary education in the whole country. In accordance with the national education direction and policies, the Provincial Education Service (PES) with offices in each province, plays an important role in setting up the educational development plans for the whole province, especially for upper secondary education, technical and vocational education, non-formal education of public and private sectors in each province and/or the capital city. The function of the PES is to implement, administer, inspect, and evaluate upper secondary education, technical and vocational education, non-formal education of public and private sectors and sports in each province.

The Government of Lao PDR in conjunction with International Development Agencies has pledged to make investment in infrastructure development, provision of learning and teaching materials, teachers training and other facilities. These pledges include the construction of classrooms, students and teachers' dormitories and the provision of education scholarships for impoverished students living far from schools to help them gain access to secondary education, as well as the provision of textbooks to secondary schools across the country. Such significant support will increase the number of students enrolled in secondary school in each year and will bring about positive change in many key indicators highlighted in table 3.

3.3 Tertiary Education

The Department of Higher Education is responsible for Tertiary Education at the Ministry level and controls higher education at the national level. The Department of Higher Education serves to:

- Set up higher educational development plans;
- Manage the activities of higher education institutions including learning and teaching activities, and curriculums;
- Provide direction in curriculum development, learning and teaching materials development;
- Support learning and teaching activities, research and experimentation at higher education institutes;
- Direct scientific and technological research at higher education institutes, and universities;
- Determine higher education qualification levels of those who graduated from higher education at home and abroad;
- Consider and approve academic titles teachers at higher education institutes, and universities;
- Monitor and evaluate higher education development.

3.4 Technical and Vocational Education

The Department of Vocational Education (DVE) oversees the development and control of vocational education and vocational and technical training. The DVE serves the following functions on behalf of the Ministry of Education and Sports:

- Set up the plan to develop the vocational education and training;
- Develop and adjust regulations and benchmarks controlling vocational education and vocational and technical training;
- Consider and set up a system, model or approach, and benchmark for technical and vocational education and training including secondary education;
- Manage vocational teacher training for vocational centers, schools, colleges, and institutes, and vocational training.
- The Provincial Education Service also plays a role in setting up the plans for the development, implementation of curriculum and learning and teaching, controlling, inspecting, and evaluating of vocational and technical education in areas of certification and diplomas.

3.5 Non-Formal Education and Lifelong Learning

On behalf of the Ministry of Education and Sports, the Department of the Non-Formal Education (NFE) plays a role in

the development of the Non-Formal Education. The key functions of NFE are to:

- Consider and set up the Non-Formal Education and lifelong learning development plans;
- Develop and adjust the regulations and for controlling, and administrating non- formal education and life-long learning;
- Provide the direction of curriculum development, and monitoring, and evaluating of curriculum implementation of non-formal education;
- Provide the direction of setting up the learning and teaching model or appropriate approach for each target group including distance education to meet the learner’s needs;
- Provide direction of every level of non-formal education final examination;
- Organise the training for, and monitoring and evaluation of the learning and teaching activities of non-formal education teachers;
- Cooperate with the Department of Teacher Education to train pre-service teacher for non-formal education;
- Administer of the issuing of certificates and diplomas for those who complete the requirements of non-formal education courses;

- Roll out decentralisation of the Non-formal Education Development Center, Regional Non-formal Education Centers, and Basic Vocational Training Centersisat;
- Monitor and evaluate non-formal education.

IV. BASIC EDUCATION CURRICULUM

The Education Law of Lao PDR issued No:05/NA, released on July 16th 2015, Article 33, education curriculum, is a document defining the principle, goals and structure of the curriculum, implementation of teaching and learning, and the evaluation and assessment of learning subjects to assure that the learners develop knowledge, competencies and an ideal attitude.

The educational curriculum consist of national curriculum, local curriculum and international school curriculum or bilingual language curriculum.

The contents of national curriculum should assure three characteristic of national education namely National, Scientific and Modern, and Progressive mass based attitude characteristics, and five dimensions such as Moral, Intellectual, Labor, Physical and Art Education.

The development of the National Curriculum for general education is the responsibility of the Research Institute for Educational Sciences (RIES), which operates under the supervision of the Ministry of Education and Sports. The main functions of the Research Institute for Educational Sciences are development of curriculum, compiling textbooks and teacher

guides, designing prototype of teaching and learning materials for pre schools and general education, providing teacher training to introduce the new curriculum and instructional materials as well as evaluation of student learning outcomes. Beside that the Research Institute for Educational Sciences is also responsible for conducting research in education and dissemination of relevant educational information and research by using magazine, radio and television. The framework used to develop the National Curriculum is as follows:

4.1 Framework for Pre-school Education Curriculum

The length of pre-school education classroom instruction is set at 30 hours per week. The aim of the National Standard-Based Pre-school Curriculum is to develop the basic potential of children aged three to six years holistically, by enriching their physical, emotional, spiritual, intellectual, social and language domains in a safe learning environment to prepare the readiness for their learning, skills and ideal attitude of five fundamental principles national education namely:

- Moral education
- Intellectual Education
- Physical Education
- Artistic Education
- Labor education.

The curriculum is organized in five strands, namely:

- Social life related to children
- People, occupation and local life

- Places and culture
- Nature and environment
- Things around children.

The components of Pre-school curriculum comprise five aspects of development, namely:

- Physical, sanitation and safety
- Language and communication
- Cognitive and general basis knowledge
- Spiritual and emotional
- Social and moral.

4.2 Framework for Primary Education Curriculum

The Primary school Curriculum focuses on educating students to have general knowledge at the basic stage, good behavior, and the capability and necessary skills for further studying and living as follows:

- Facilitating students to be developed in all ways: having knowledge and a variety of experiences, and balanced physical and mental development;
- Helping students in developing basic capability in terms of remembering, understanding, thinking and solving problems in everyday life; having skills in learning and experience in expressing feeling and presenting comments in an appropriate way;

- Having basic skills in listening, speaking, reading, writing, looking and calculating;
- Knowing how to take care of good health, sanitation and environmental preservation;
- Being proud and aware of the value of Lao culture; having positive habitual attitudes towards the tradition, having good behavior and being disciplined;
- Loving parents, friends; respecting the teachers and the elderly; loving hometown and the Lao Nation.

Mandatory subjects for all primary school children in both government and private schools include: Lao language; Mathematics; Moral Education; World Around Us; Fine Art, Artistic; Music; Handicraft; Physical Education; and Foreign language (English). Students start to learn the English language from grade three. In addition, there are class or school activities and extracurricular activities.

According to Education Development Plan 2016-2020 of Laos, the primary curriculum and teaching and learning materials will be improved. The expected results of primary curriculum change are students' learning outcomes at primary level will improved; quality of primary curriculum, textbooks and teacher guides will be enhanced; learner centered teaching methods will be improved; assessment system for primary school will be enhanced.

The goals of primary school education should emphasize on helping students acquire basic abilities, skills, and habits essential for learning and daily life; development of basic skills of literacy and numeracy in reading, writing and calculation.

The new curriculum structure will consist of nine subjects and extracurricular activities: Lao language, Mathematics, Moral Education, Science and Environment, Social Studies, Music, Fine Art and Handicraft, Physical Education, and English.

4.3 Framework for Lower Secondary Education Curriculum

Lower Secondary Education Curriculum is set at 30 hours per week for grades 6-7, and 31 hours per week for grades 8-9. The aim of Lower Secondary Education is to put emphasis on educating students to have basic knowledge, experience and necessary skills for further studying, living or undertaking a career, having good ethics or morals, and becoming a good citizen of the nation in the following areas:

- Supporting the holistic development of students, including having a physical and mental balance; developing students' ability in thinking, understanding and awareness of their capabilities and interests in order to be ready to enter into the careers;
- Helping students to develop the basic capability to solve problems in their studies and everyday life; having skills in studying and communication

experience, ability in expressing feeling and thinking creativity;

- Helping students to acquire knowledge and basic skills in the Lao language, Mathematics, Natural Science, Social Science, Law and Regulation, ICT, Physical Education (PE), Arts, Foreign Language, Technique and vocation;
- Enabling students to be able to keep good health, sanitation and environmental preservation; having brilliant hearts and arts;
- Being proud and aware of the value of Lao language and arts; being active about following or undertaking the Lao tradition and culture, having good behavior and being disciplined;
- Loving hometown, Lao Nation and the People Democracy regime; building students to be fond of self-value and self-strengthening.

Subjects that must be learned by all lower secondary school children in both government and private schools: Lao language and literature, Mathematics, Natural Sciences, Social Sciences (History and Geography), Civic Education, Technology (vocational education and ICT), Arts (Music and Fine Art), Physical Education, and Foreign languages (foreign language 1 is English, foreign language 2 is French or other such as Japanese, Chinese, Vietnamese).

In addition, there are two hours per week for class or school activities, four hours per month for extra-curricular activities, and 2 hours per month for grade 9 student's career guidance activities.

4.4 Framework for Upper Secondary Education Curriculum

The aim of upper secondary education is to give emphasis on expanding student knowledge and specializing in some subjects, having the ability and necessary skills for further education and daily life or for working and having good behavior for becoming a good citizen of the nation and the world:

- Helping students' development in all ways and physical and mental well-balanced health for each person;
- Being creative, curious about learning, reading, writing and researching; having the skill to think scientifically and in daily life; arts, able to adapt thinking, self-expressing and adapting the way of working to suit particular situation;
- Having broad knowledge about a wide variety of subjects and being able to cooperate with international nations; recognizing the socio-economic change and the growth of science and technology; being able to live in an environment which is becoming competitive higher and higher;

- Loving exercise, taking care one-self to be healthy with a good personality;
- Obeying the law, rules and regulations; being responsible, ethical and moral;

Loving country and people's democratic regime; good solidarity with all ethnic groups in Laos; faithfulness and interpersonal skills; enthusiasm about protecting environment.

Subjects that must be learned by all upper secondary school children in both government and private schools: Lao language and Literature, Mathematics, Physics, Chemistry, Biology, History, Geography, Civic Education, Information and Communication Technology (ICT), Physical Education, Foreign language 1 (English), Technology (vocational education), Art Education, Foreign languages 2.

In addition, two hours per week are allotted for class or school extra activities, four hours per month for extra-curricular activities, and three hours per month for career guidance activities.

V. GENDER PARITY

This section provides an orientation to gender issues in education and an overview of the situation in Lao PDR. Laos is one of the global states that has adopted international commitments to gender equality in education: Universal Declaration of Human Rights, 1948, UNESCO Convention against Discrimination in Education, 1960, Convention on the

Elimination of All Forms of Discrimination Against Women (CEDAW), 1979, World Declaration on Education for All, 1990, Beijing Declaration and Platform for Action, 1995, Dakar Framework for Action, Education for All, 2000, UN Millennium Development Goals (MDGs), 2000. Laos itself also having implemented Local Framework: 1991 National Constitution (Article 22 and 24), National Strategy for Advancement of Women (NSAW 2011-2015), National Strategy and Plan of Action on Inclusive Education (2011-2015), Education Strategic Vision 2000-2020 (MOE, 2001), National Plan of Action on Education for All 2003-2015 and others. The progress of implementation of international as well as local commitments to gender equality in education in Lao PDR are shown as of the annual report of the MOES of the academic year 2013-2014, indicating that the gender parity index for primary education is 0.95%, lower secondary education 0.91%, upper secondary education 0.84%, and vocational and technical education, 0.6%. According to these statistics, although some figures are acceptable, disparities between boys and girls in education can be clearly seen.

VI. EDUCATION AND SPORTS POLICIES

The Government of Lao PDR has expressed the importance of achieving the pivotal national development goal of enabling Lao PDR to escape from the ranks of the least developed countries and move to industrialisation and modernity by 2020. The Eighth National Socio-Economic Development Plan (NSEDP) emphasizes the important role of education in

providing human resource development to underpin this goal. The key objective of the Eighth NSEDP is graduation from least developed country status, which will require strengthened human resource capacity by improving workforce skills, encouraging them to be more disciplined and tolerant; increasing the number of technical experts and specialists; enhancing technical and professional capacity of civil servants, private sector and entrepreneurs to be able to compete within the ASEAN Economic Community and globally.

The Education Sector Development Plan 2016-2020 responds to priorities of the Eighth NSEDP, specifically:

- Continue to reform the education system to become stronger at all levels, and at the post-basic education level to better respond to the demands from socio-economic development, particularly in remote areas through improved infrastructure, updated curriculum and improved quality of teaching and learning;
- Fulfill the policy on compulsory education at primary level and then at the secondary level as a foundation for the development and upgrading of labor skills and quality. Ensure incentives are applied to attract more students at vocational education level, particularly to produce graduates in the fields of electrical, mining, processing, handicraft, mechanics and services to ensure a sufficient labor force for the production and service sectors in supporting future national

development and enhancing the capacity to integrate and compete at the regional and international levels.

- Develop capacity for athletes and gymnastics players to become professional and gradually reach regional and international standards and to encourage all people to play sports and gymnastics, promoting and developing indigenous sports.

In the social and cultural sectors, the government of Laos identifies the vision for Social Economic Development to 2030 as follows: “Laos has quality Human Resource and aligned with regional and global labor market, strong labor force, meet the need of national social and economic development, all youth complete upper secondary education, population access to quality health care and average life span over 75 years old”.

The Ministry of Education and Sports presents the vision for 2025 as follows: “Create opportunity for all Lao population to have equitable education access with a focus on education quality development to develop Lao citizens to become disciplined, brave, qualified and professional in self and nation and to reduce disparities between urban and rural areas”.

To achieve this vision the Ministry of Education and Sports needs to focus on these following missions:

- Continue to strive for compulsory primary education and expand compulsory education to the lower secondary education level with the assurance that all

have access to education to be ready to work for socio-economic development.

- Completely eradicate illiteracy among Lao people across all ethnic groups by supporting lifelong learning and providing opportunities for them to use their literacy skills in improving their livelihoods.
- Broadly expand, strengthen and promote secondary education, technical and vocational education and training and higher education to respond to the future demands of the labour market and to improve economic outputs.
- Improve the responsiveness of the technical vocational education and training system by providing skills training and courses which are more relevant to industry needs.
- Improve the quality of higher education and technical and vocational education training and match the education skills to the needs of the labour market to ensure that the graduates have competence to enter the workforce.
- Provide training in labour skills for technical, professional staff and intelligentsia to develop knowledge, and capacity to use modern technology and science to respond to the demands of socio-economic development.

- Improve the quality and relevance of education to provide youth with the knowledge needed for socio-economic development, including providing basic business skills and knowledge so that they can run their own family business, particularly in remote areas.
- Ensure that young people, especially young girls from rural settings attend and stay in school at all levels to ensure their access to information on sexual and reproductive health.
- Place education as the core in human resource development to ensure Lao PDR can compete and link with the ASEAN Economic Community (AEC) and obtain high benefits leading to the improvement of people's livelihood including escaping from Least Developed Country Status.

The Ministry of Education and Sports has set the overall goal for the Education Sector Development Plan (ESDP) from 2016-2020 as follows: “The Education and Sports Sector in Lao PDR is appropriately structured and resourced to create opportunity for all Lao citizen to have equitable access to quality education and sport and to benefit from socio-economic development in order for Lao PDR to graduate from least developed country status by 2020”. The Ministry of Education and Sports has set 11 expected outcomes for the Education Sector Development Plan from 2016-2020 as follows:

- Number of learners from early childhood care and education (ECE) to lower secondary education increased with special focus on the disadvantages and ensuring gender equality.
- Increased number of primary school children with functional literacy and numeracy skills.
- Increased number of qualified teachers so that all schools can better teach all subjects of the national curriculum from ECE to secondary education.
- All schools have physical and human resources to equitably improve student learning outcomes.
- Increased numbers of basic education graduates who have acquired basic skills and knowledge and can apply for work in the labour market or continue post-basic education or become an entrepreneur.
- Increased adult literacy rates and gender parity index for adult literacy.
- Enrolment profile in public and private post-basic education programs aligned with national development goals of the Eighth NSEDP.
- Education and Sport sector is appropriately structured, resourced and monitored by using Annual Costed Sector Plans that are linked to ESDP 2016-2020.

- Financing plan of ESDP takes into account the need to reduce disparities related to gender, ethnicity, poverty and location.
- Policy decisions are evidence-based.
- The number of general and professional athletes matching regional and international quality standards is increased and the physical health of the Lao population is improved.

ANNEX: KEY INDICATORS AND STATISTICS

Table 4.1. Comparison of some key indicators for Early Childhood Education (ECE) over the past five years

Indicator	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total ECE schools (public and private)	1,284	1,358	1,577	1,802	2,125	2,403
No. of Children in kindergarten and pre-school (public and private)	95,074	103,200	119,758	137,359	159,491	175,492
	47,835	51,884	59,914	68,398	79,494	87,707
No. of ECE staff and teachers (public)	3,128	4,187	4,217	5,741	6,430	6,891
Enrolment rate of 3-4 year children	14.6%	16.4%	19.3%	22.3%	27.3%	31.5%
Enrolment rate of 3-5 year children	22.1%	24.5	28.6%	33%	39.1%	43.2%
Enrolment rate of 7 year children	36.6%	40.2%	46.6%	52.9%	61.4%	66%

Sources: Education Statistic and Information Center of Ministry of Education and Sports of Lao PDR.

Table 4.2. Comparison of some key indicators for primary Education over the past five years

Indicator	2009-10		2010-11		2011-12		2012-13		2013-14		2014-15	
No. of schools (public and private)	8,968		8,902		8,912		8,927		8,884		8,889	
No. of classrooms (public and private)	31,648		31,057		31,957		32,745		33,173		33,669	
Total no. of students (public and private)	916,341		900,123		883,701		878,283		870,893		850,553	
	Female 432,349		Female 427,050		Female 420,877		Female 419,231		Female 416,627		Female 408,292	
No. of students in public schools	884,632		865,878		847,202		779,556		831,419		808,616	
Average Student Classroom Ratio	29		28		28		27		26		25	
Education personnel and teachers (public schools)	29,571		31,361		31,460		31,474		33,661		33,915	
Net enrolment of new intakes	84.2%		85.3%		90.0%		93.4%		96.3%		97.2%	
Net enrolment rate	92.7%		94.1%		95.2%		96.8%		98.0%		98.6%	
Survival Rate			67.7		69.9		73.3		77.5		78.3	
	boy	girl	boy	girl	boy	girl	boy	girl	boy	girl	boy	girl
	-	-	66.4	69.2	68.9	71.2	72.2	74.3	75.8	79.0	76.8	80.0

Sources: Education Statistic and Information Center of Ministry of Education and Sports of Lao PDR.

Table 4.3. Comparison of some key indicators for secondary Education over the past five years

(CSE= Complete Secondary Education, LSE= Lower Secondary Education, USE=Upper Secondary Education)

Indicator	2009-10			2010-11			2011-12			2012-13			2013-14			2014-15		
	C	L	U	C	L	U	C	L	U	C	L	U	C	L	U	C	L	U
No. of schools (public and private)	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	-	-	-	4	8	3	5	8	3	5	9	3	5	9	3	6	9	3
				5	4	4	1	6	4	5	0	3	9	6	3	8	3	4
				1	4		5	0		3	8		1	2		2	5	
No. Of classrooms (public and private)	8,103			8,560			9,217			9,946			10,941			16,314		
Total no. of students (public and private)	335,388			345,283			361,875			385,552			420,720			442,806		
	Female 150,225			Female 157,015			Female 167,040			Female 180,030			Female 198,935			Female 210,816		
Gross enrolment rate (%)	60.2%			62.9%			64.7%			69.0%			74.4%			78.1%		
	Boy	Girl		Boy	Girl		Boy	Girl		Boy	Girl		Boy	Girl		Boy	Girl	
	-	-		67.2	58.4		68.2	61.0		72.1	65.7		76.7	72.0		80.2	76.0	
Transition-completion rate	85.7%			87.5%			88.2%			90.1%			92.5%			91.3%		
No. of staff and teachers (public schools)	17,769			19,959			24,386			26,646			27,715			30,170		

Sources: Education Statistic and Information Center of Ministry of Education and Sports of Lao PDR.

Malaysia

Education at a Glance

Guan Eng Chan & Sheela Nair

Ministry of Education

I. OVERVIEW

Malaysia is a federal constitutional monarchy located between 2 and 7 degrees north of the Equator, consisting of 13 states and three Federal Territories. Peninsular Malaysia is separated from the states of Sabah and Sarawak by the South China Sea. Malaysia covers a total land area of 330,290 (127,355 sq mi) with a coastline that stretches 4,675 km. To the north, Malaysia shares its border with Thailand while Sabah and Sarawak both share their boundaries with Indonesia. Sarawak also shares its border with Brunei Darussalam. The capital of Malaysia is Kuala Lumpur, while the administrative hub is located in the Federal Territory of Putrajaya. Currently the population is around 30,261,700 and comprises different ethnic groups, namely the Malay, Chinese, and Indian in Peninsular Malaysia and the Kadazan, Iban and other indigenous people of Sabah and Sarawak. The GDP per capita was estimated to be 10,017 USD in 2013.

Education is one of the priorities of the Federal Government of Malaysia and it is committed to providing quality education to all children in the country. The 10th Malaysia Plan (10MP) from 2011 to 2015 has placed great importance on education, training and lifelong learning. In line with the government's emphasis on human development, the total development allocation under the 10MP is RM230 billion, **of which the Federal Government development allocation by physical development is 60% versus non-physical development of 40%. The allocations for 10MP by sectoral shares are 55% for the economic sector, 30% for the social**

sector, 10% for security, 5% for general governance. About 25% of the total budget allocation has been channeled towards education and training development. The resources allocated to the education sector, including the amount allocated to the MoE constitute about 16 percent of the total federal budget. The government's spending on basic education amounts to 4.4 percent of the GDP, as shown in Table 5A.3.

The 11th Malaysia Plan (11MP) 2016-2020 which was launched in May 2015 indicates a strong financial outlook for the country over the next five years. The Federal Government revenue is expected to increase from RM1.050 trillion RM in 10MP to RM1.408 trillion RM in 11MP. Human capital development continues to be a critical enabler for driving and sustaining Malaysia's economic growth and supporting the transition of all economic sectors towards knowledge-intensive activities. Thus the Eleventh Plan is based on the theme "anchoring growth on people" that will transform ideas into reality, and address in concert the goals set out in Vision 2020 so as to catapult Malaysia towards the end state of being an advanced economy and inclusive nation.

The Ministry of Education (MOE) provides equal access to all Malaysians in education. As stipulated in the National Education Philosophy in 1996, every child has a right to education and is given equal opportunities to develop his or her potentials. Malaysia has achieved near universal primary education and the education system is currently intensifying efforts to ensure universal access and full enrolment of all children from pre-school to upper secondary level by 2020. In

Malaysia, both male and female children have equal access to education and this is clearly stated in the Malaysian education legislation, policy, educational structure and allocation of resources. Hence, the composition of males and females enrolled in public primary schools is well balanced. (Table 5A.1, Table 5A. 2)

As of 31 January 2014, there were 7, 751 primary and 2,366 secondary schools under the Ministry. A total of 194,225 students were enrolled in the pre-schools, while the enrolment for primary and secondary schools was 2,698,883 and 2,234,621 respectively. (Table 5A.7, Table 5A.8) The teaching force under the MOE was 420,854 strong in 2014. A total of 1,221,508 students are enrolled in higher learning institutions. The rate of enrolment in all registered primary and secondary schools in Malaysia (schools under MoE and private, international, religious, and other categories) in 2013 is higher than 90%, with 96.59% at primary and 91.12% at secondary levels.

Statistics indicated that the minimum educational attainment of upper secondary level for adults aged 25 years and above in the country have reached 32% of the population cohort. However, the completion rate for upper secondary education for conventional school-going children has also been consistently above 90 percent for the last six years. To this end, the MoE, over the years has improved the quality of education by improving the average class size and teacher student ratio in primary and secondary schools. (Table 5A.4, Table 5A. 5, Table 5A.6)

II. EDUCATIONAL ADMINISTRATION

The administrative system of Malaysia is centralized and structured into four distinct hierarchical levels, namely the federal, state, district and school levels. The agencies involved are the MOE at the federal level, the State Education Departments, the District Education Offices and the schools at their respective levels. The MOE is responsible for the effective implementation of the national education policy and the administration of the entire education system. The MOE is headed by two ministers and two deputy ministers. Administrative affairs of the MOE fall under the jurisdiction of the Secretary-General of Education whereas the Director-General of Education is responsible for all professional matters.

There are currently 32 divisions and two agencies under the jurisdiction of the Education Sector and 11 divisions, three departments and two agencies under the Higher Education Sector. Another six Divisions are placed directly under the control of the Secretary-General of the MOE. The functions of divisions and agencies under the Education Sector can be clustered into the following categories: Policy and Educational Development; Educational Operations; Professional Development; Educational Development; and Management.

The divisions that fall under the study are the Educational Planning and Research Division (EPRD), Curriculum Development Division, Examination Syndicate, Educational Technology Division. The following discussion will focus on the

Educational Planning and Research Division because it is the main educational research agency for the Ministry.

The EPRD, the main planning and coordinating committee of the MOE was established in 1963. Its main functions include macro planning and developing education policies, conducting policy research, analyzing and evaluating policies, and collecting and evaluating educational data. The Division is also given the task of monitoring the implementing the MOE's policies and programmes and also to coordinate projections for student enrolment and teacher placements at all levels of education.

Another important task carried out by the EPRD is the development and management of the Educational Management Information System (EMIS) and it also serves as the primary educational resource centre and depository for documents and publications by the MOE. Besides these functions, the EPRD also functions as the Parliamentary Secretariat to the MOE, whereby it provides and coordinates information on education to assist parliamentary affairs for the Ministry.

The multitude of tasks performed by the EPRD is coordinated through six sectors and two units that have been assigned specific responsibilities and functions. Besides this, the EPRD also works closely with the various divisions and agencies within the MOE and also other ministries to ensure that the information collected and disseminated is accurate and current.

However, in July 2015, the Government decided to establish Ministry of Education (MOE) and Ministry of Higher

Education (MOHE) to enhance the nation's education sector, by enabling the MOE to fully focus on basic education while the MOHE will focus on the higher education sector.

III. PROVISION OF BASIC EDUCATION

Malaysia's diverse cultural and religious background has resulted in an education system that is distinct and unique in nature, compared to other systems in the world. One of the objectives of the education system is to preserve the Malaysian identity which is fundamentally based on the philosophy of integrating the diverse ethnic groups in the country, while preserving each group's cultural and religious heritage. This is reflected in the National Education System which espouses National Schools to use the national language as the medium of instruction and implement the National Curriculum to prepare all students to sit for a common public examination. The Ministry of Education also caters to the needs of other major ethnic communities in Malaysia by making provisions for National Type Chinese and National Type Tamil Schools where instruction is carried out using their mother tongue.

As mentioned earlier, equity and equality in education has always been the priority of the MOE. As stipulated in the National Education Philosophy, every child has a right to education and is given equal opportunities to develop his or her potentials. Malaysia has achieved near universal primary education and the education system is currently intensifying efforts to ensure universal access and full enrolment of all children from pre-school to upper secondary level by 2020.

In Malaysia, male and female children have equal access to education. The MOE does not practice any form of discrimination against female children in terms of legislation, policy, education structure or allocation of resources. Every child has a right to education as an individual and not according to gender. Consequently, the composition of males and females enrolled in public primary schools is well balanced.

3.1 Pre-school Education

Early Childhood Care and Education (ECCE) programmes in Malaysia are divided into two levels. Pre-school education is provided for children aged between 4+ and 5+ whereas daycare centres have been established for younger children. Children spend one year in pre-school before they begin their formal education at primary level.

Pre-school education provided by the Ministry of Education is based on the National Pre-school Curriculum which aims to equip young children with basic communication and social skills before they begin their formal primary education. The Government aspires to give every child an equal head start by ensuring that they have access to quality education and positive learning environments. In order to achieve this goal, the Ministry is currently expanding pre-school education by increasing the number of schools and classes and aims for universal pre-school enrolment by 2020.

3.2 Primary Education

Primary education is compulsory and a child is expected to start formal education at age 6+. Children are required to complete six years of primary education before moving on to secondary education.

Primary education is provided by three main types of schools, which are the National Schools, National Type Chinese Schools, and National Type Tamil Schools. The distinctive feature among these three types of schools is the medium of instruction used in the teaching and learning processes. The medium of instruction in National Schools is mainly Bahasa Malaysia, while the medium of instruction in National Type Chinese and National Type Tamil Schools is Mandarin and Tamil respectively. Besides the three major types of primary schools, there are also other types of schools under the MoE, which include special education schools for groups with special needs, and religious schools.

3.3 Secondary Education

A child in Malaysia begins secondary education at age 12+. Secondary education can be divided into two phases: three years of lower secondary and two years of upper secondary. Basically, the Malaysian Education System provides five years of secondary education. Lower secondary education is provided mainly by public secondary day schools but there are also other categories of schools such as religious schools, special education schools, sports schools, arts schools, and fully residential schools.

At the upper secondary level, students who opt for the academic path can enroll in national secondary schools, religious schools, technical schools, sports schools, arts schools, special programme schools, and private schools which enable them to leave school with a Malaysian Certificate of Education. Students can also choose a skill-based career path by opting for vocational education provided by vocational colleges, public skills training institutes and private skills training institutes which award the Malaysian Vocational Certificate or Malaysia Skills Certificate.

3.4 Post-Secondary Education

The MOE offers several choices for students who successfully complete their upper secondary education. Students can continue to Form Six for the Malaysian Higher School Certificate or the Malaysian Higher Religious Education Certificate which is recognized by public universities as well as many overseas universities.

The Matriculation Programme is another post-secondary option offered by a number of matriculation centres in the country. This programme focuses on science, mathematics, accounting, and technical education and students who complete this programme are also accepted for admission into public universities in Malaysia and some overseas institutions. Secondary school leavers who are interested in making a career in the vocational field have the option of pursuing their studies at Vocational Colleges, Public and private skills training institutes that offer courses at the diploma level.

3.5 Private Education

The MOE facilitates the establishment of educational institutions by the private sector for all levels of education. According to the National Education Act 1996, all non-public educational institutions have to be registered with the MoE and are subject to all the rules and regulations stipulated in the Act.

As of June 2013, there are 389 registered primary and secondary private schools in the country. This includes private schools, international schools, religious schools, expatriate schools, special education schools, correspondence schools and independent Chinese schools. **These private schools provided access to 175,713 students in 2013.**

- *Private schools:* Schools in this category use the national curriculum to teach six core subjects identified in the 1996 Education Act. The Private Education Division (PED), one of the divisions under the MOE, monitors and regulates the development of private education in Malaysia at the pre-tertiary level. One of the main functions of PED is to ensure that all private schools conform to the National Education Philosophy and provide education that is of world class and relevant to the manpower needs of the country. Private schools offer more enriching activities such as drama, music, art, and foreign languages.
- *International Schools:* Schools in this category use international curriculum based on the British, American, Australian, Canadian, or International Baccalaureate

programmes. The MOE ensures that Malaysian students enrolled in these schools develop a sense of national identity by making it compulsory for them to learn the national language, Bahasa Malaysia.

- *Religious Schools*: These schools focus mainly on Islamic education. These schools are more affordable as the majority of them are conventionally run as non-profit organisations, set-up by individuals, companies, or Islamic organisations.
- *Independent Chinese schools*: There are 60 such schools in the country. The schools are managed by independently-appointed board of trustees who work closely with school leaders. The schools are funded through tuition and philanthropic contributions. The Chinese language is the main medium of instruction. The students are prepared for a standardized examination known as the Unified Certificate (at Year 6 of secondary school) and many schools also prepare their students for the Malaysian Certificate of Education.

3.6 Basic Education Curriculum

The Education Act of 1996 stipulates the provision of education at all levels under the national education system which covers pre-school to secondary school education. The Act specifies the use of a National Curriculum by all national schools in Malaysia. National Curriculum is defined as:

An educational programme that includes curricular and co-curricular activities which encompasses all the knowledge, skills, norms, values, cultural elements and beliefs to help fully develop a pupil based on physical, spiritual, mental, and emotional aspects as well as to inculcate and develop desirable moral values and to transmit knowledge.

The development of the National Curriculum is the responsibility of the Curriculum Development Division. The framework used to develop the National Curriculum is presented in the Tables 5.1, 5.2, and 5.3.

Table 5.1 Framework for Pre-school Curriculum

Time	Aim	Organisation	Components
20 hours per week	<ul style="list-style-type: none"> Holistic development of the potential of children aged four to six years Positive schooling experience for children 	Organized into six strands: Communication; Spiritual; Attitudes and Values; Physical and Aesthetic Development; Humanities; Personal Development; Science and Technology.	<ol style="list-style-type: none"> Language and communication Cognitive development Spiritual and moral socio-emotional development Physical development Creativity and Aesthetics

The National Standard-Based Preschool Curriculum aims to holistically develop the potential of children aged between four and six by enriching their physical, emotional, spiritual, intellectual and social domains in a safe learning environment. It is also designed to develop their creativity by engaging young learners in a fun and meaningful learning environment.

The curriculum is organised into six strands which focus on facilitating the acquisition of basic skills, knowledge, and values that are essential for children’s development. This is achieved through the five components listed in Table 5.1.

Table 5.2 Framework for Primary School Curriculum

Time	Aim	Organisation
23 hours per week	focuses on basic education	<p>LEVEL 1 - Year 1-3 Core Subjects: Malay; English; Chinese (Chinese national type schools);Tamil (Tamil national type schools); Mathematics; Science; Islamic Education/ Moral education; Physical Education; Health Education; and Visual Arts Education /Music Education</p> <p>LEVEL 2 – Year 4-6 Core Subjects: Additional of the following: Local Studies; History; Physical Education; Design & Technology / ICT;</p> <p>Elective Subjects for Level 1 and Level 2: Communicative Chinese Language; Communicative Tamil Language; Communicative Arabic Language; IbanLanguage ;KadazanDusun Language; and Semai Language .</p>

Primary school education in Malaysia is compulsory and there is a legislative provision under the Education Act to penalize parents who fail to send their children to attend primary education in government schools.

Primary education focuses on basic education and is divided into two levels: Level 1 comprises Years 1, 2 and 3; while Level 2 covers Years 4, 5 and 6. Students are required to learn a number of core subjects as well as elective subjects that they can choose based on their own interest, talent, ability and potential. Examples of core and elective subjects are displayed in Table 5.2.

Students will sit for the Primary School Achievement Test (UPSR) at the end of Year 6. This test will test pupils on the mastery of comprehension, writing and oral skills for Malay and English, mathematical skills, and science concepts.

Table 5.3 Framework for Secondary School Curriculum

Time	Aim	Organisation
26 hours per week	<p>Emphasis is on:</p> <ul style="list-style-type: none"> • general education; • development of aptitude and interests, personality; • development of attitude and values • specialisation, career and higher education. 	<p><u>Lower Secondary</u></p> <p>Core subjects:</p> <p>Malay Language; English Language; Mathematics; Islamic Education / Moral Education; Science; Integrated Living Skills; Geography; History; Health Education; and Art Education</p> <p>Elective Subjects</p> <p>Communicative Chinese Language; Communicative Tamil Language; Communicative Arabic Language; Iban Language; Kadazandusun Language; Semai Language; French; Japanese; German; and Arabic.</p> <p><u>Upper Secondary</u></p> <p>Core subjects:</p> <p>Malay Language; English Language; Mathematics; Islamic Education / Moral Education; Integrated Living Skills; History; Health Education; and Art Education.</p> <p>Elective Subjects</p> <p>Geography; Science; Additional Math; Information Technology; Foreign Languages.</p> <p>Pure Science subjects</p> <p>Biology; Chemistry; and Physics</p>

The National Standard Secondary School Curriculum is the continuation of the primary school education. The emphasis of the curriculum is on general education which focuses on the consolidation of skills acquired at primary and pre-vocational level, the development of aptitude, interests, personality and the development of attitude and values as well as specialisation, career and higher education.

Secondary education is also divided into two levels: Lower Secondary and Upper secondary levels. It is compulsory for students to learn all the core subjects stipulated in the curriculum, but students are given the freedom to choose elective subjects based on their interests and aptitudes. The list of core and elective subjects offered to students is shown in Table 5. 3.

IV. PROVISION OF HIGHER EDUCATION

The government is continually improving the quality of public higher learning institutions through performance based funding by expanding the rating system for the Malaysian Higher Education Institution (SETARA) to cover private universities and college universities, and at faculty level. A central enrolment system has been introduced in stages for all students, including international students with a flexible credit accumulation framework.

Higher Education includes certificates, diplomas and undergraduate as well as postgraduate studies. Undergraduate studies consist of Bachelor's degree levels and professional studies while postgraduate studies consist of Master's degrees

and PhD levels. Generally, higher education at the diploma level is for secondary school certificate (SPM) holders from the age of 17 and the Bachelor's degree is for students from the age of 19 with post-secondary qualifications.

4.1 Brief History of the Higher Education Sector

Early tertiary education in this country began with the establishment of the University of Malaya (Singapore) as a branch in Kuala Lumpur in 1958. After four years, this branch campus was turned into a university with its own management and was renamed University of Malaya, while the main campus in Singapore was renamed University of Singapore. University of Malaya remained the only university in Malaysia until the establishment of Universiti Sains Malaysia (USM) in 1969 and Universiti Kebangsaan Malaysia (UKM) in 1970. Two colleges, the MARA Institute of Technology (1967) and Tunku Abdul Rahman College (1969), were established with the help of the government. In the same year, a polytechnic named Politeknik Ungku Omar was established in Ipoh, in the state of Perak. The year 1969 also marked the establishment of two private higher institutions in Malaysia, Taylor's College and Maktab Adabi.

Tertiary education continued to expand during the early 1970s and into the late 1980s with the establishment of four public universities, namely the Universiti Pertanian Malaysia (UPM) in 1971 (now known as Universiti Putra Malaysia), Universiti Teknologi Malaysia (UTM) in 1972, Universiti Islam Antarabangsa Malaysia (UIAM) in 1983 and Universiti Utara Malaysia (UUM) in 1984. Private higher institution also recorded

a steady growth from 1981 to 1987. During this period of time, Institut Perkim-Goon was opened in 1981, Kolej Damansara Utamain 1983, Kolej Informatics in 1984 and Sedaya College, Inti College, Prime College and HELP Institute were all established in 1986. Sunway College started its operation in 1987.

These two decades showcased a vigorous growth of Polytechnic Colleges in Malaysia. The second Polytechnic named Politeknik Sultan Ahmad Shah (POLISAS) was opened in Kuantan, Pahang in 1976. In 1980, three Polytechnics, Politeknik Jitra, Politeknik Kota Bharu and Politeknik Kuching were established. After a decade, seven more Polytechnics were opened in 1990 and two Metro Polytechnics opened in Melaka and Terengganu. A total of 12 Polytechnics were in operation by 1990. Today Malaysia has 20 public universities, 33 polytechnics, 90 community colleges and more than 500 private colleges which include more than 80 private universities or university college status.

Tertiary education in the national education system is directly under the jurisdiction of the Higher Education Sector, MOE and comprises post-secondary education right up to higher education. Tertiary education in Malaysia also includes skills training offered by training providers outside the domain of MOE.

Post-Secondary education or pre-tertiary education is for students who have completed 11 years of education and need to obtain pre-university qualification in order to pursue their

education at higher educational institutions under MOE. The main providers of post-secondary schools (Form 6) and matriculation colleges are under the jurisdiction of the Ministry of Education.

Higher education covers certificate, diploma, undergraduate, as well as postgraduate levels. The providers of higher education are colleges, polytechnics and universities. Postgraduate studies include Masters and PhD Degrees.

Higher education at certificate and diploma levels are for students from the age of 17 with SPM qualifications (Which is equivalent to GCE 'O' levels) while the Bachelor's degree level is usually for students from the age of 19 or 20 with post-secondary qualifications such as the Foundation qualifications. These degree programmes normally take between 3 to 5 years. After obtaining their Bachelor's degree, students can proceed to postgraduate studies.

Higher education in the academic and professional fields is provided by:

- Public-funded higher educational institutions which include public universities, polytechnics, community colleges and public colleges; and

- Private-funded higher educational institutions which include private universities, private colleges and foreign university branch campuses.

MOE is directly responsible for the operations and performance of public HEIs, whereas the private HEIs are guided by MOE's policy guidelines and objectives.

The general entry requirements and duration of study at certificate, diploma, undergraduate and post-graduate levels for higher education (academic) can be grouped as below:

Table 5.4 Higher Education Qualification levels, Entry Requirements & Duration of Study

<i>Higher Education levels</i>	<i>For whom</i>	<i>Age Group</i>	<i>Duration of Study</i>
Certificate level.	For those with secondary education qualifications such as SPM.	17 and above.	1 to 1.5 years.
Diploma level.	For those with secondary education qualifications such as SPM.	17 and above.	2 to 3 years.
Bachelor's Degree level.	For those with post-secondary or pre-university qualifications such as STPM, GCE A-levels, etc.	19 and above.	3 to 5 years.
Master's Degree.	For those with a Bachelor's degree.	Any adult.	1 to 5 years.
PhD (Doctor of Philosophy).	For those with a Master's degree.	Any adult.	3 to 8 years.

4.2 The Malaysian Qualifications Agency (MQA)

In November 2007, the following three quality assurance bodies were replaced by a new agency, called the Malaysian Qualification Agency. The quality assurance bodies are:

- Lembaga Akreditasi Negara (LAN) (established under Act 556), for private higher educational institutions
- The Quality Assurance Division of MOE, for public universities
- The Quality Assurance Division of MOE, for polytechnics & community colleges

The National Accreditation Board or Lembaga Akreditasi Negara (LAN) was established in 1996 under the Parliament Act and was the national quality assurance agency for private higher education institutions. Meanwhile, the quality assurance division under the Ministry of Higher Education supervised the quality of public universities, polytechnics and public community colleges. In the year 2007, a new agency known as the Malaysian Qualifications Agency (MQA) was established under a new education legislation, the Malaysian Qualifications Act 2007. At the time, MQA was the responsibility of the then existing Ministry of Higher Education.

This Act allows for the establishment of MQA as a national body to implement the national framework known as the Malaysian Qualifications Framework (MQF), to accredit higher education programmes and qualifications, to supervise and regulate the quality and standard of higher education providers, to establish and maintain the Malaysian Qualifications Register and to provide for related matters.

The main role of the MQA is to implement the Malaysian Qualifications Framework (MQF) as a basis for quality assurance of higher education and as the reference point for the criteria and standards for national qualifications. The MQA is responsible for monitoring and overseeing the quality assurance practices and accreditation of national higher education.

The MQA is also assigned with other responsibilities as follows:

1. to develop, with the cooperation of stakeholders, standards and criteria and instruments as a national reference for the conferment of awards;
2. to assure the quality of higher education providers and programmes;
3. to accredit programmes that fulfill a set of criteria and standards;
4. to facilitate the recognition and articulation of qualifications;
5. to establish and maintain the Malaysian Qualifications Register (MQR); and
6. to advise the Minister of Higher Education on any matter relating to quality assurance in higher education.

The MQA also evaluates foreign qualifications and assesses its comparability in relation to the MQF.

4.3 The Malaysian Qualifications Framework (MQF)

The Implementation of MQF means that there will be a unified system to bind and interlink all the qualifications awarded in Malaysia (which include higher education qualification and Malaysian Skills Certificates (SKM) - Level 1 to 5 and serve as a reference point for all Malaysian national qualifications.

The MQF is an instrument that develops and classifies qualification based on set criteria that are approved nationally and is at par with international good practices at the level of learning attained by the learners. This includes learning outcomes achieved and a credit system which is based on the learner's academic load. All the qualifications in the framework are based upon four classifications, which are: (1) learning outcomes (2) credit (3) objectives (4) field of study. Under this MQF, the qualification for MSC Level 1 to 3 is known as the Malaysian Skills Certificate; MSC Level 4 as the Malaysian Skills Diploma and MSC Level 5 as the Malaysian Skills Advanced Diploma.⁶

⁶ Note: The **SPM** (which is equivalent to GCSE 'O' levels) and **the STPM** (which is equivalent to GCE 'A' levels) are the two recognized secondary and post-secondary qualifications awarded by the Malaysian Government examination syndicate/board for further study in government-funded tertiary institutions.

4.4 Lifelong Learning

Lifelong learning (LLL) is one of the imperatives suggested in the NHESP 2007–2020. The establishment of public and private universities, university colleges, open universities, polytechnics, community colleges and private colleges in Malaysia has made it possible to implement LLL, especially for adult learners.

In addition, other government agencies are offering education and training to Malaysian citizens through various ministries such as Entrepreneur and Co-operative Development, Rural and Regional Development, Agriculture and Agro-Based Industry, Women, Family & Community Development, Culture, Arts & Heritage, Youth & Sports, and Tourism and Health Advances in ICT have also contributed significantly to LLL.

V. RECENT EDUCATION POLICIES

5.1 Education Transformation 2013 – 2025

A comprehensive and extensive review of the education system in Malaysia was undertaken in 2011 to gauge the efficiency of the existing system and its significance to the current needs of the nation. In order to produce a review which was credible and impartial in nature, the MOE sought the expertise of various international agencies such as UNESCO, the World Bank, and the OECD, as well as education experts from local universities, District and State Education Departments, various divisions of the Ministry, as well as school leaders,

teachers, parents, students and other stakeholders in education. This exercise was carried out over a period of 15 months and resulted in the launch of the Malaysia Education Blueprint 2013 – 2025.

5.1.1 Aspirations

The main objectives of the Blueprint are to:

- Understand the current performance and challenges of the Malaysian education system;
- Establish a clear vision and a set of aspirations for individual students and the education system for a period of 13 years; and
- Outline a comprehensive transformation programme for the system, including key changes to the Ministry.

The following five aspirations have been identified for the education system:

- **Access** – to achieve 100% enrolment across all levels from pre-school to upper secondary by 2020;
- **Quality** – to be in the top third group of countries in terms of achievement in international assessments such as PISA and TIMSS in 15 years;
- **Equity** – a 50% reduction in achievement gaps (urban-rural, socioeconomic and gender) by 2020;
- **Unity** – to develop an education system that gives children shared values and experiences by embracing diversity;

- **Efficiency** – to develop a system which maximises student outcomes within the allocated budget.

5.1.2 Attributes and shifts

The MOE is aware of the fact that Malaysian children will be facing new challenges, especially in the 21st century. In order to ensure that students are fully equipped to face these challenges, individual student aspirations have also been outlined in the Blueprint, based on the National Education Philosophy’s vision of a holistic and balanced education which takes into account intellectual, spiritual, emotional, and physical development of students. In order to achieve this vision, every child is given the opportunity to develop the following attributes:

- **Knowledge** – students will be able to master core subjects and encouraged to develop their knowledge and skills in other areas such as the arts, music, and sports.
- **Thinking skills** – to instill the spirit of lifelong learning and inquiry based learning in every child, including skills such as reasoning, problem-solving, creative thinking, and innovation.
- **Leadership skills** – the education system will help individuals to reach their full potential by providing opportunities for them to assume leadership roles. The concept of leadership within the education system includes entrepreneurship, resilience, emotional intelligence, and effective communication skills.

- ***Bilingual proficiency*** – Every child will be able to master at least two languages, Bahasa Malaysia which is the national language and the language of unity and English Language which is considered the international language of communication. Students, however, will be encouraged to learn an additional language.
- ***Ethics and spirituality*** – strong ethics and spirituality will be inculcated in every child to prepare them to overcome challenges that they will face as adults by relying on peaceful solutions to conflicts and sound judgment and principle in critical situations. Besides, the system also intends to produce caring individuals who are able to contribute positively towards nation-building.
- ***National identity*** – to instill in every child an unshakable sense of national pride and identity, a feat which requires a strong sense of inclusiveness which can be achieved by embracing diversity.

The Ministry has also identified 11 shifts that need to transpire so that necessary steps can be taken to ensure the outcomes envisioned in the Blueprint become a reality by 2025. Collectively, the shifts encompass all five system aspirations and represent a change in strategy, direction as well as operations at school and Ministry levels.

The 11 shifts to transform the education system are:

1. Providing equal access to quality education of an international standard;
2. Ensuring every child is proficient in Bahasa Malaysia and the English Language. Children are also encouraged to learn an additional language;
3. Developing values-driven Malaysians;
4. Transforming teaching into the profession of choice;
5. Ensuring high performing school leaders are placed in every school;
6. Empowering state and district education offices and schools to customize solutions based on need;
7. Leveraging ICT to scale up quality learning across Malaysia;
8. Transforming the ministry's delivery capabilities and capacity;
9. Partnering with parents, the community and the private sector;
10. Maximizing student outcomes for every ringgit; and
11. Increasing transparency for direct public accountability.

5.1.3 Target groups

The transformation process is expected to have an impact on the following groups of people:

Students: Students will learn in an environment that nurtures the belief that all children have the potential to learn and succeed. Their school experiences, both academic and non-academic will be enriched by projects and group-based activities that will develop their higher-order thinking skills and their ability to work independently and collaboratively. Students will be given the freedom to chart their own learning experiences and they are expected to leave school armed with world-class knowledge and skills, strong moral values and a competitive edge.

Teachers: School-based professional development opportunities will be created for teachers and they will enjoy better working conditions, performance-based rewards and enhanced career pathways. Teachers will be exposed to a culture of collaboration and professional excellence. Teachers play a pivotal role in transforming passive young learners into active learners who can think critically, create new knowledge and solve problems in the real world. In order to keep pace with the changes in the complex world of diverse needs, the Ministry recognized the need for teachers to constantly develop their knowledge and level of professionalism to meet the needs of learners in the Twenty-First century.

School leaders: School leaders will also enjoy better working conditions and performance-based remunerations. School leaders will be given more autonomy through school-based management and they will also enjoy opportunities for on-going professional development. Raising the quality of the teaching and learning processes in schools to world class standards needs more than just changes in teacher selection and training. Research findings indicate that school leaders play important roles in determining student learning outcome. True leadership is about encouraging best practices in teaching and in order for that to happen, school leaders have to become familiar with innovative teaching theories and practices and be able to facilitate best practices in the classroom.

Ministry officials: Ministry officials will be provide the training and support they need to become ‘change leaders’ to support and guide schools to achieve excellence. There will be better collaboration among the different divisions within the ministry to eliminate duplication of tasks and responsibilities. As the system moves towards decentralisation, officials will enjoy greater flexibility in decision-making and finding solutions to educational issues in their jurisdiction.

Parents: Parental involvement in their children’s education will increase and they will have better understanding of their children’s development in school which will place them in situations where they can provide assistance for their children’s improvement. Schools will become more transparent in terms of their policies and strategies to improve student learning.

5.1.4 Sequence of the transformation

The transformation process is not expected to happen all at the same time. The ministry has envisioned three distinct periods or ‘waves’ for the transformation journey in which different aspects of education will be prioritized.

Wave 1 is expected to start in 2013 and end in 2015. During this period, the Ministry’s focus will be on raising teaching quality, raising school leader quality and improving student literacy and numeracy.

Wave 2 (2016 – 2020) will focus on structural changes aimed at accelerating the pace of change. This will include revamping the career package of teachers and principals and the introduction of the standard based curriculum for primary and secondary schools.

By the beginning of Wave 3 (2021 – 2025), all schools, teachers and principals are expected to be moving toward excellence. The focus will be on increasing operational flexibility and moving all schools into the school-based management model.

5.1.5 Transformation of the Technical and Vocational Education and Training (TVET)

The Transformation of the Technical and Vocational Education and Training (TVET) is a crucial part of the Government's Transformation Programme which aims at creating a repository of highly skilled and professional workers that will help elevate Malaysia into the high-income nation category. The goal of the transformation process is to reinvent the existing TVET system into one that highly appeals to students and parents by preparing students for careers that require expertise and skills and providing a career pathway that enables graduates to secure jobs and advance further in their chosen career paths. Students' progression from school to work is summarized in the chart below.

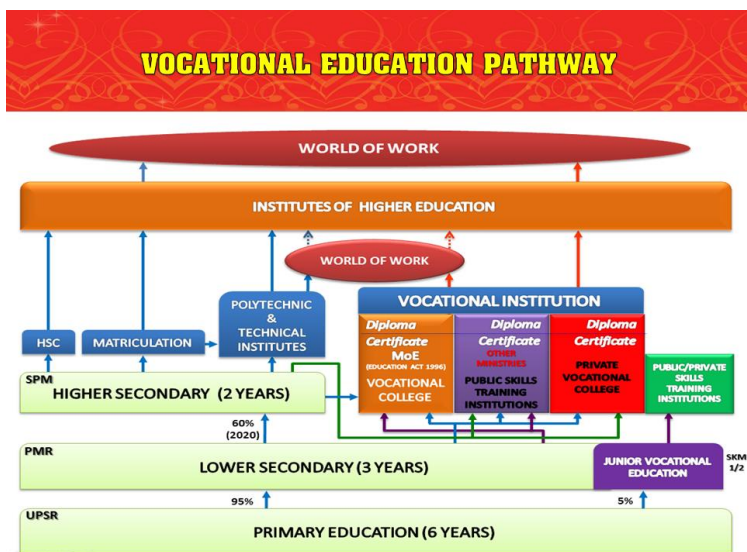


Figure 5.1 Students' Progression from School to Work

5.2 Malaysia Education Blueprint 2015-2025 (Higher Education)

Recently, MOE has launched the Malaysia Education Blueprint 2015-2025 (Higher Education) [MEB (HE)] to be in line with the aspiration of the Malaysia Education Blueprint 2013-2025 which was initially formulated for the basic primary and secondary education.

The Malaysia Education Blueprint (Higher Education) has identified ten shifts that will spur continued excellence in higher education to both public and private HEIs and address key performance indexes in higher education, including quality and

outcomes that deliver a good return on investment. The ten shifts are:

- Holistic, entrepreneurial and balanced graduates;
- Talent excellence;
- Nation of lifelong learners;
- Quality TVET graduates;
- Financial sustainability;
- Empowered governance;
- Innovation ecosystem;
- Global prominence;
- Globalised online learning; and
- Transformed higher education delivery

This plan provides the impetus that will drive the adoption of best practices in attracting and retaining quality academic staff, students, and researchers alike. The Blueprint provides a resilient higher education system that enables it to meet the challenges of globalisation and competitiveness. These include the democratisation of knowledge and access; contestability of market and funding; global mobility; integration with industry; and digital technologies that propel higher education.

With concerted efforts and planning, Malaysia's higher education sector performance on global rankings is strong in Asia, with niche areas of excellence globally. For example, five of Malaysia's universities currently rank among Asia's top 100 universities and Universiti Malaya is included in the top 200 globally (2014). Universiti Malaya is also the leading university among institutions in the Organisation of Islamic Cooperation

(OIC) countries. Within specific disciplines, Malaysia's universities are already ranked in the top 200 globally. In 2014, for example, Universiti Sains Malaysia was ranked 28th in the QS World University Rankings in the subject area of environmental sciences. 11 other HEIs had at least one department placed in the top 100 globally.

The Government is deeply committed to higher education as evidenced by its investment level relative to peers. As with the basic education sector, the Government is deeply committed to higher education, and the annual total expenditure on higher education is equivalent to 7.7% of annual Government expenditure (where the Ministry's expenditure on higher education alone is 5.5% of annual Government expenditure). This is, according to UNESCO benchmarking, the highest among Malaysia's peers – developed Asian economies (Hong Kong, Singapore, South Korea, Japan), ASEAN neighbours (Indonesia, Thailand, Singapore), and countries with comparable GDP per capita (Chile, Mexico).

In summary, the MEB (HE) proposes major reforms to Malaysia's higher education system in order to accelerate the positive upward trajectory of the system. It places the needs and interests of learners at the heart of the system, and reiterates the Government's longstanding commitment to providing equitable access to high-quality education of international standards. It calls for more intensive and frequent industry and community engagement, collaboration, and partnerships. The MEB (HE) also aims to unleash and empower both private and public HEIs to

push the boundaries of innovation and strive for institutional excellence in all its forms. Above all, the higher education system can be transformed to prepare Malaysians for the challenges and opportunities of an ever-changing world through the collective efforts of all stakeholders.

5.3 Blueprint on Enculturation of Lifelong Learning for Malaysia: 2011-2020

To implement the LLL agenda of the country and to assist the government in transforming the nation into a high income economy by 2020, MOE has taken the initiative to embark on a Blueprint on Enculturation of LLL for Malaysia: 2011-2020.

To realize the full potential of LLL for Malaysia, the Blueprint aims to address the following challenges:

- Formulating of a full-fledged LLL policy;
- Monitoring of LLL program at the national level;
- Greater awareness and participation in LLL programs;
- More adequate financial support for lifelong learners;
- Provision of adequate mechanism and infrastructure for effective implementation of LLL programs;
- Reducing overlapping LLL activities programs; and
- Recognition.

The Blueprint recommends that all LLL initiatives be governed by the following principles:

- Enculturation of LLL is a national agenda and to be the third pillar of human capital development;
- Maximum impact and complementarities;
- Cost effectiveness;
- Accountability;
- Creativity and innovation;
- Leveraging on technology;
- Benchmarking with international best practices.

ANNEX: KEY INDICATORS AND STATISTICS

**Table 5A.1 Enrolment in Primary and Secondary Schools
(2008 – 2013)**

Level of Education	Year Enrolment rate %					
	2008	2009	2010	2011	2012	2013
Primary	95.50	95.65	96.19	95.88	96.42	96.59
Secondary	89.11	90.01	89.61	89.81	90.18	91.12

Note: The rate of enrolment in all registered primary and secondary schools in Malaysia (schools under MOE and private, international, religious, and other categories).

Table 5A.2 Gender Parity (2008 – 2013)

Indicator	Level	2008	2009	2010	2011	2012	2013
Gender parity	Primary	1.01	1.01	1.00	1.00	1.00	1.00
	Secondary	1.06	1.07	1.07	1.07	1.06	1.07

Note: The trend for secondary education indicates that boys are falling behind, hence posing a challenge for the MOE to retain the boys in the system until they complete the full cycle of secondary education.

Table 5A.3 Expenditure as % of GDP (2008 –2011)

Indicator	2008	2009	2010	2011
Expenditure as % of GDP	4.5	4.06	4.3	4.4

Note: The resources allocated to the education sector, including the amount allocated to MOE constitute about 16 percent of the total federal budget.

**Table 5A.4 Average class size and Teacher Student Ratio
(2008 – 2013)**

Indicator	Primary						Secondary					
	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
Average class size	30	30	28	28	27	27	31	29	29	28	28	29
Teacher Student ratio	14.95	13.31	12.97	12.60	12.29	11.98	14.53	13.10	13.38	13.12	13.11	13.05

Table 5A.5 Completion Rate for Upper Secondary Education (2008 – 2013)

Indicator	2008	2009	2010	2011	2012	2013
Completion rate (Upper Secondary)	91.00	91.12	91.22	92.05	90.18	90.4

Table 5A.6 Educational Attainment (2009 – 2012)

Indicator	Level	2009	2010	2011	2012
Educational attainment	Primary	23.7	23.2	22.9	22.7
	Lower Secondary	17.5	17.4	17.3	17.4
	Upper Secondary	31.2	31.7	32.3	32.5

**Table 5A.7 Number of Schools, Enrolment and Teachers
(2014)**

	Schools	Enrolment			Teachers		
		Male	Female	Total	Male	Female	Total
Primary	7,751	1,387,360	1,311,523	2,698,883	72,701	167,684	240,385
Secondary	2,366	1,114,593	1,120,028	2,234,621	55,457	125,012	180,469
TOTAL	10,117	2,501,953	2,431,551	4,933,504	128,158	292,696	420,854

Note: The table indicates the number of schools, students and teachers in schools under the authority of the MOE.

Table 5A.8 The Number of Student Intake, Enrolment and Graduates in Higher Learning Institutions (HLIs) (2014)

HLIs	2014		
	Intake	Enrolment	Graduate
Public Universities*	183,508	617,617	126,038
Private Colleges and Universities**	181,410	493,725	106,203
Polytechnic	34,298	92,181	23,181
Community Colleges	12,103	17,985	6,483
Total	411,319	1,221,508	261,905

Note: These figures do not include more than 105,000 international students in private and public universities/colleges.

Source: Data Unit, Planning, Research and Policy Coordination Division, MOE, Malaysia, 2014

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The Republic of the Philippines

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I. OVERVIEW

The Philippines is an archipelago consisting of 7,107 islands with a total land area of 300,000 square kilometers. The three major group of islands are Luzon, Visayas and Mindanao. As of the last census in 2010, the population is 92.34 million, growing at an average of 1.90% between the last two censuses in 2000 and 2010. There was an estimated 20.1 million households in 2010. The country has 17 administrative regions and 80 provinces. The estimated gross domestic product (GDP) in 2013 is 272 billion USD and per capita income of 2,765 USD. The estimated simple literacy ratio for population 10 years and above is 97% (2010) and the functional literacy is 86.4% (2008).

As in many countries, basic education in the Philippines is dominated by the public school system. In the school year 2012-2013, there were 46,404 elementary schools, of which 38,659 (83.3%) were public. Kindergarten enrolment was about 2.2 million, of which 1.8 million (80.5%) in public kindergartens. Of 14.5 million students in elementary schools, 13.2 million (91.5%) were in public elementary schools, indicating the larger size of public schools. There were about 12,878 secondary schools in the school year 2012-2013 of which 7,748 (60.2%) in public secondary schools. The total enrolment was 7.1 million students, of which 5.7 million (80.2%) was in public schools. Again, secondary education is dominated by the public sector but not as much as in elementary education. There are 4,733 technical vocational training institutions, 467 (10%) of which are public. The number of enrollees in 2013 was 1.9 million and the number of graduates was 1.8 million. (Table 4A.1, Table 4A.2, Table 4A.3) In contrast, there are 1,856 higher education institutions, of which only 220 (11.9%) are public. In terms of enrolment, the

distribution is not as lopsided, with public HEIs accounting for 1.3 million students (42.3%). The number of graduates follows a similar distribution pattern as enrolment. In the case of higher education, this is slightly dominated by the private sector. (Table 4A.4)

II. EDUCATION SYSTEM IN THE PHILIPPINES

Table 6.1 encapsulates the education system in the Philippines. The passage of the Enhanced Basic Education Act of 2013 (RA 10533) drastically changed the Philippines' basic education. It mandated 12 year compulsory basic education plus a year of kindergarten. Compulsory education consists of kindergarten, six years of elementary education, four years of junior secondary and two years of senior secondary school (SSS). The compulsory kindergarten as a prerequisite for entering Grade 1 in elementary education was added in 2012 through the Kindergarten Education Act (RA 10157). From SSS the student can either go into a vocational and technical education track, which can be as long as three years depending on the program, or into the academic track, which consist of four years of college education, two years of master's degree and another two years for a PhD degree. After college education, many fields have non-degree continuing professional education. These are often required by their respective professional organisations⁷ to maintain their licenses to practice the profession.

⁷There are, to date, 43 professional organizations. These professional organizations are primarily responsible to regulating the practice of specific professions in the country.

Table 6.1 Education System in the Philippines

Age	TVET Track	Academic Track
25		PhD Programs
24		Continuing
23		Master's Professional
22		Degree Education
21		Programs
20	Post-Secondary	College Education
19	Technical	
18	Vocational	
17	Senior High School (Grades 11-12)	
16		
15		
14	High School (Grades 7-10)	
13		
12		
11	Compulsory	
10		
9	Elementary School (Grades 1 to 6)	
8		
7		
6		
5	Kindergarten	
3-4	Pre-school	

III. EDUCATION ADMINISTRATION

3.1 Pre-elementary

Pre-elementary education covers ages 3 to 5. All of it used to be optional and not covered by the public school system. The recent kindergarten law (RA 10157, 2012) makes compulsory kindergarten education a prerequisite before entering first grade in elementary. It also places kindergarten under the supervision of the Department of Education (DepEd). The rest of the pre-elementary education is still optional. It consists of day-care centers supervised by the Department of Social Welfare and Development (DSWD) in cooperation with local governments and private schools offering pre-elementary education. Even if the rest of pre-elementary education is not mandated, many families send their children to private schools offering pre-elementary programs.

3.2 Basic (Elementary and Lower Secondary) Education

The DepEd manages basic education which covers kindergarten, elementary, and secondary education⁸. The Central Office maintains the overall administration of basic education at the national level. The Field Offices are responsible for the regional and local coordination and administration of the Department's mandate. The DepEd manages the basic education system through direct supervision for public elementary and

⁸Qv. <http://www.deped.gov.ph/about/history>

secondary schools and through regulation for private elementary secondary schools.

- a. *Public schools.* To supervise the public elementary and secondary school systems, the DepEd Field Offices has Sixteen (16) Regional Offices, and the Autonomous Region in Muslim Mindanao (ARMM), each headed by a Regional Director (a Regional Secretary in the case of ARMM). It has two hundred twenty-one (221) Provincial and City Schools Divisions, each headed by a Schools Division Superintendent. Assisting the Schools Division Offices are 2,602 School Districts, each headed by a District Supervisor.
- b. *Private schools.* The DepEd regulates the private elementary and secondary education institutions through a permit to operate and recognition system described in the 2010 Revised Manual of Regulations of Private Schools. This involves submission of pertinent documents followed by ocular inspection, regular monitoring with defined sanctions and penalties.

3.3 Technical Vocational Education

The Technical Education and Skills Development Authority (TESDA) is mandated by law to be the regulator of technical and vocational education training (TVET) institutions⁹.

⁹ Orbeta (2015)

RA 7796 mandates the TESDA Board to “primarily be responsible for formulating and continuing, coordinated and fully integrated technical education and skills development policies, plans and programs.” The highest policy making body is the 22-member TESDA Board¹⁰ chaired by the Secretary of Labor and with representations from the government, private firms and workers’ organisations. It guides the development of the TVET sector through the National Technical Education and Skill Development Plan (NTESDP). The TESDA manages the TVET sector by regulating the operations of the private technical vocational institutes (TVIs) and participating directly in training provision by operating several TESDA training institutes (TTIs). TESDA manages 120 training institutes consisting of 21 regional training centers, 43 provincial training centers, and 56 technical vocational schools that involve private training institutions, community-based programs, and enterprise-based training programs.

- a. *Private training institutions.* The TESDA regulates the private TVIs through mandatory program registration. Before a Certificate of Program Registration (CoPR) is issued, site visits are conducted. Regular monitoring is also done.
- b. *Community-based programs.* One important component of TVET provision is community-based training initiated by local government units (LGUs),

¹⁰ Expanded from the original 12 members stipulated in the TESDA law (RA 7796)

non-government organisations (NGOs) and other organisations or individuals. The TESDA provides technical assistance to community-based training programs. It provides training modules, related equipment, supplies and materials; recommends qualified trainers; and co-signs training certificates.

- c. *Enterprise-based training programs.* Firms provide dual training systems / apprenticeship and learnership programs conducted at the workplace conducted by enterprise, school or training center.

3.4 Higher Education

The governance arrangement for the higher education¹¹ sector has seen several drastic changes since early 1994. The main outcome of the Congressional Education Commission in 1991/92 was the “trifocalization” of supervision of the education system with Commission on Higher Education (CHED) for tertiary and graduate education, the DepEd for basic Education and TESDA for technical vocational education. The creation of the CHED was done under the Higher Education Act of 1994 (RA 7772).

¹¹ Qv. Orbeta (2008).

The CHED is an attached agency to the Office of the President. It is headed by the Chairman and four commissioners each having a term of office of 4 years.

The supervisory powers of the CHED cover both public and private higher education institutions (HEIs) as well as degree-granting programs in all post-secondary institutions. The functions of CHED can be grouped into four: (a) develop plans, policies, priorities and programs on higher education and research; (b) set and enforce minimum standards for programs and institutions; (c) recommend the allocation of resources to institutions and program; and (d) monitor the performance of the system of higher education.

- a. *Public HEIs.* The public HEIs consist of State Universities and Colleges (SUCs), and Local Universities and Colleges (LUCs), other CHED Supervised Schools (CSIs) and other special institutions. SUCs are chartered HEIs established by law and are administered and financially subsidized by the government. LUCs are institutions established and financially supported by local governments through resolutions and ordinances. CSIs are non-chartered public post-secondary education institutions administered and financially supported by government. Specialized schools include the military and police academies supervised by relevant military and police departments.

SUCs have their own charters and policy making bodies consisting of a board of regents for universities and a board of trustees for colleges. By law, the Chair of CHED serves as head of these boards.¹² Policy implementation and day to day management of the SUCs is vested on the president, staff, and support units. The LUCs have a similar administrative set-up except that the members of the board of trustees is designated by the local government units.

- b. *Private HEIs.* Private HEIs consist of sectarian and non-sectarian institutions. Private education institutions are established under the Corporation Code. The non-sectarian schools are owned and incorporated by private entities not affiliated with religious organisations. The sectarian schools, on the other hand, are usually non-stock, non-profit, duly incorporated and owned and operated by religious organisations.

3.5 Continuing Professional Education (CPE)

The aim of CPE¹³ is to enhance and raise the technical skills and competence of professionals. CPE has now evolved to Continuing Professional Development (CPD).

¹² Because there are too many SUCs (110 in 2012), this responsibility is now shared among the CHED Chair and Commissioners.

¹³ Qv. www.prc.gov.ph.

The Professional Regulations Commission (PRC) has 46 professional regulatory boards covering various disciplines. These boards are responsible in monitoring the CPE/CPD requirements of their respective professionals, based on the mandate of the 1987 Philippine Constitution, R.A. 8981, otherwise known as the PRC Modernization Act of 2000, and Executive Order No. 220, directing the Adoption of the Code of Good Governance for the Professions in the Philippines.

Each board has its own CPE/CPD Council chaired by any member of the board. It has two members, the first is either the President or Officer of the accredited professional organisation and the second is either the President or Officer of the association of deans or heads of colleges/universities offering the course. The CPE/CPD Council is empowered to monitor periodically the implementation of programs/activities. This is done to find out if the program or activity submitted is implemented or not.

IV. CURRICULUM FRAMEWORK

4.1 Basic Education

The DepEd adheres to the following standards and principles, when appropriate, in developing the enhanced basic education curriculum:

- The curriculum shall be learner-centered, inclusive and developmentally appropriate;
- The curriculum shall be relevant, responsive and research-based;
- The curriculum shall be gender- and culture-sensitive;
- The curriculum shall be contextualized and global;
- The curriculum shall use pedagogical approaches that are constructivist, inquiry-based, reflective, collaborative and integrative;
- The curriculum shall adhere to the principles and framework of the MTB-MLE which starts from where the learners are and from what they already know proceeding from the known to the unknown; instructional materials and capable teachers to implement the MTB-MLE curriculum shall be available. For this purpose, MTB-MLE refers to formal or non-formal education in which the learner's mother tongue and additional languages are used in the classroom;
- The curriculum shall use the spiral progression approach to ensure mastery of knowledge and skills after each level; and
- The curriculum shall be flexible enough to enable and allow schools to localize, indigenize and enhance the same based on their respective educational and social contexts.

Table 6.2 Curriculum for Basic Education

Elementary	Kindergarten to Grade 6				
Junior school	High	Grades 7 to 8 (Exploratory TLE)	Grades 9 to 10 (Specialized TLE)		
Tracks					
Contextualized Track Subjects					
Senior School (Grades 11-12)	High 8 Core Subjects	Academic	Technical- Vocational Livelihood	Sports	Arts & Design
		STEM	Home economics		
		ABM	Agro-Forestry		
		HUMSS	Industrial arts		
			ICT		

Source: Department of Education

With the K to 12 Law, the curriculum for senior secondary school (SSS) adds a tracking system described in Table 6.2 The core curriculum has seven learning areas. These are languages, literature, communication, mathematics, philosophy, natural science and social sciences. In addition, the SSS student can choose among three tracks: Academic, technical-vocational-livelihood, and sports and arts. The academic tracks has three strands, namely, business, accountancy, and management (BAM); humanities, education, social sciences (HESS); and science, technology, engineering and mathematics (STEM.)

4.2 TVET

The curriculum for TVET is embodied in the training regulations (TR) promulgated by TESDA in cooperation with the industry experts. The curriculum is competency based. The TR is regularly reviewed and updated every 3 to 5 years or whenever there are significant developments in the skill, whichever comes first.

4.3 Higher Education

With the introduction of 12 year basic education, the higher education general education curriculum (GEC) has been revised (CHED CMO 20 s2013) reducing the number of GEC units from 63 to 36. This will consist of 24 units of core courses; nine units of elective courses and three units of life and works of Dr. Jose Rizal (the national hero). The eight courses of the core course (three units each) consist of (1) understanding the self, (2) readings in Philippine history, (3) the contemporary world, (4) Mathematics in the modern world, (5) purposive communication, (6) art appreciation, (7) science, technology and society, and (8) ethics. The nine elective units cover at least two of the three domains, namely, arts and humanities, social sciences and philosophy, and science, technology and mathematics. The implementation of this curriculum will be in academic year 2018-2019 when the first batch of K to 12 graduates have completed their 12 years of basic education. The CMO identifies the difference of this new GEC with the old curriculum into four areas: (i) it has clearly articulated goals and outcomes, (ii) because of its outcomes-orientation, it highlights competencies in

addition to the standard emphasis on content, (iii) it is more in keeping with the liberal nature of GE, and (iv) it provides the element of choice with nine units of elective courses.

The course-specific curriculum is determined by course-specific technical panels composed of senior specialist or academicians appointed by CHED. These are also subjected to periodic review by the panels.

V. RECENT POLICY REFORMS

5.1 Basic Education

There are two major recent policy reforms in basic education. These are (a) the K to 12¹⁴ program and (b) the MTB-MLE.

5.1.1 K to 12

The K to 12 program overhauls basic education program of the Philippines. It aims to (a) align our basic education cycle with international practice, (b) improve the quality of children's educational experience, and (c) increase our country's competitiveness and to widen good job opportunities. The K to 12 promises can accomplish these objectives by:

- Increasing the school readiness of pre-school children;

¹⁴K to 12 program description was taken from www.gov.ph/k-12/.

- Decongesting the curriculum for each academic year and spreading learning activities through a couple more years of education;
- Expanding learning areas and choice of careers, including tailoring of education towards high quality practical technical and vocational skills; and
- Improving the maturity and readiness of college-bound high school graduates for college work.

Table 6.3 Objectives and Features of the K to 12 Curriculum

Objectives	Features
1. Strengthen the Early Childhood Education.	Universal Kindergarten skills.
2. Relevant curriculum.	Enhanced and decongested curriculum.
3. Integrated and seamless learning.	Spiral Progression.
4. Proficiency through language.	Mother tongue-Based multilingual education (MTB-ME).
5. Gearing up for the future.	Senior high school.
6. Nurturing the holistically developed Filipino.	College and livelihood readiness for 21st century skills.

Source: <http://www.gov.ph/k-12/>

The K to 12 program reiterated making kindergarten a pre-requisite to Grade 1 admission. As mentioned earlier, kindergarten was made mandatory by the Kindergarten Education Act (RA 10157) which was before the K to 12 laws and implementation began in school year 2011–2012. The 12 years of

basic education covers the six years of primary education, the four years of Junior Secondary School (JHS), and the two years of senior secondary school.

Implementation Timeline. In school year 2012–2013, the enhance curriculum for Grade 1 and Grade 7 was implemented. This was also implemented in the other grade levels progressively in the succeeding school years. Meanwhile, the DepEd noted that it is not just the public schools that must adhere to the minimum standards of the K to 12 curriculum, private schools must likewise follow including the K to 12 progressions. In school year 2016–2017, Grade 11 will be introduced and the DepEd reports that they will engage in partnerships with colleges, universities, and TVI to use their existing facilities and teaching staff to ensure that during the transition period the reduction in enrolment in these colleges and universities will be offset. Similarly, the DepEd has identified 5,800 public schools in the country that will offer SSS programs. Meanwhile, Grade 12 will be introduced in the following school year 2017–2018. It is expected that in March 2018, the first batch of K to 12 students will graduate.

K to 12 Tracks. There are three tracks that the SSS can choose from. These are the Academic, Technical-Vocational-Livelihood and Sports and Arts. A Certificate of Competency (COC) or a National Certificate Level I (NC I) can be acquired after finishing Grade 10 while National Certificate Level II (NC II) can be acquired if the student passes the competency-based assessment of the TESDA after finishing Technical Vocational-Livelihood in Grade 12 which greatly improves their employability.

Despite what the K to 12 program promises to reinforce, criticisms abound, like it will worsen the already overcrowded classrooms and the extra two years will burden more the family expenses. It is noteworthy that several of those criticisms are already being addressed by the government examples are the following:

- Implementing the MTB-ME to make it easier for Filipino children to learning;
- Extension of Pantawid to include high school education coverage to ensure the poor benefits from high school education;
- The education budget has been significantly raised, though it is still less than 3.0 % of GDP;

- Passing of the Unified Financial Assistance System for Higher and Technical (UNIFAST) Education Bill to enable deserving students to access good quality post-secondary education and create a mechanism to give incentives to high school students to perform well in basic education.

5.1.2 Multilingual education

The DepEd Order 31, s. 2012 implements the mandate of using the mother tongue (MT) or the common language in the area or lingua franca as a medium of instruction and as a subject

starting in kindergarten in the K to 12 Law. In Grades 1-3, the mother tongue will be used in teaching all subjects, except in teaching other languages such as Filipino and English subjects. Starting Grade 4, Filipino and English will become the languages for instruction. Both will become primary languages of instruction in JSS and SSS.

The principle of MTB-MLE is to use the language that learners are most comfortable and familiar with and that they are able to learn best through their first language, their mother tongue. After Grade 1, every student can already read in his or her mother tongue. Learning in mother tongue also serves as the foundation for students to learn Filipino and English easily.

Twelve (12) mother tongue languages have been introduced for school year 2012-2013. These were as follows: Bahasa Sug, Bikol, Cebuano, Chabacano, Hiligaynon, Iloko, Kapampangan, Maguindanaoan, Meranao, Pangasinense, Tagalog, and Waray. Other local languages will be added in succeeding school years. Recently, seven (7) dialects were added by the DepEd. These were the following: Ibanag, Ivatan, Sambal, Aklanon, Kinaray-a, Yakan and Surigaonon.

5.2 Technical and Vocational Education

5.2.1 Ladderized education (RA 10647)¹⁵

The most important recent policy reform in the TVET sector is the passage of the Ladderized Education Act of 2014 (RA 10647) last November 21, 2014. The law enables graduates of technical-vocational (tech-voc) schools to earn units for college degrees. The law institutes a “ladderized interface” between technical-vocational education and higher education in the Philippines. This allows technical-vocational courses to be credited as units for an undergraduate degree.

The DepEd, CHED and TESDA were the agencies mandated to implement RA 10647. They were tasked to develop a ladderized education curriculum, as well as mechanisms to credit technical-vocational courses as college units. In addition, they were also given the responsibility to identify “priority disciplines” for ladderisation, taking into account the situation in the labor market.

This law was even hailed by Senator Pia Cayetano who said that the new law would particularly benefit workers to take up technical-vocational courses, which are cheaper and shorter. Likewise, college degree holders who wish to acquire technical skills, including those which are in demand in the labor market, may also take advantage of the same program under the new legislation.

¹⁵RA 10647 description was taken from www.tesda.gov.ph.

5.3 Higher education

5.3.1 Outcome Based Education (OBE) (CMO 46)

In higher education, the shift to learning competency based standards was introduced in 2011 through the Commission on Higher Education's Memorandum Order (CMO) No. 2, which revised the policy standards of academic programs previously released in 2003.

In 2012, CHED released CMO No. 37, outlining policy standards and guidelines for the establishment of an outcomes-based education system in HEIs offering engineering programs. The CMO reinforced previous issuances, pending the Philippines' admission into the Washington Accord (WA). Since 2000, all signatory countries of the WA have shifted from an input-based to an outcomes-based education (OBE) system, where the focus is for the institutions with accredited programs to demonstrate that their graduates have met an acceptable level of knowledge, skills, and attitude demanded by their different fields of practice.

CMO No. 46 in the same year expanded outcomes-based education to include outcomes-based quality assurance monitoring and evaluation differentiated by the type of institution, within the framework of lifelong learning. The learner-centered paradigm aimed to enhance the development of thinking, technical and behavioral competencies, with standards that comply with existing international standards. The Order adopts both a horizontal typology based on the functional differentiation of HEIs in their service to the nation, and a vertical

typology based on elements of quality, including program excellence and institutional quality.

5.3.2 Normative Financing (DBM-CHED JC 2 s2004)

Prior to 2005, budgets for State Universities and Colleges were decided on allocation models covering enrolment, quality of performance, and research and extension. Normative funding was adopted in 2004, which applies a set of prescribed objective criteria designed to promote and reward quality instruction, research and extension services, and financial responsibility. Through the DBM-CHED Joint Circular No. 2, normative funding rationalized the allocation of funds to State Universities and Colleges, taking into consideration personal services, the maintenance and other operating expenses(MOOE), capital outlays, and instruction, research and extension services.

The Normative Funding Formula follows a set of prescribed objective criteria comprising general institutional support, research, extension services, and quality teaching to realize an enhanced procedure in the distribution of government funds, particularly in the provision of key services and facilities.

VI. CONCLUSION

There is a constitutional guarantee that education should be the highest priority of government. Nonetheless, the expenditure of 3% GDP is still lower than many countries. Despite this seeming limitation, the education system of the country has been experiencing a fundamental overhaul at all levels in recent years. Policy reforms that have been introduced in the Philippine education system in recent years are aimed at

aligning the system to the international education experience and improving the efficiency and effectiveness of delivering education at all levels. In the basic education sector, it increases the compulsory education to 13 years (K plus 12 years of elementary and secondary school). The reform in TVET aims to facilitate the granting of credit for TVET education in higher education. The reforms in higher education are aimed at shifting towards outcome based education. These profound changes in the Philippine education system are designed to propel the country into better socio-economic performance in the future.

ANNEX: KEY INDICATORS AND STATISTICS

Table 7 A.1 Elementary schools and enrolment

	2009-2010	2010-2011	2011-2012	2012-2013
Schools	44,846	45,964	46,137	46,404
Public	37,762	38,351	38,503	38,659
Private	7,084	7,613	7,634	7,745
Kindergarten Enrolment	1,474,644	1,650,232	2,111,293	2,202,486
Public (with SUC)	1,054,200	1,224,173	1,683,229	1,773,505
Private	420,444	426,059	428,064	428,981
Elementary Enrolment	13,934,172	14,166,066	14,436,345	14,509,690
Public (DepEd with SUC)	12,799,950	13,019,145	13,241,213	13,273,325
Private	1,134,222	1,146,921	1,195,132	1,236,365

Source: Department of Education, Republic of the Philippines. (2014)

Table 7 A.2 Secondary Schools and Enrolment

	2009-2010	2010-2011	2011-2012	2012-2013
Schools	10,384	12,950	12,670	12,878
Public	5,677	7,268	7,470	7,748
Private	4,707	5,682	5,200	5,130
Enrolment	6,806,079	6,954,946	7,049,877	7,110,944
Public (DepEd with SUC)	5,465,623	5,580,236	5,635,664	5,702,597
Private	1,340,456	1,374,710	1,414,213	1,408,347

Source: Department of Education, Republic of the Philippines. (2014)

Table 7 A.3 TVET Institutions, Enrolment and Graduates

	2010	2011	2012	2013
Total	4,328	4,434		4,733
Public	422	423		467
Private	3,906	4,011		4,266
Enrollees	1,568,617	1,572,131	1,804,742	1,943,589
Graduates	1,344,371	1,332,751	1,600,658	1,765,757

Source: Bureau of Labor and Employment Statistics, Philippine Statistics Authority. (2014)

Table 7 A.4 Higher Education Institutions and Enrolment

Indicator	2009/10	2010/11	2011/12
Higher Education Institutions (HEIs)			
Total HEIs (excluding SUCs Satellite campuses)	1,791	1,823	1,856
Public	218	219	220
State Universities and Colleges (SUCs)	109	110	110
Local Colleges and Universities (LCUs)	93	93	94
Others (include OGS, CSI, Special HEI)	16	16	16
Private	1,573	1,604	1,636
Sectarian	322	334	339
Non-Sectarian	1,251	1,270	1,297
Enrolment			
All Disciplines	2,770,965	2,937,847	3,033,967
Public	1,083,194	1,193,851	1,282,045
Private	1,687,771	1,743,996	1,751,922
Graduates			
All Disciplines	481,862	498,418	517,425
Public	192,545	207,722	208,995
Private	289,317	290,696	308,430

Source: Commission on Higher Education, Republic of the Philippines. (2013, July)

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Republic of Singapore

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I. OVERVIEW

Singapore, officially the Republic of Singapore, is a sovereign city-state located at the southern tip of the Malaysian Peninsula, around 137 kilometres north of the equator. With a land area of 718 square kilometres, Singapore's total population was around 5.47 million in 2014.¹⁶ The Singapore population is multiracial. It comprises four main ethnic groups, namely Chinese (77%), Malay (13%), Indian (9%), and other groups (1%). The official languages are English, Malay, Mandarin and Tamil. The GDP per capita of Singapore, estimated at USD 55,182 in 2013, is among the highest in the world.¹⁷

Despite Singapore's small size, it has a large number of education institutions. Singapore has 182 primary schools, 154 secondary schools, 15 mix-level schools,¹⁸ 14 pre-university institutions, five polytechnics and six universities. The primary, secondary and pre-university institutions have a total of enrolment of 473,375 students. There are 14,788 primary school teachers, 14,993 secondary school teachers, 2,998 pre-university teachers. (Table 8A.2, Table 8A.3, Table 8A.4, Table 8A.7) The Singapore Government views education as a priority and invests heavily in it. In 2014, it budgeted 20.3% of total government

¹⁶ Department of Statistics Singapore. (2015).

¹⁷ The World Bank. (2015).

¹⁸ The category Mixed Level comprises Primary & Secondary Schools (P1-S4/5) and Secondary &

Junior College Schools (S1-JC2).

expenditure or SGD 11.486 billion on education¹⁹. Government expenditure on education in 2013 ranged from SGD 8,669 (USD 6,933) per student in primary schools, to SGD 21,839 (USD 17,467) per student in universities²⁰. (Table 8A.5) The Singaporean education system has resulted in a high literacy rate of 96.5%. The mean years of schooling were 10.5. Meanwhile, 68% of citizens have at least Secondary or higher qualifications (Table 8A.1)

This chapter will give an overview of the administrative structure of the Singapore education system, describe its educational pathways, and briefly explain its basic education curriculum. It will also comment on significant educational policies in recent years and highlight some key indicators and statistics of Singapore education.

II. EDUCATION ADMINISTRATION

This section delineates the administrative structure of the education system in Singapore. A sub-section describes the role of education research institutions in supporting education policy and practice in Singapore.

The Ministry of Education (MOE) directs the formulation and implementation of education policies. It oversees the development and administration of government-funded schools.

¹⁹Ministry of Finance Singapore. (2015).

²⁰Ministry of Education Singapore. (2014a).

It also exercises an advisory and supervisory role over private schools.

2.1 Preschool Education

The Early Childhood Development Agency (ECDA) serves as the regulatory and developmental authority for the early childhood sector in Singapore. It oversees the development of children below the age of 7 across kindergartens and child care centres. The ECDA is an autonomous agency jointly overseen by the MOE and the MSF (Ministry of Social and Family Development).

The ECDA was officially launched in April 2013 to integrate the regulation, planning, professional development and public education functions for the early childhood sector. The roles and responsibilities of the ECDA²¹ include the following:

- Oversee measures to raise quality standards of early childhood programmes, including regulation, quality assurance, and the provision of early childhood development resources;
- Facilitate the training and continuing professional development of early childhood professionals;
- Master-plan for infrastructure and manpower resources to support the early childhood sector;

²¹Early Childhood Development Agency Singapore. (2013).

- Provide subsidies and grants to keep quality pre-school programmes affordable, especially for low and middle income families;
- Conduct public education and outreach to raise parents' awareness and support for their children's development.

2.2 Basic Education

The Ministry of Education is the core educational administrative body for basic education. The administrative system is centralised and the schools are managed by the Schools Division. The Schools Division comprises five Branches and one Centre, namely Schools Branch North, Schools Branch South, Schools Branch East, Schools Branch West.

The Zonal Branches oversee the management of all primary and secondary schools, junior colleges and centralised institutes. The schools are grouped into clusters and each cluster is facilitated by a Cluster Superintendent. The Cluster Superintendents in each Zonal Branch develop, guide and supervise the school leadership teams to ensure that schools are effectively run. They ensure that there is networking, sharing and collaboration among the member schools within the cluster so as to raise the capacity of the leadership teams and the quality of education programmes and experience in each school. Cluster Superintendents also play a key role in cross-school sharing of good practices as well as ensure good personnel and financial management. They also form the critical interface between the MOE headquarters and schools by communicating the MOE's

policies, supporting schools in their implementation, actively engaging schools to understand their needs and to feedback school's concerns to the MOE.

Schools are supported by the School Appraisal Branch to review their programmes and make continuous improvement while the School Cockpit Administration Centre supports the data infrastructure and system in schools.

2.3 Higher Education

The Higher Education Division (HED)²² oversees the provision of tertiary and technical education in Singapore as well as registration of private schools. It oversees nine statutory boards – five Polytechnics, the Institute of Technical Education (ITE), the Science Centre Singapore (SCS), the Institute of Southeast Asian Studies (ISEAS), and the Council for Private Education (CPE). The HED also oversees the development of five autonomous universities (the National University of Singapore, the Nanyang Technological University, the Singapore Management University, the Singapore University of Technology and Design, and the Singapore Institute of Technology). It also oversees the provision of publicly-subsidised places in the following institutions: SIM University, the LASALLE College of the Arts and the Nanyang Academy of Fine Arts.

The mission of the HED is to:

²²Ministry of Education Singapore. (n.d. a).

- Steer and support the development and provision of quality post-secondary education that meets national economic and social objectives;
- Facilitate the development of quality informal education at the SCS and ISEAS, as well as offer quality services to private education providers.
- Some of the key functions of the HED include:
 - Initiate, implement and review policies on universities, polytechnics, technical and tertiary arts education;
 - Evaluate policy recommendations and oversee the operations of universities, polytechnics and ITE;
 - Register private schools under the Education Act;
 - Formulate policies for the regulation of the Private Education sector;
 - Conduct research and formulates strategies for the post-secondary education sector;
 - Collect and analyse data for the post-secondary education sector for policy formulation;
 - Evaluate, review and develop policies to support Continuing Education and Training (CET) implementation at ITE, Polytechnics and Universities; and

- Recommend and evaluate CET initiatives and facilitate collaborations involving the post-secondary education sector, school sector, industry bodies and economic agencies.

2.4 Schools for Students with Disabilities

In Singapore, the goal for the education of students with Special Educational Needs (SEN) is to enable each student to optimise his potential and prepare him to participate and pursue a productive and meaningful life in the society. The approach to supporting students with SEN is to place them in the appropriate education setting that can best serve their needs. Those with mild SEN and have the cognitive abilities and adequate adaptive skills to learn in large-group settings attend mainstream schools. Those who require intensive specialized assistance in their education to fully optimise their potential and abilities for learning and independent living, attend Special Education (SPED) schools that are run by Voluntary Welfare Organisations (VWOs). These schools receive funding from the Ministry of Education and the National Council of Social Service.

The Ministry of Education provides additional funding and resources to SPED schools to better support these students, in recognition of their greater needs. These resources come in the form of smaller teacher-student ratios, purpose built school buildings and specialised facilities, as well as provisions for the teaching of sign language and braille as well as assistive technological devices to better facilitate learning. At the same time, all students with special needs will have appropriate and

meaningful opportunities for interaction and integration with mainstream students over the course of their education with the aim of providing them with skills to integrate well into society.

2.5 Lifelong Learning – Continuing Education and Training

2.5.1 The Post-Secondary Institutions

Adult learners can undergo Continuing Education and Training (CET) at the post-secondary institutions. CET programmes aim to address manpower and skills gaps, so as to support industry development and job creation, facilitate education and career transition via various pathways, and enable the workforce to stay employable amidst rapid shifts in the economic landscape.

ITE offers for adult learners part-time Nitec, Higher Nitec, Master Nitec, Specialist Nitec and ITE Skills Certificate courses. They are offered in modules of six months' duration, giving adult learners the flexibility to sign up for training based on their needs. In addition, companies that are Certified On-the-Job Training (OJT) Centres by ITE can offer their employees OJT. Working adults also have access to courses conducted by Approved Training Centres off-the-job. ITE conducts skills evaluation tests for public candidates and instructional skills and related programmes for industry trainers. For adult learners who wish to resume or continue with academic upgrading at the secondary

level, ITE offers MOE-subsidised lessons for levels from Secondary One Normal to GCE 'N' and GCE 'O' levels, under its General Education Programme.

The polytechnics offer working adults academic CET programmes at diploma and post diploma level, covering areas such as Engineering, Environmental Technology, Chemical Processes, Pharmaceuticals, Electronics, Construction, Aerospace, Marine & Offshore, Logistics, Business, Accounting & Finance, Security, Information Technology & Digital Media, Early Childhood Education, Healthcare, Sports, Retail and Tourism.

The universities offer academic CET through part-time degree courses at both undergraduate and post-graduate levels. NUS and NTU are the two autonomous universities offering part-time basic degree courses, specifically in engineering. The NUS courses lead to the award of the Bachelor of Technology, while the NTU courses lead to the award of the Bachelor of Engineering. Both universities also offer part-time post-graduate courses for existing degree holders. UniSIM offers a range of more than 60 part-time undergraduate and postgraduate courses in 4 schools – the School of Arts and Social Sciences, the School of Business, the School of Human Development and Social Services and the School of Science and Technology.

2.5.2 Singapore Workforce Development Agency

The Singapore Workforce Development Agency (WDA)²³ was established in September 2003, within the context of an economic crisis at the turn of the 21st century, to help the Singapore labour force cope through training and skills upgrading. WDA was given a clear mission to lead, drive and champion workforce development, and enhance the employability and competitiveness of Singapore's workforce. The agency began with three main objectives:

- Keep training relevant.
- Strengthen the Continuing Education and Training (CET) infrastructure.
- Help workers find jobs.
- The agency launched programmes to train and place workers in sectors such as cleaning, wafer fabrication and textiles. In the following years, the WDA significantly expanded the CET infrastructure which now includes:
 - A network of five career centres;

²³Singapore Workforce Development Agency.(n.d.).

- More than 40 CET Centres offering quality training and career services;
- A national Singapore Workforce Skills Qualifications (WSQ) framework, covering close to 30 industries;
- The Institute for Adult Learning (IAL), which aims to enhance the capabilities and professionalism of adult educators so as to broaden and deepen their expertise.

III. EDUCATION RESEARCH

Education research has played a pivotal role in informing policy and practice in Singapore. The Office of Education Research (OER) of the National Institute of Education (NIE), Nanyang Technological University (NTU) was established in April 2008 to forge an NIE-wide programme of research, development and innovation. It facilitates the governance, planning, monitoring, quality assurance and dissemination of education research across NIE. The OER coordinates the work of three Research Centres, namely the Centre for Research in Pedagogy and Practice (CRPP), Learning Sciences Lab (LSL), and the Education and Cognitive Development Lab (ECDL). The OER also administers the Education Research Funding Programme (ERFP), a pool of research funds provided by the MOE.

IV. EDUCATION PATHWAYS

Figure 7.1 provides an overview of the education pathways within the Singapore Education Landscape, from primary education to post-secondary education. The system seeks to maximise the potential of every student in Singapore.

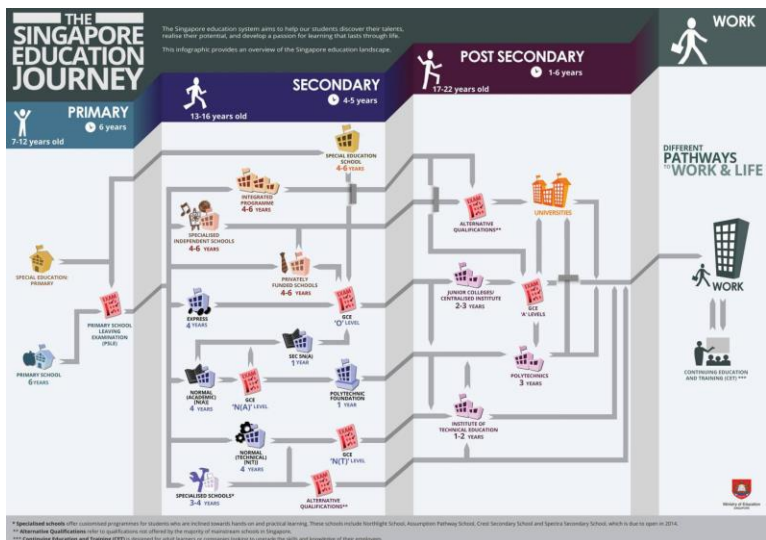


Figure 7.1 The Singapore Education Journey

4.1 Primary Education

Six years of primary education is compulsory for all Singapore citizens above the age of 6 years and for those who have not yet attained the age of 15 years. It consists of a 4-year foundation stage from Primary 1 to 4 and a 2-year orientation stage from Primary 5 to 6. The overall aim of primary education

is to give students a good grasp of the English Language, Mother Tongue, and Mathematics.

At the end of Primary 6, all students are assessed on their academic abilities through the Primary School Leaving Examination (PSLE), and placed in a secondary school course that suits their academic learning pace and aptitudes (Table 8A.6). For students with special needs and learning disabilities, there are specialised schools that offer customised programmes both at the primary and secondary levels. Students may also seek admission to a secondary school based on their achievements and talents across a diverse range of areas (including arts and sports) through the Direct School Admission exercise.

4.2 Secondary Education

Secondary education is for students aged 13 to 16 or 17 years. At the secondary level, students have range of courses and school types to choose from. Based on their performance at the PSLE, students are placed in a four-year Express course, or a four-year Normal (Academic) course with an optional fifth year, or a four-year Normal (Technical) course. The different curricular emphases are designed to match their learning abilities and interests. Academically-strong students who prefer a more independent and less structured learning style may apply to a school that offers the Integrated Programme (IP)²⁴, and students

²⁴The Integrated Programme (IP) provides a 6-year integrated secondary and pre-university education where secondary school students can proceed to pre-university without taking the GCE O-level examinations. Given the strong academic aptitude of its students, the IP aims to stretch the potential of its students

with specific talents and abilities in areas such as the arts, sports, mathematics and science may apply to study in Specialised Independent Schools. Students can also attend the Specialised Schools.

4.2.1 Types of Courses

a. Express Course

Students in the Express course at the end of Secondary 4 are typically offered seven to eight subjects at the Singapore-Cambridge General Certificate of Education (Ordinary Level) examination (GCE O-level).

b. Normal (Academic) Course

Students in the Normal (Academic) course are offered academically-based subjects while those in the Normal (Technical) course will follow a curriculum that is more practice-oriented. Students in both courses will sit for the Singapore-Cambridge General Certificate of Education (Normal Level) (GCE N-level) examination at the end of Secondary 4. (Table 8A.6)

After the GCE N-level examination, students from the Normal (Academic) course who satisfy the academic requirements can go on to a fifth year of study, where they can sit

in non-academic aspects by engaging them in broader learning experiences beyond the academic curriculum.

for the GCE O-level examination at the end of the year. Qualified students may be admitted to post-secondary institutes such as the polytechnics via the Polytechnic Foundation Programme, or to the Institute of Technical Education (ITE) through the Direct Entry Scheme.

c. Normal (Technical) Course

After sitting for their GCE N-level examination, students from the Normal (Technical) course who satisfy the academic requirements can transfer laterally to the Secondary 4 Normal (Academic) course, or be admitted to the ITE for the National ITE Certificate (NITEC) course.

4.2.2 Types of Secondary Schools

The types of secondary schools described below are not mutually exclusive. Among these schools, namely the government schools, government-aided schools, independent schools, and specialised schools, may also be an autonomous school, a Special Assistance Plan school, or both.

a. Special Assistance Plan Schools

Special Assistance Plan (SAP) schools were first established in 1979 to preserve the ethos of the Chinese medium schools and to promote the learning of Chinese language and culture. These schools have done well and have remained relevant over the years. With the shifts in the home-language background of students, the changing profile of educators and the

rising importance of China, SAP schools have evolved with the times to better fulfil the mission of nurturing bilingual and bicultural students who are steeped in Chinese language and culture.

b. Independent Schools

The Independent Schools were introduced in 1988 to allow greater autonomy in curricular innovations, implementation of school programmes, administration, student admission and the setting of school fees. Scholarships, both from the MOE and the schools, are available to students who have done well and wish to join the Independent Schools.

c. Autonomous Schools

The Autonomous Schools were introduced in 1994 to enable schools to provide a wider range of innovative courses and enrichment programmes that enhance students' learning experience and develop their talents.

d. Specialised Schools

Specialised Schools such as NorthLight School and Assumption Pathway School offer customised programmes for students who are inclined towards hands-on and practical learning. Two Specialised Schools catering to Normal (Technical) course students are Crest Secondary School and Spectra Secondary School. Both schools adopt a whole-school approach in providing a customised learning environment to develop their students. The schools also work closely with the Institute of

Technical Education (ITE) and industry partners to elaborate vocational programmes and provide attachment opportunities for students.

e. Specialised Independent Schools

The Ministry of Education (MOE) seeks to cater to the learning needs of different groups of students. It has established schools specialised in the arts, music, sports, and science and mathematics to develop students' specific talents and abilities to an even higher level than what is normally offered.

The NUS High School of Mathematics and Science and the School of Science and Technology are specialised independent schools that cater to students with an aptitude for mathematics and scientific inquiry. The School of the Arts and the Singapore Sports School cater to students with flair for the arts and in sports, respectively.

4.3 Integrated Programme

After Primary 6, students can also choose the Integrated Programme (IP) which is a 6-year programme that caters to academically-strong students who prefer a more independent and less-structured learning style. It allows secondary school students to proceed to pre-university education without sitting for the GCE 'O' level examination. Given the strong academic aptitude of its students, the IP aims to stretch the potential of its students in non-academic aspects by engaging them in broader learning experiences beyond the academic curriculum. Students sit for the pre-university examinations at the end of 6 years.

4.4 Post-Secondary and Tertiary Education

a. Junior Colleges/Centralised Institute

Academically-inclined students who have taken their GCE O-level examination are eligible to study a 2-year course in Junior College, or a 3-year course in Centralised Institute. In the final year of the course, students sit for the Singapore-Cambridge General Certificate of Education Advanced Level (A-level) examination.

b. Polytechnics

Students who wish to pursue applied and practice-oriented training and have the requisite GCE O-level qualifications may choose from among five polytechnics in Singapore. These are: Nanyang Polytechnic, Ngee Ann Polytechnic, Republic Polytechnic, Singapore Polytechnic, and Temasek Polytechnic. Polytechnics provide quality practice-oriented training to equip students with relevant and specific skills and knowledge for the workplace to give Singapore a competitive edge as it moves into a knowledge-based economy. A polytechnic programme typically takes three years to complete, and students graduate with a Diploma. The polytechnics offer both full time and part time programmes. They have a long tradition of working in strong partnership with industry and educational institutions to enrich students' education through internships, collaborative projects, immersion programmes, study visits, community service,

competitions as well as opportunities for training overseas. These collaborations have grown robust over the years, adding value to their teaching and learning.

The polytechnics in Singapore offer a wide range of courses, including Engineering, Information Technology, Arts and Social Sciences, Design, Interactive and Digital Media, Chemical and Life Sciences, Business Management, Health Sciences, Applied Science, Engineering, Enterprise and Communication, Events and Hospitality, Info-communications, Sports, Health and Leisure, and Maritime and Technology for the Arts. They are equipped with state-of-the-art facilities ranging from broadcast, multimedia and animation studios to research laboratories, simulation technology as well as sports facilities. Their courses cater to students seeking a high quality polytechnic education and to working professionals seeking post-employment professional development programmes and services.

c. Institute of Technical Education

ITE was established as a post-secondary education institution in 1992 under the Ministry of Education. ITE is a principal provider of career and technical education and a key developer of national occupational skills certification and standards to enhance the competitiveness of Singapore's workforce. Under its “One ITE System, Three Colleges” model of education and governance, ITE comprises three colleges, namely the ITE College Central, ITE College East and ITE College West. ITE aims to create opportunities for students and

adult learners to acquire skills, knowledge and values for employability and lifelong learning.

d. Universities

Universities in Singapore are widely recognised around the world and place competitively in international university rankings. There are six publicly-funded universities offering full-time bachelor's degrees and graduate programmes in different disciplines. They are the National University of Singapore (NUS), the Nanyang Technological University (NTU), the Singapore Management University (SMU), the Singapore University of Technology and Design (SUTD), and the Singapore Institute of Technology (SIT) and the SIM University (UniSIM).

e. Arts Institutions (AIs)

Students with an aptitude and interest in the creative arts may also choose to pursue their post-secondary education at the AIs, namely, the LASALLE College of the Arts (LASALLE) and the Nanyang Academy of Fine Arts (NAFA). NAFA and LASALLE offer publicly-funded diploma and degree programmes in a range of creative arts disciplines, such as music, theatre, dance, interior design, animation and fashion design.

f. Special Education

Section 2 D) mentioned that students with SEN will be placed in the appropriate education setting that can best serve their needs. Those with mild SEN and have the cognitive abilities

and adequate adaptive skills to learn in large-group settings attend mainstream schools while those who require intensive specialized assistance in their education attend Special Education (SPED) schools that are run by Voluntary Welfare Organisations (VWOs).

Currently, there are 20 SPED²⁵ schools run by 13 VWOs which serve students from age 7 to about 18 or 21. The general mission of these SPED schools is to provide education and training for children with disabilities so as to enable them to function optimally, integrate into society, and be equipped with the knowledge, skills and confidence to lead fulfilling lives and become self-supporting and contributing members of society. The programmes are provided according to the type and level of disabilities and are customised to meet the needs of the students.

V. BASIC EDUCATION CURRICULUM

This section delineates the basic education curriculum for preschool, primary, secondary and junior colleges.

5.1 Preschool Curriculum

Pre-school education lays the foundation for life-long learning and influences the later development and learning of children aged 4 to 6. The MOE published Nurturing Early Learners – A Curriculum Framework for Kindergartens in

²⁵ For a list of SPED schools categorised by disability and age groups including other useful links on special education resources, etc. cf. Ministry of Education Singapore. (n.d. b)

Singapore (revised 2012) to guide pre-schools in designing and implementing a quality kindergarten curriculum for children. This framework contains learning goals that establish what children should be able to do at the end of their kindergarten education, to ensure that they have a smooth transition from pre-school to Primary One.

Table 7.1 shows the key stage outcomes learning areas, behaviours and attitudes to be developed in the pre-school curriculum.

Table 7.1 Pre-school Curriculum

Aims	Elaboration
Key stage outcomes	<ul style="list-style-type: none"> • Know what is right and what is wrong. • Be able to relate, willing to share and take turns with others. • Be curious and able to explore. • Be able to listen and speak with understanding. • Be comfortable and happy with themselves. • Have developed physical co-ordination, healthy habits, participate in and enjoy a variety of arts experiences. • Love their families, friends, teachers and school.
Learning areas for the holistic development of the child	<ul style="list-style-type: none"> • Aesthetics and creative expression. • Discovery of the world. • Language and literacy. • Motor skills development. • Numeracy. • Social and emotional development.

Nurture learning dispositions of positive behaviours and attitudes to learning	<ul style="list-style-type: none">• Perseverance.• Reflectiveness.• Appreciation.• Inventiveness.• Sense of wonder.• Curiosity.• Engagement.
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Source: Ministry of Education Singapore (2012)

5.2 Primary School Curriculum

The primary school curriculum offered by the MOE focuses on three main aspects of education – subject disciplines, knowledge skills, and character development.

Subject disciplines comprise subject areas such as languages, humanities and the arts, and mathematics and sciences, and are designed to give students good grounding in different fields of study.

Knowledge skills focus on developing students' thinking, process, and communication skills. Knowledge skills are taught through a variety of subjects and often through a project work approach. This enables students to use the full range of knowledge skills, work together, and clearly demonstrate what they have learnt.

Character development is facilitated through daily teacher-student interactions, as well as programmes in the non-academic curriculum. They focus on instilling sound values in students to take them through life as a responsible adult. The child will have many opportunities to develop skills for life and a

love for Singapore through Character and Citizenship Education, Social and Emotional Learning, National Education and Co-Curricular Activities.

English Language, Mathematics and Mother Tongue Language make up a significant part of the Singapore primary school curriculum. These subjects help students develop literacy and numeracy skills – skills that provide a strong foundation as children progress on their educational journey. Table 7.2 shows the subjects taught in Primary School.

Students also take up subjects like Art, Character and Citizenship Education, Music, Social Studies and Physical Education. Science is introduced from Primary 3 onwards. These subjects expose students to different areas of study at an early stage to allow them to discover their interests and talents, equip them holistically with a range of important knowledge and skills, and also provide teachable moments to develop in them the core values that define a person's character and their sense of responsibility to society.

After the initial foundation stage for all students (Primary 1 to Primary 4), English Language, Mathematics, Mother Tongue Language and Science are offered to students at either the foundation or standard level at Primary 5 to Primary 6. Students who do well in their Mother Tongue Language may also be offered Higher Mother Tongue Language. This means that teachers take into account the ability of their students in designing their lessons and assessment tasks. Students thus learn at a pace that suits them.

Table 7.2 Subjects taught in Primary School

<i>Period</i>	<i>Subjects</i>
Primary 1 – 6	<ul style="list-style-type: none"> • English Language. • Mathematics. • Mother Tongue Language. • Arts. • Character and Citizenship Education. • Music. • Social Studies. • Physical Education. • Science (from Primary 3 onwards).
Primary 5 – 6	<ul style="list-style-type: none"> • Higher Mother Tongue Language. <i>(Additional optional subject for those who do well in their Mother Tongue).</i> • English (Foundation), Mathematics (Foundation), Mother Tongue (Foundation), Science (Foundation). <i>(These subjects are offered at the foundation level for academically weaker students).</i>

Source: Ministry of Education (2015)

The Gifted Education Programme (GEP) caters to students that are intellectually gifted. These students are placed in centrally-run GEP classes in Primary 4 to 6. The GEP provides a wider range of innovative courses and enrichment programmes that enhance students’ learning experiences and develop their talents.

As part of a range of efforts to enhance the development of 21st century competencies in students, the MOE has strengthened the quality of Physical Education and Art and Music education. These subjects contribute to the students’ holistic education through enabling students to develop physical robustness,

enhance their creative and expressive capacities, and shape their personal, cultural and social identities.

At the end of Primary 6, all students are assessed on their academic abilities via the Primary School Leaving Examination (PSLE), and placed in a secondary school track or stream, such as Express, Normal (Academic) or Normal (Technical), that suits their academic learning pace and aptitude. Other than using PSLE results, students can also seek admission to a secondary school based on their achievements and talents across a diverse range of areas (including arts and sports) through the Direct School Admission exercise.

5.3 Secondary School Curriculum

Secondary education is divided into Lower Secondary (Secondary 1 & 2) and Upper Secondary (Secondary 3, 4 and 5). The secondary school curriculum encompasses:

Life skills to ensure that students acquire sound values and skills to take them through life as responsible adults and active citizens. It comprises the non-academic curriculum.

Knowledge skills seek to develop students' thinking, process and communication skills. This will enable students to analyse and use information, and be able to express their thoughts and ideas clearly and effectively. It comprises the skills-based subjects.

Content-based subject disciplines that is, the Languages, Humanities and the Arts, and Mathematics and Sciences. It ensures that students have a good grounding in content knowledge across different areas of study.

The MOE also offers Language, Art and Music Elective Programmes, recognising that every child is unique, with different aptitudes, capabilities and talents. Students with a passion for language, the arts and music can select from a range of elective programmes that focus on a specific area of interest. They can also choose to take up advanced elective modules in applied areas such as Information Technology, Business, and Engineering offered in some secondary schools.

Three core courses are offered at the secondary school level. As discussed above, depending on a child's PSLE results, he/she will be placed in the Express Course (including the Integrated Programme in some schools), the Normal (Academic) Course or the Normal (Technical) Course. Academically-strong students can apply for the Integrated Programme.

In the Express course, students are offered 6 to 9 subjects in the GCE O- Level examination. English Language, Mother Tongue Language, Mathematics, a Science subject and Combined Humanities are compulsory at the upper secondary levels (see Table 7.3A).

Table 7.3A Express Course Subjects

Subjects
<ul style="list-style-type: none">• Languages (English, Mother Tongue/Higher Mother Tongue/Mother Tongue 'B' at a lower level and an optional 3rd Language).• Humanities and the Arts:<ul style="list-style-type: none">▪ Lower secondary subjects – Geography, History, Literature in English, Visual Arts, Music.▪ Upper secondary subjects – Combined Humanities.▪ Upper secondary electives – Geography, History, Literature in English or Chinese or Malay or Tamil, Art & Design, Music, Higher Art, Higher Music, Drama, Economics, Business Studies, Introduction to Enterprise Development, Media Studies in English or Chinese.• Mathematics and Science:<ul style="list-style-type: none">▪ Lower secondary subjects – Mathematics, Science, Design & Technology, Food & Consumer Education.▪ Upper secondary subjects – Mathematics, a Science subject.▪ Upper secondary electives – Additional Mathematics, Biology, Chemistry, Physics, Combined Science options, Design & Technology, Food & Nutrition, Principles of Accounts, O-level Physical Education, Computer Studies, Biotechnology, Design Studies, Fundamentals of Electronics.• Character and Citizenship Education.• Physical Education.

Source: Ministry of Education Singapore (n.d. c)

In the Normal (Academic) course, students are offered 5 to 8 subjects in the GCE N-Level examination. English Language, Mother Tongue Language, Mathematics, a Science subject and Combined Humanities are compulsory at the upper secondary levels (see Table 7.3B).

Table 7.3B Normal (Academic) Course Subjects

Subjects
<ul style="list-style-type: none">• Languages (English, Mother Tongue/Higher Mother Tongue/Mother Tongue 'B' at a lower level and an optional 3rd Language).• Humanities and the Arts:<ul style="list-style-type: none">▪ Lower secondary subjects – Geography, History, Literature in English, Visual Arts, Music.▪ Upper secondary subjects – Combined Humanities.▪ Upper secondary electives – Geography, History, Literature in English or Chinese, Art & Design, Music, Drama, Economics, Business Studies, Introduction to Enterprise Development, Media Studies in English or Chinese, Elements of Business Skills.• Mathematics and Science:<ul style="list-style-type: none">▪ Lower secondary subjects – Mathematics, Science, Design & Technology, Food & Consumer Education.▪ Upper secondary subjects – Mathematics, a Science subject.▪ Upper secondary electives – Additional Mathematics, Combined Science options, Design & Technology, Food & Nutrition, Principles of Accounts, Physical Education, Computer Applications, Fundamentals of Electronics.• Character and Citizenship Education.• Physical Education.

Source: Ministry of Education Singapore (n.d. d)

In the Normal (Technical) course, students are offered 5 to 7 subjects in the GCE N-Level examination. This curriculum prepares them for a technical-vocational education at the Institute of Technical Education (ITE). The curriculum is geared towards strengthening

students' proficiency in English and Mathematics. Students take English Language, Mathematics, Basic Mother Tongue and Computer Applications as compulsory subjects (see Table 7.3C).

Table 7.3C Normal (Technical) Course Subjects

Subjects
<ul style="list-style-type: none">• Languages (English, Basic Mother Tongue).• Humanities and the Arts:<ul style="list-style-type: none">▪ Lower secondary subjects – Social Studies, Visual Arts, Music.▪ Upper secondary electives – Art & Design, Elements of Business Skills, Music Syllabus T, Retail Operations.• Mathematics and Science:<ul style="list-style-type: none">▪ Lower secondary subjects – Mathematics, Science, Computer Applications, Design & Technology, Food & Consumer Education.▪ Upper secondary subjects – Mathematics, Computer Applications.▪ Upper secondary electives – Science, Design Studies, Food Studies, Computer & Networking, Electrical Technology & Applications, Mobile Robotics.• Character and Citizenship Education.• Physical Education.

Source: Ministry of Education Singapore (n.d. d)

Lastly, the Integrated Programme (IP) is a 6-year programme that allows university-bound students to skip the GCE O-Level Examination and proceed directly to pre-university education. It provides an integrated secondary and junior college education for students who are academically strong and prefer a more independent and less structured learning style. Given the

strong academic aptitude of its students, the IP aims to stretch their potential in non-academic aspects by engaging them in broader learning experiences beyond the academic curriculum. These schools enjoy greater autonomy in curricular innovations, implementation of school programmes, administration, student admissions and the setting of fee structures.

The IP is offered by 18 schools. These schools optimise the time freed up from preparing for the GCE ‘O’ Levels to stretch students and provide greater breadth in the academic and non-academic curriculum. IP Schools are required to take either the GCE Advanced (‘A’) Level Examination or an International Baccalaureate in their 6th year of study.

5.4 Pre-University Education Curriculum

The Pre-University curriculum is offered at Junior Colleges (JC) and Centralised Institute (CI). JC students complete the curriculum based on the GCE A-Level Examination in two years while CI students take three years to complete the curriculum. Subjects are designed and pitched at three levels of study, namely, H1, H2 and H3. Students may choose a combination of subjects. The curriculum time of H1 is half that of H2. H2 is pitched at a higher level than H1, and H3 consists of subjects with diverse learning opportunities for in-depth study (e.g. advanced content, research paper, and university module). Students who are taking H3 subjects must be offered the same subjects at H2 level.

The total curriculum time of the A-Level curriculum is between 26-29 hours per week. The three level structure of A-Level curriculum provides the student with more breadth and more option, and more focus on thinking and communication skills. In addition to the three-tier curriculum structure, all students also undertake Project Work²⁶, and study at least one subject outside their area of specialisation, that is, a contrasting subject.

The general combination of subjects is:

- Three H2 content-based subjects.
- One H1 content-based subject.
- H1 Mother Tongue Language (MT).
- H1 General Paper (GP).
- H1 Project Work (PW).

Students are also offered Knowledge and Inquiry²⁷ (KI) in place of the General Paper, or offered Mother Tongue Language & Literature at H2 level. Students can refer to the different subject

²⁶Project Work is a learning experience which aims to provide students with the opportunity to synthesise knowledge from various areas of learning, and critically and creatively apply it to real life situations. This process aims to enhance students' knowledge and enable them to acquire skills like collaboration, communication and independent learning that prepare students for lifelong learning and challenges ahead.

²⁷ The objective of Knowledge and Inquiry (KI) is to provide students with a better understanding of the nature of knowledge, how knowledge is constructed, and to apply this understanding to the different areas of knowledge they may be engaged in. Due to the rigor of the content, students may replace General Paper with KI.

combinations that JCs or CIs offer in making a decision on the subjects that they will take up. The subjects offered are shown in Table 7.4.

Table 7.4 Subjects offered in Junior Colleges/Centralised Institutes

Disciplines	Subjects
Knowledge Skills	General Paper, Project Work, Knowledge & Inquiry
Languages	Mother Tongue (Chinese, Malay, Tamil), Mother Tongue (Chinese, Malay, Tamil) 'B', French, German, Japanese
Disciplines	Subjects
Humanities & the Arts	Art, Economics, Geography, History, Literature in English, China Studies in English, China Studies in Chinese, English Language and Linguistics, General Studies in Chinese, Translation (Chinese), Chinese Language & Literature, Malay Language & Literature, Tamil Language & Literature, Music, Theatre Studies & Drama, Management of Business, French, German, Japanese.
Mathematics & Sciences	Biology, Chemistry, Physics, Mathematics, Computing, Principles of Accounting.
Other subjects	Physical Education. Other H3 Programmes offered by the MOE in collaboration with Partners such as NUS, NTU & A*STAR collaborations. There are other H3 Programmes offered by MOE Partners such as NUS, NTU & A*STAR.

Note: The subjects listed can belong to one or multiple levels (H1, H2, and H3) of study.

Source: Ministry of Education Singapore (n.d. e)

In the spirit of holistic education, students have opportunities in the non-academic curriculum to engage in activities that will help them cultivate qualities such as initiative and leadership skills, as well as strength of character. A student's involvement in Co-Curricular Activities (CCA), the Values in Action (VIA) programmes and other out-of-curriculum pursuits will be described in a single 'A'-Level certificate, known as the School Graduation Certificate, along with their academic grades.

VI. MAJOR EDUCATION FRAMEWORKS AND POLICIES

Singapore education is anchored by the MOE's framework for the Twenty-First Century Competencies and Student Outcomes which encapsulates values and competencies identified as being particularly important for the development of every child. Launched in 2010, this framework incorporates the following values and competencies which form an integral part of the curriculum:

- Core values(respect, responsibility, resilience, integrity, care, harmony)
- Social and emotional competencies(self-awareness, self-management, social awareness, relationship management, responsible decision-making)
- Emerging Twenty-First century competencies(critical and inventive thinking, communication, collaboration)

and information skills, civic literacy, global awareness and cross-cultural skills)

The following sub-sections describe key policies which have shaped the Singapore education system to what it is today.

6.1 Bilingual Policy

Adopted in 1966, bilingualism is a fundamental aspect of the education system. While English is the medium of instruction in schools, students also learn their respective Mother Tongue languages - Chinese, Malay and Tamil (and others). This policy ensures that students are able to engage fellow Singaporeans of different races, access the global economy, and at the same time remain connected to their cultural roots.

6.2 Character and Citizenship Education

Character and Citizenship Education (CCE) has always been at the heart of Singapore's education system. Through CCE, students learn to be responsible to family and community; and understand their roles in shaping the future of our nation. The emerging trends and global developments that impact society, such as changing societal structure, globalisation and technological advancements were taken into consideration in the development of the CCE curriculum.

The goal of CCE is to inculcate values and build competencies in students to develop them into good individuals and useful citizens. It emphasises the interconnectedness of the core values, social and emotional competencies and civic literacy,

global awareness and cross-cultural skills that are critical for character and citizenship development of students.

One key feature of CCE is Values in Action (VIA). VIA are learning experiences that support students' development as socially responsible citizens who contribute meaningfully to the community, through the learning and application of values, knowledge and skills. VIA fosters student ownership over how they contribute to the community. As part of VIA, students reflect on their experience, the values they have put into practice, and how they can continue to contribute meaningfully. Table 7.5 illustrates the components of Character and Citizenship Education.

6.3 Co-Curricular Activities (CCAs)

CCAs are an integral part of students' holistic education. There is a diverse range of Co-Curricular Activities (CCA) offered in each school that provides a natural platform for students to discover their interests and talents while developing values and competencies that will prepare them for a rapidly changing world. CCA also promotes friendships among students from diverse backgrounds as they learn, play and grow together. Participation in CCA fosters social integration and deepens students' sense of belonging, commitment and sense of responsibility to school, community and nation.

Table 7.5 Components of Character and Citizenship Education

Components in CCE	What it refers to at the primary school level	What it refers to at the secondary school level
CCE Lessons	Teaching of values, knowledge and skills for CCE in Mother Tongue Languages.	Teaching of values, knowledge and skills for Character & Citizenship.
CCE Guidance Modules	Form Teacher Guidance Period (FGTP) - Teaching of social and emotional competencies (including Cyber Wellness and Education and Career Guidance and) and building teacher-student relationship. Sexuality Education.	<ul style="list-style-type: none"> • Education and Career Guidance. • Sexuality Education. • Cyber Wellness.
School-based CCE	Could include assembly programmes linked to CCE and lessons on school values.	Could include assembly programmes linked to CCE and lessons on school values.

Source: Ministry of Education, Singapore (2014a, 2014b)

CCAs are not compulsory for primary school students, but they are encouraged to join them based on their interests. On the other hand, every secondary school student takes part in one CCA taken from the following options: Clubs and Societies, Physical Sports, Uniformed Groups, Visual and Performing Arts Group.

Students who are keen on an activity not offered in school may seek the school's approval to start their own activities. This gives students the opportunity to pursue their specific interests or ideas, and expand the range of activities available in schools.

6.4 21st Century Competencies

In 2010, motivated by the key driving forces of the future that include globalisation, changing demographics and technological advancements, the MOE launched the Twenty-First Century Competencies and Student Outcomes Framework to help students thrive in a fast-changing world. The MOE has identified competencies that have become increasingly important in the Twenty-First Century.

The framework for Twenty-First Century Competencies and Student Outcomes aspires to develop in every student:

- A confident person who has a strong sense of right and wrong, is adaptable and resilient, knows himself, is discerning in judgement, thinks independently and critically, and communicates effectively;

- A self-directed learner who takes responsibility for his own learning, who questions, reflects and perseveres in the pursuit of learning;
- An active contributor who is able to work effectively in teams, exercise initiative, takes calculated risks, is innovative and strives for excellence;
- A concerned citizen who is rooted in Singapore, has a strong civic consciousness, is informed, and takes an active role in bettering the lives of others around him or her.

6.5 Teach Less Learn More

The Teach Less Learn More (TLLM) movement was launched in 2005. TLLM marked a new milestone in learning and teaching in Singapore. The movement was a call to schools to focus on teaching better, to engage learners and prepare them for life, rather than teaching more, for tests and examinations. TLLM aims to touch the hearts and engage the minds of our learners, to prepare them for life. It reaches into the core of education—why we teach, what we teach and how we teach. The two key thrusts of TLLM are: (1) giving teachers and school leaders more space and support, so that they can focus on improving the quality of interaction with their students, both in the classroom and beyond; and (2) to provide more flexibility and choice to the learner. These two thrusts are supported by the ‘top-down support for round-up initiative’ approach. The approach outlines the tripartite relationship among learners, teachers and school leaders as well as the MOE’s support for their efforts.

- To support the TLLM, new initiatives have been put in place to support teachers and school leaders;
- To provide greater space for school-based flexibility in the curriculum by reducing content;
- To give schools more ownership and encourage greater emphasis on character development;
- To provide an average of two hours per week for each teacher for professional planning and collaboration;
- To enhance professional development and mentorship of teachers;
- To strengthen development of school leaders by establishing an Education Leadership Development Centre.

VII. SINGAPORE EDUCATION IN THE 21ST CENTURY

Education in Singapore has been moving towards a system that is flexible and diverse, providing students with greater choices to meet their different interests and ways of learning. The Singapore education system seeks to nurture individuals who ask questions and look for answers, and who are willing to think in new ways, solve new problems, and create opportunities for the future. The aim is to help individuals build a set of sound values so that they have the strength of character and resilience to work hard to pursue their dreams and to deal with life's inevitable setbacks. While there is an emphasis on results and excellence in

academic achievements, there is also a focus on providing a broad-based education that ensures all-rounded or holistic development of the individual, in and out of the classroom.

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ANNEX: KEY INDICATORS AND STATISTICS

Table 7A.1 Literacy Rate, Educational Attainment & Mean Years of Schooling

% Literacy Rate in 2013 (among residents aged 15 years & over).	Males	98.5
	Females	94.6
	Total	96.5
% with Secondary or higher qualifications in 2013 (among residents aged 25 years & over).	Males	71.8
	Females	66.0
	Total	68.8
Mean years of schooling in 2013.	Males	11.0
	Females	10.0
	Total	10.5

Source: Ministry of Education Singapore. (2014c); Department of Statistics Singapore. (2015).

Table 7A.2 Number of Schools by Level and by Type

	2008	2009	2010	2011	2012	2013
Primary	174	172	173	174	175	182
Secondary	154	154	155	154	154	154
Pre-University	14	13	13	13	13	14
Polytechnic	5	5	5	5	5	5

Source: Ministry of Education Singapore. (2014c); Department of Statistics Singapore. (2015).

Table 7A.3 Number of Teachers by Level

	2008	2009	2010	2011	2012	2013
Primary	13,023	13,864	13,693	13,903	14,309	14,788
Secondary	12,143	13,214	13,332	14,043	14,574	14,993
Pre-University	2,728	2,797	2,837	2,869	2,908	2,998

Source: Ministry of Education Singapore. (2014c); Department of Statistics Singapore. (2015).

Table 7A.4 Enrolment by Level and School Type

	2008	2009	2010	2011	2012	2013
Primary	279,272	272,254	263,906	258,293	252,735	244,045
Secondary	217,081	217,230	214,388	207,974	202,520	197,165
Pre-University	32,579	32,110	32,420	32,296	32,087	32,165
Polytechnics	71,137	74,566	76,989	78,443	79,003	79,970
Universities	50,904	53,579	55,178	56,349	57,989	59,748

Source: Ministry of Education Singapore. (2014c); Department of Statistics Singapore. (2015).

Table 7A.5 Government Recurrent Expenditure on Education per student (SGD)

	2008	2009	2010	2011	2012	2013
Primary	5,397	5,537	6,624	6,712	7,396	8,669
Secondary	7,551	7,736	9,008	9,022	9,940	11,606
Junior College/ Centralised Institute	11,094	10,772	12,331	11,830	12,806	14,517
Institute of Technical Education	11,106	10,129	11,839	11,898	11,837	12,227
Polytechnic	13,479	12,598	14,552	14,687	14,668	15,120
University	19,664	18,868	20,630	20,505	20,816	21,839

Source: Ministry of Education Singapore. (2014c); Department of Statistics Singapore. (2015).

Table 7A.6 Pass Rate for PSLE, and GCE 'N'- or 'O'- Level Examinations in %

	2008	2009	2010	2011	2012	2013
Percentage of P1 cohort who sat for PSLE and passed.	97.9	98.1	97.9	97.9	98.1	97.9
GCE 'N'- or 'O'- Level Examinations and had at least 5 'N'- Level passes or 3 'O'- Level passes.	86.9	87.5	87.8	89.1	88.6	89.6

Note: The Primary School Leaving Examination is the first notable examination that all students sit for. The GCE 'N' and 'O' Levels is the next higher tiered examinations.

Source: Ministry of Education Singapore. (2014c); Department of Statistics Singapore. (2015).

Table 7A.7 Ratio of Students to Teaching Staff in Primary Schools and Secondary Schools

	2008	2009	2010	2011	2012	2013
Primary Schools	21.4	19.6	19.3	18.6	17.7	16.5
Secondary Schools	17.9	16.4	16.1	14.8	13.9	13.2

Source: Ministry of Education Singapore. (2014a); Department of Statistics Singapore. (2015).

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Kingdom of Thailand

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I. OVERVIEW

Thailand is among the first countries in the Southeast Asian region that averted the household learning culture into the western schooling system. In 1884, King Chulalongkorn of Siam (1853-1910) established a public schooling system for commoners in lieu of the nationwide emancipation and the feudalistic time-serving of all males. Children were encouraged to enroll in neighboring schools that were mostly run by temples or private owners. These schools gradually improved their quality by employing professional teachers and introducing a standardized curriculum to enhance literacy and numeracy skills, thereby serving the newly- founded bureaucracy system (Fine Art Department, 1984). Three decades later, volunteerism in education ended in 1921 when King Vajiravudh stipulated the Primary Education Act that commanded all students at the age of seven to enroll in any type of school with the financial support from the government. It is believed that the compulsory education from that act expanded the number of educated minds and heralded the end of absolute monarchy and the dawn of democracy in Thailand in 1932 (Mulsilp, 1998).

Education in Thailand has developed significantly over the past hundred years. In the academic year 2556 (2013), Thailand was praised for its strong commitment to the UNESCO Education for All (EFA) initiative over the past two decades. The gross enrolment ratio at the pre primary level jumped to 118.52 percent, 95.38 percent in elementary, 93.60 percent in lower secondary, and 78.40 percent in upper secondary levels respectively.

The remaining students are in schools administered by various agencies affiliated with the Local Government Department, Ministry of the Interior and Local Government Department, the Border Patrol Police, and Bangkok Metropolitan Authority. The Ministry of Education (MOE) dominates the majority of schooling services, being responsible for the management and taking charge of 57.28 per cent of all elementary schools, and 89.38, 91.49, and 95.57 per cent of primary, lower and upper secondary schools.

In terms of the literacy rate of the population aged 15 years and above, Thailand successfully reached 96.67 percent in 2015, which is well beyond the world average at 83.7 percent. Nonetheless, Thailand is still lower than the average benchmark, 99.0 percent, of Eastern Europe and North America.

Under the present education system, various types of methods of learning are offered to Thai learners regardless of their economic, social, and cultural backgrounds. Education approaches are classified as formal, non-formal, and informal. All types of education can be provided by educational institutions as well as learning centers organized by individuals, families, communities, community or private groups, local administration organisations, professional bodies, religious institutions, welfare institutes and other social institutions. In terms of service providers, a number of agencies inside and outside the Ministry of Education are responsible for education with a strong commitment on resource allocation in the past decade.

II. THE EDUCATION SYSTEM

2.1 Type of Education

2.1.1 Formal Education

Formal education specifies the aims, methods, curricula, duration, assessment, and evaluation necessary for its completion. Through both public and private bodies, formal education services are mainly provided to those within the schooling system, at both basic and higher education levels, and in both general and vocational education systems. Formal education services in Thailand are provided in multiple formats for several target groups:

- Mainstream education, in both general and vocational streams, provided for general students in regular schools;
- Basic education for children with special educational needs including special education for gifted and talented students; special education for students with disabilities provided by special schools, special centers and inclusive schools; and welfare education for disadvantaged students provided by Welfare Schools and Border Patrol Police Schools;
- Education for ecclesiastics and educational provision by several religious institutions;

- Specialized education provided by specific agencies other than the Ministry of Education; and
- International education provided by using languages other than those specified in the 2008 Curriculum for Basic Education.

2.1.2 Non-Formal Education

Non-formal education is provided by both public and private bodies. Under the supervision of the Ministry of Education, the Office of Non-formal and Informal Education is the main agency in charge of non-formal and informal education. This Office offers services to various target groups through traditional methods and through e-Book, e-Library and e-Learning, offering three main types of non-formal technical and vocational training programs, such as:

- *Non-Formal Program for Certificate in Vocational Education:* Non-formal education activities leading to the Certificate in Vocational Education are provided through distance learning to lower secondary school graduates, both the unemployed and those working in public organisations and private enterprises. This program requires at least three years of study, except when there is a transfer of academic performance or experience;
- *Short-Course Vocational Training program:* short course vocational training is provided in many areas by

both public and private institutions and agencies. These courses range from as short as three hours to as long as one year, and are designed to serve the needs for self-employment and to articulate with formal programs in order to serve lifelong learning.

- *Interest Group Program:* Teaching and learning activities are organized according to the individual needs and interests of the general public. Those having the same interests can form a group of five to 15 persons and receive training of up to 30 hours. Generally, the following non-formal educational services are provided by the Office of the Non-formal and Informal Education: Provision of Non-Formal Education for Pre-School Children; Provision of Fundamental Education for Literacy; General Non-Formal Education; and the Non-Formal Technical and Vocational Education and Training Program. In addition, several agencies responsible for education services, welfare and public services also provide vocational training activities concerned with quality of life improvement.

The Bureau of Special Education Administration, under the supervision of the Office of the Basic Education Commission, the Ministry of Education, is responsible for 76 Special Centers in 76 provinces. The Special Centers render services at the Centers, inclusive Schools, at home, and in hospitals. They also organize meetings/seminars to provide knowledge for parents of

the disabled and relevant agencies and conduct research and formulate the curriculum for short-term training for the disabled.

As mentioned above, non-formal education is also specially arranged for children with disabilities. Apart from the Ministry, special education for the disabled students is provided by several other agencies, including the Department of Social Development and Welfare under the supervision of the Ministry of Social Development and Human Security, as well as by some demonstration schools, municipal schools and private foundations. Moreover, some hospitals also organize classes for children with disabilities resulting from chronic conditions.

2.1.3 Informal Education

Informal education enables learners to learn by themselves according to their interests, potential, readiness and the opportunities available from individuals, society, environment, media or other sources of knowledge as follows:

- Informal education programs provided by libraries, museums and science/technology centers, etc. as well as by mass media (radio, television, newspapers and magazines, etc)
- Informal education programs of community learning networks i.e. community learning centers, village reading centers, sub-district health offices, sub-district agricultural offices, as well as natural learning sources in each community.

Pedagogical philosophy in Thailand has been developed from several sources: a) local wisdom, which includes culture and the body of knowledge in each community; b) Local media, which plays an important role in passing on knowledge and social values through several kinds of performance; and c) families, which are learning sources from birth for all people; and networking through cooperative activities.

Several ministries are involved in providing informal education to promote lifelong learning, through information dissemination, educational activities or academic and professional programs for different target groups relating to the responsibilities of each organisation. New lifelong learning sources have been established, while existing ones have been improved and developed in accordance with Section 25 of the National Education Act, which requires the State to promote the running and establishment, in sufficient number and with efficient functioning, of all types of lifelong learning sources.

According to the Bureau of Educational Standards and Learning Development, Office of the Education Council, there are approximately 3,200 learning sources in Thailand, comprising public libraries (864), museums (293), art galleries (21), zoological gardens (45), public parks (1,260), botanical gardens (70), science and technology parks, sports and recreation centers (91), national parks (95), and more than 450 other sources of learning. Efforts have been made to enable individuals to learn at all times and in all places through several sources.

Included among the new lifelong learning sources are:

- The Office of Knowledge Management and Development, a public organisation under the aegis of the Office of the Prime Minister. At present, it comprises six separate entities namely 1) Institute for Gifted and Innovative Learning (IGIL); 2) Thailand Knowledge Park; 3) National Discovery Museum Institute; 4) Thailand Creative and Design Centre; 5) Thailand Centre of Excellence for Life Science; and 6) Centre for the Promotion of National Strength of Morals, Ethics, and Values: This centre has been established to promote morals and ethics through the interaction of public and private sectors throughout the country.

- The National Science Museum Organisation, a state enterprise under the supervision of the Ministry of Science and Technology, operates the four following museums: 1) The Science Museum; 2) The Information Technology and Telecommunications Museum; 3) The Natural History Museum; and 4) The Environment and Ecology Museum.

- The Bangkok Children's Discovery Museum, established by the Bangkok Metropolitan Administration in 2001 to help children develop their ideas and gain experience in adapting to an urban environment and the country's economic and social development.

Several new public libraries have also been established, and services in all libraries have been improved. For example, free internet service is provided in all Chalermrachakumari libraries and other public libraries while many higher education institutions are also developing e-libraries and living libraries.

2.2 Levels of Education

2.2.1 Basic Education

In accordance with the National Education Act and additional government policies, 12 years of free basic education is made available to students throughout the country. Before this level, pre-primary education is provided to children who are 3- 5 years of age by local authorities and some of the kindergartens in primary schools. The current compulsory education requirement covers six years of primary and three years of lower secondary education. Children are expected to be enrolled in basic education institutions from age 6 through the age of 17, except for those who have already completed Grade 9. Basic education is provided before higher education by the following institutions:

- *Early childhood development institutions* i.e. childcare centers, child development centers, initial care centers for disabled children or those with special needs and early childhood development centers operated by religious institutions or by other agencies. - Schools such as state schools, private schools, and those under the jurisdiction of Buddhist or other religious institutions; and

- *Community Learning Centers (CLC)*, i.e. those organized by non-formal educational agencies, individuals, families, communities, community organisations, local administration organisations, private organisations, professional bodies, religious institutions, enterprises, hospitals, medical institutions, welfare institutes and other social institutions.

2.2.2 Higher Education

Higher education at the diploma, associate degree, and degree levels is provided by universities, educational institutions, colleges, community colleges, and other types of institutions. Associate Degree or Diploma Level Higher Education requires two years of study and is offered by Rajabhat Universities, the Rajamangala University of Technology, state and private vocational colleges, as well as colleges of physical education, dramatic and fine arts. The majority of courses offered are related to vocational and teacher education. Degree Level Programs leading to a degree require two years of study beyond the diploma level, and four to six years of study for those who completed upper secondary education or the equivalent prior to entering the program to obtain the following qualifications:

- The first professional qualification is a baccalaureate, normally attained after four years of study. Five years of study are required in the fields of architecture, painting, sculpture, graphic arts, and pharmacy, and six years for medicine, dentistry, and veterinary science. In

some of these fields, additional study is required to allow for a practicum before professional qualifications are awarded.

- Advanced study of at least one but generally two years, combined with a thesis, leads to the award of a master's degree.
- A doctorate, requiring an additional three years of study following the master's degree, is awarded in some fields, while an advanced diploma or certificate, designed for students already possessing a degree or professional qualification, may be obtained after one or two years of course work.

Since the establishment in 1917 of Chulalongkorn University, Thailand's first tertiary institution, the number of higher education institutions has increased substantially, particularly within the past decade. There are currently 151 higher education institutions under the supervision of the Office of the Higher Education Commission and 94 specialized institutions under the charge of other ministries and agencies.

In addition, 44 community colleges were set up in accord with a government policy prescribed in 2001. The mentioned policy supported the establishment of community colleges in provinces where other opportunities for higher education were not available, to offer the education and training necessary for economic and social development in those communities. Community colleges offer 2-year associate degree programs

suitable for professional development in areas relevant to local economic and social development needs. Several curricula are currently offered in associate degree programs from community colleges.

2.3 Organisational Structure and Providers of Educational Service

To carry out the tasks in accordance with the 1999 National Education Act and the 2002 Bureaucratic Reform Act, the most important reform of educational administration and management has been the merging of three agencies, consisting of the Ministry of Education, the Ministry of University Affairs and the Office of the National Education Commission, into a single Ministry of Education. The Ministry of Education is responsible for promoting and overseeing all levels and types of education under the administration of the state as follows:

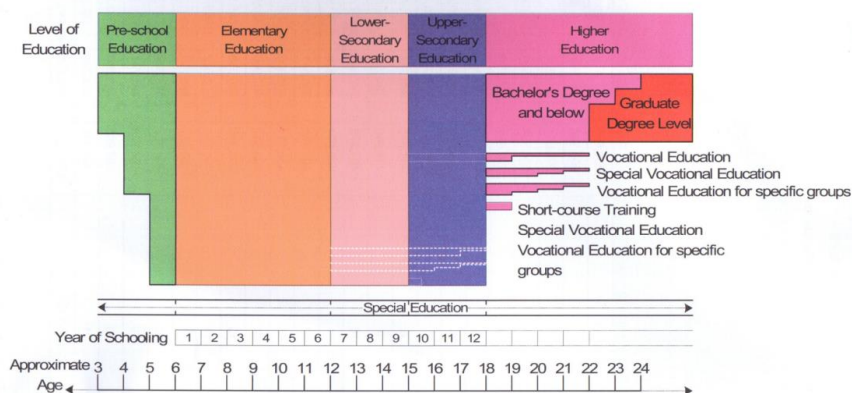


Figure 8.1 The Schooling Chart

2.3.1 Ministry of Education

The *Office of the Permanent Secretary (OPS)*: The Permanent Secretary serves as the housekeeping office of the Minister and Deputy Minister of Education that supervises the education program operation, resource planning and budgeting, and special assignments including private education, non- formal education, and teacher council, as well as teacher welfare.

The *Office of the Education Council (OEC)*: Under Section 14 of the Administrative Organisation of the Ministry of Education Act 2003 stipulates the following functions of the Education Council:

- Formulating the National Scheme of Education which integrates relevant aspects of religion, art, culture and sport into all levels of education;
- Formulating educational policies, plans and standards for implementation as prescribed in the National Scheme of Education
- Proposing policies and plans for mobilisation of resources for education;
- Evaluating educational provision in accord with requirements of the Scheme; and
- Providing views or advice on legal matters as well as educational laws and ministerial rules and regulations. Furthermore, the Education Council is required to provide pertinent views or advice to the Minister of Education or the Council of Ministers; it is also

authorized to perform other duties as provided by the law or as assigned by the Minister of Education.

The *Office of the Basic Education Commission (OBEC)*: At the provincial level, the Basic Education Commission supervises education service areas to serve as the ministerial linkage in the basic education between the nationwide central authority and school operation. In 2015, there were 183 Primary Level Service Areas and 42 Secondary Level Service Areas to take care of 31,424 schools;

The *Office of the Vocational Education Commission (OVEC)*: The Vocational Education Commission supervises more than 400 vocational institutions ranging from technical, commercial, and agricultural skill development and training; and

The *Office of the Higher Education Commission (OHEC)*: As the administrative for higher education, the Higher Education Commission approves the degree program proposed by universities and its accreditation. The Higher Education Commission also works together closely with universities to allocate funding in terms of categorical grants in capital investment, faculty professional development, and international networking at the regional and at the global level, One of the main functions in recent years can be observed from its function as the regulator, as well as coordinators, on developing the Thai Curriculum Framework (TQF) to ensure that the skill development at universities can be compared across the institutions.

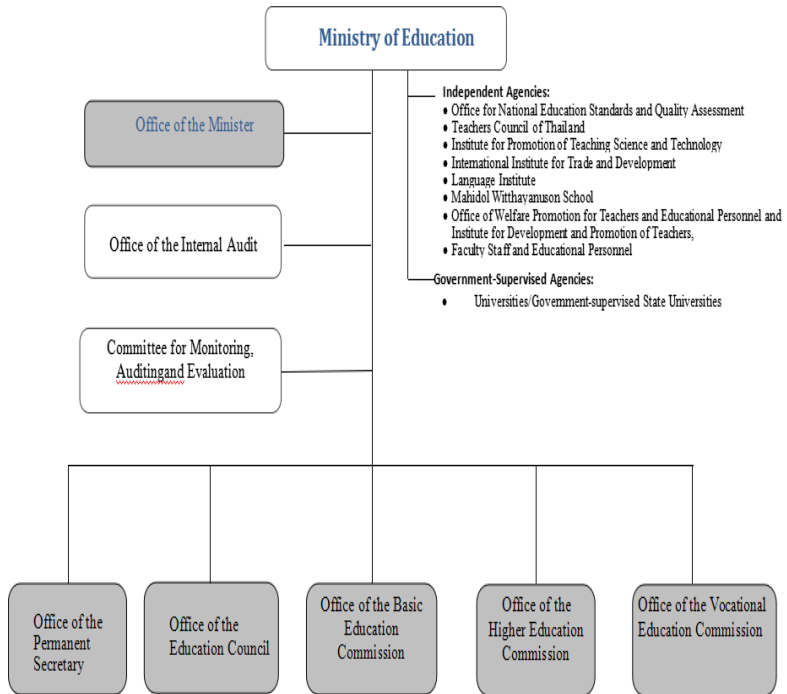


Figure 8.2 Organization of the Ministry of Education at Central Level

2.3.2 Local Administration Organisation

In accordance with the National Education Act, local administration organisations can provide education services at any or all levels commensurate with their readiness, suitability, and the requirements of the local area. The Ministry of Education prescribes criteria and procedures for assessing readiness to provide education services, and assists in enhancing their capability in line with the policies and required standards.

Additionally, the Ministry advises on the budgetary allocations provided by local administration organisations. The local administration organisations in Thailand can be divided into four main types. As of 30 September 2014, there were 3,057 local administration organisations. In decentralizing authority for educational provision from the Ministry of Education to local administrative organisations, some responsibilities not requiring assessment have already been transferred. These include tasks related to the supervision of sub-district libraries and pre-primary child development centers as well as the procurement of educational materials and supplementary food items, such as milk.

2.3.3 Private Sector

Educational Provision by Families: Family-based early childhood development plays an essential role in education. Around 98 percent of the children aged 0-3 and 18 percent of the children aged 3-5 are cared for by families. Some families preferred to provide education for their own children even before the enactment of the 1999 National Education Act empowered families to provide basic education, whereupon the number of home-schooled children increased to around 400 families. While some families educate only their own children, their parents form groups and set up learning centers to provide education for children of their group. Currently, a number of schools allow these children to register as their students in order to maintain eligibility for further study.

Non-governmental Organisations: Both local and foreign non-governmental organisations contribute to the provision of basic education in a significant manner. For example, several agencies, such as the Child Development Center and the Council of Early Childhood and Youth Development Organisations, help provide non-formal pre-primary education. Another example is the contribution of the Duang Prateep Foundation, established in 1978 and officially registered as a charity in Thailand. Its project on education covers kindergarten programs, a special school for the hearing-impaired and education sponsorship. The Foundation now supervises 11 kindergartens in Bangkok slums and is viewed as the model in founding community kindergarten in slum areas. Thus far, the Duang Prateep Foundation has assisted in setting up 15 kindergartens in other slum areas, as well as in poor villages in the Northeast. The kindergartens are administered by locally elected community councils and the Foundation's role is a supportive and advisory one.

Educational Provision by Private Educational Providers: The state is responsible for overseeing administration and management as well as for monitoring the quality and standards of private educational institutions, both those providing general education and those offering vocational education. At present, most private institutions are proprietary schools, with a few prestigious institutions managed by Christian denominations. In some fashions, the Ministry also supports these private providers such as professional development grants to school and health care services.

2.4.The Mobilisation of Resources and Investment for Education

Thailand's resource management priorities were high quality human-based and social development as clearly addressed in the second strategy of the annual budget. The Government intended to spend 314,931 million baht, or 20 percent out of 1,566,200, to follow up the previous educational reform agenda. The areas covered included teacher and professional development, three-system development and its inter-linkage, and public-private cooperation on skills development. Most importantly, however, the aim of lifelong education was emphasized through self-inquiry, reading appreciation and moral education in the classroom as well as in real life situations.

This budget allocation should result in improved knowledge, skills, and moral development of all learners. The national budget to the education sector also includes subsidies of education provided by the Bangkok Metropolitan Administration as well as local authorities nationwide, according to the Decentralisation Act of 1999. Considering that education is a crucial factor in national development, the Thai Government has for the last decade allotted a generous proportion of the national budget for education. For education alone, the Government resumed its 2004 spending level of 4 percent of the Gross Domestic Product.

To reflect this allocation shift in real baht, in 2015, 20.7 percent of the total budget was used by various public agencies to provide public services in schooling, non-formal, and informal

systems, a 20.5 percent increase from 2014. The increase also reflects the continuing commitment of the Government to improve the quality of education. In terms of investment per level of education, financial contribution from the Government to higher education has been steady at 18.5 percent for university enrolment and student loans, while those of primary and second education have fluctuated in the past five years. (OEC, 2015)

In conclusion, the Government will highlight the reform agenda with steady investment in basic education under the year by year system. In higher education, this data emphasizes an increasing budget allocation to public universities.

Apart from general per head subsidies, the State is also responsible for the distribution of allocations for operating and capital costs of state educational institutions providing basic education and distribution of low-interest loans for students and private educational institutions. The government budget for educational provision came not only from the Ministry of Education, but also from several other government agencies which contribute a significant amount for educational purposes. Contributions from the private sector and society are comprised of non-government sources, private educational institutions, the business sector, communities and international organisations

III. EDUCATION REFORM AS NATIONAL POLICY

Over the past 131 years of public schooling history in Thailand, there have been three major education reform initiatives

that revolutionized the educational system in response to the changing world. Each reform has its own characteristic traits based on the changing philosophy about the nature of and need for learning and the political views of the stakeholders about education, and learners' achievements and their expected roles as citizens.

3.1 First Education Reform (1884 – 1921)

As mentioned earlier, the first reform in Thailand could be observed though the changing perceptions towards education since the national policy started with the establishment of a schooling system for all commoners in 1884. However, the initial system which was put in place by King Chulalongkorn consisted of a collaboration between existing temple schools run by monks and semi-professional teachers/policymakers hired by the state. Not until 1892 had the government upgraded the previous Department of Education to the Ministry level. At that time, most of the public schools were still in the care of religious institution supervised by the Buddhist Supreme Patriarch and Minister of Interior. As such, the system ownership during the first phase of the reform in Thailand was systemically composed of monks as teachers provincial, as well as local, administrators as system providers, and the newly- founded Ministry of Education as policy-makers and academic advisors.

The first decade (1884-1904) of reform resulted in a significant increase of schooling providers co-sponsored by religious institutions and local authorities, whereas the Ministry of Education centrally controlled the curriculum and textbooks

(Mulsilp, 1998). The turning point occurred in 1898 when the Ministry of Education promulgated the first Education Scheme of 1898 that addressed a critical need for a four-tier education system, namely pre-primary, primary, secondary, and higher education. Apart from the incremental number of students enrolled in public and private schools, the promotion of female education and recruitment of professional teachers simply drove to a wider group of stakeholders than previously designed. For example, this scheme called for establishing schools for specialists like public officers (College for Civil Officer Training 1899), teachers (Teacher College in 1909) and artists (Art College in 1911). During this time, the Ministry of Education increasingly played a bigger role in schooling management in the secondary and tertiary levels, whereas local schools affiliated to temples mostly focused on the primary level and gradually came into the hands of professional teachers. The advent of the Primary Education Act in 1921 represented the legitimacy of the Ministry of Education as the main service provider, while religious, as well as local, bodies were sidelined as main supporters.

Last but not least, the first period of the development of the schooling system in Thailand initially aimed to improve literacy and numeracy skills for the newly free citizens after the nationwide emancipation and end of men's time-serving requirement. However, the first education scheme in the second half of this reform foresaw a growing number of graduates at the primary level who needed more occupational skills and opportunities in life to choose their future careers rather than in public service. During this period, therefore, the focus of

educational policy was on educational accessibility to basic skills, as well as occupational skills improvement through various types of public learning institutions ranging from elementary school to university levels (Chulalongkorn University in 1916).

3.2 The Second Education Reform (1974-1978)

After nearly four decades of democratisation in Thailand and twenty years of the National Economic and Social Development Plans, a panel of 22 experts led by Professor Sippanondha Ketudat was appointed by the Government in June 1974 to review the current development stage of the education system as it had come into being over a period of ninety years, and subsequently submitted an educational reform proposal. This task force addressed four major needs for reform as follows:

- Expansion of compulsory education from 4 to 7 years with the introduction of 6:3:3 system;
- Transferring public primary schools to local authorities, whereas the Ministry of Education concentrated only on the secondary level;
- Addressing the equity issues for all compulsory graduates who could further their education to the higher levels by mobilizing more resources from all sectors; and
- Stipulating the education act and regulations to herald fairness and equality in education, flexible linkage between schooling and non- schooling systems, socially

responsible higher education system, and central policy command vs. decentralization (Sriprasart, 2003).

The implementation of these recommendations met with resistance from stakeholders, first over the power shift from control by the Ministry of Education to unwilling local authorities, then, political turmoil from the burgeoning of Communism and Marxism among Thai scholars, and afterward, it was plagued by a lack of systemic reform implementation in last three years of reform (Sriprasart, 2003). Nevertheless, this short-lived initiative brought in the fruit for thought to future educational reformists as follows:

- Access: The 6:3:3 system, the only actualised feature of the reform proposal, has kept students in schools in line with the international standard to guarantee at least six to nine years of basic education, whereas vocational and higher education serves as further opportunities in life for semi- and high skilled occupation. However, the Thai education system thereby became rooted in the American system, which focused on the general education towards university, not the balance between basic and occupational skills as previously envisioned in the 1910s and 1920s.
- Stakeholders and need for learning: A variety groups of student enrolled in both public and private institutes needed more flexible paths of learning in terms of types, curriculum, and learning methods. For instance, the disparity between the general and technical/vocational

education shaped up a second-tier citizen for those who ended up with the non-degree level. The core curriculum did not account for local contexts or the cultural needs of suburban learners, while teachers tended not to acknowledge students' individual differences and self-directedness that was highlighted two decades later.

3.3 Third Reform (1999 – 2011)

The longest period of reform occurred nearly two decades later, after the most ambitious, but doomed reform in the 1970s. The new generation of reformers, led by Dr. Rung Keawdang and his mentors including Professor Sippanondha, got involved in the drafting of the National Education Act of 1999. This act arose from recommendations made in the previous reform period. The National Education Act of 1999, which is in force till today, addresses the following issues and strives for:

- Focus on full development of all Thai people with lifelong education, all parties for education, and high standards and quality of the education system;
- Endorsement of at least 12 years of basic education of high quality and free of charge;
- Differentiation, but with interconnectedness, of three systems of education encompassing formal, non-formal, and informal education in which families, learners, and the workplace can be beneficial to the service;

- Acknowledgement of child-centered learning as the preferred mode of teaching and learning in each system. A core curriculum is in place, while the school-based curriculum may add more variety and local content and context, as needed in different localities;
- Acceleration of decentralisation to educational service areas and schools through elected bodies, especially the school governing boards nationwide;
- Institutionalizing educational standards and a quality assurance system that involves external school reviews.
- Development of financial instruments and policies, such as taxation and exemption to support the private sector in public/private partnership in education;
- Introduction and expansion of ICT in learning.

In the past twelve years, evaluation of this reform can be summarized in positive and negative results as follows:

- *Access*: Thailand has experienced a new challenging territory of statistical indicators that show the additional learning opportunities at various levels of education. For instance, pre-primary education seemingly has become part of basic education in the form of additional inclusion in the 15 years of free basic education as of 2009, which has driven up the participation rate above regionally comparable countries such as Japan, South Korea, and Australia. So does the gender disparity among boys and

girl that remains neutral, with a slightly increase in numbers of girls in the schooling system (UNESCO-OECD, 2015). However, there is some concern about the percentage of out-of-school children, which might be as high 5% in each leaning cohort. The situation gets worse if marginalized and vulnerable groups such as children in families on the move or illegal workers are taken into account.

- *Stakeholders:* Even though this reform seems rosy in numbers, some critics pinpoint some pitfalls of this initiative, one of which includes lesser inspiration for learning behavior changes into a student-centered learning environment among teachers and students (Kantamara, Hallinger, and Jartiket, 2005). However, the system has witnessed the increasing role of the private sector in technical and vocational education training (TVET) and higher education, for example in the number of private vocational and technical colleges, including private universities which has skyrocketed over the past decade, not mentioning the number of non-Thai students in Thai schools offering programs in English.
- *Quality:* One of the grayest areas of this reform is measured by the learning outcomes among learners. Although the implementation of the 1999 National Education Act has prompted a major paradigm shift in the education sector in terms of both teaching and learning methods, as well as in learning environments.

This classroom transformation however, has been fractionally implemented in only a few schools. Evidence of this can be observed by the below-international-average scoring of Thai students in many international tests of student achievement such as PISA 2012 and TIMSS 2001. The lack of a good match between inputs and results suggests inefficiencies in the Thai education system.

IV. WAY FORWARD TO EDUCATION REFORM

After comparing education systems and reform experiences with peers, it can be concluded that Thailand has overcome problems relating to accessibility, but it still has difficulties in areas such as equity and quality. On a brighter note, through the ongoing drafting process of the New Constitution, Thailand has been challenged with reinvigorating the education reform as a part of 11 agendas in the national reform initiative. One question that remains to be answered at this stage is to what extent Thai educational reformers can avert previous pitfalls.

The first trend of the future education reform has to do with the redefinition of basic education and compulsory education. By law, the 1999 Education Act entitles all Thai people to 12-year basic education, but the first three years of age (3-5) was subsidised by the Government not until ten years later. The State may officially decide to include these three years of pre-schooling as an official part of the basic education, as well as compulsory education, which would then encompass the ages of 3 to 15.

The second movement of this time's reform can be witnessed by the growing sense of public awareness on additional learning opportunities after the age of 15, as part of the national capacity building of workforce. For example, the interplay of non-formal and informal education will become important to those who leave school prematurely, offering more flexible learning settings and requirements. The concept of credit transfer and qualification frameworks will be measurable and compared across three systems by Office of the National Qualification

Framework. Lastly, in-house training programs during their employment period can be accredited as part of employees' educational experience.

The third trend towards the future reform will be the continuation of another form of decentralisation that allows the Provincial Education Council to work together more closely with schools and educational service areas throughout the country. This popular forum will set goals and objectives of the educational service in a particular area, as well as help monitoring the learning outcomes in a certain period of time. This new layer of local responsibility will increase the accountability level towards the quality of education started from the local school level to the educational authority at the national levels.

The next dimension of reform involves the new funding formula for compulsory education to ensure that all Thai learners may enjoy development of their learning skills at an early age. A demand-sided financing and subsidy that take into account different needs of individual learners such as socio-economic status, physical and mental readiness, and locality shall replace the former subsidy that was standardised to all by only one funding formula. It is hoped that the different amounts of subsidy would allow new out-of- school children to return to school or non-schooling system accordingly. By the same token, choosing schools by students' choice would encourage schools and universities to change their classroom's learning to fit in a call for the 21st century skills and uplift the quality of education systematically.

Finally, the new educational standards and quality assurance processes need to guarantee the quality of learners' learning, while the results will be used by the learning institutions

to coach the schools to improve their services to answer to the national policy and learning targets at certain period of time. For example, the streamlining of the fourth-round of external review is underway to ensure that schools encounter with fewer paper work requirement and focus more on whole-school improvement of the learning outcomes.

Table 8. Education Indicators of Thailand

Education Indicators	2009	2010	2011	2012	2013	2014	2015
1. Education Quality							
1.1 Net Enrolment rate, pre-primary	99.41	98.31	99.92	-	-	-	-
1.2 Net Enrolment rate, primary	95.61	-	-	-	-	-	-
1.3 Net Enrolment rate, secondary	77.03	78.09	81.69	79.47	-	-	-
1.4 Gross Enrolment ratio, pre-primary	101.95	108.35	110.28	112.28	118.52	-	-
1.5 Gross enrolment ratio, primary	96.67	94.92	94.87	95.39	95.83	-	-
1.6 Gross enrolment ratio, secondary	80.67	83.48	87.37	86.98	85.91	-	-
1.7 Gross enrolment ratio, lower secondary	95.46	98.63	102.20	98.60	93.60	-	-
1.8 Gross enrolment ratio, upper secondary	66.16	68.77	73.07	75.74	78.40	-	-
1.9 Gender Parity Index (GPI)	0.99	-	-	-	-	-	-
2. Education Quality							
2.1 Quality of primary education ¹	3.7	3.5	3.3	3.6	3.6	3.7	3.5
2.2 Quality of the education ¹	3.7	3.6	3.5	3.6	3.4	3.7	3.6
2.3 Quality of math and science education ¹	4.3	4.2	4.1	4.0	3.9	4.3	4.2
2.4 Quality of management school ¹	4.4	4.1	4.3	4.5	4.1	4.4	4.1
2.5 Literacy rate	-	96.43	-	-	-	-	96.67
2.6 Mean years of schooling	-	7.30	-	-	-	-	-
3. Effectiveness of Education Management							
3.1 Internet Access in School ¹	-	4.7	4.5	4.3	4.4	4.6	-
3.2 Pupil-Teacher ratio, in pre-primary education	-	-	27.0	28.9	-	-	-
3.3 Pupil-Teacher ratio in primary education	-	16.3	15.8	16.3	-	-	-
3.4 Pupil-Teacher ratio in secondary education	-	-	19.9	-	-	-	-
3.5 Government Expenditure in educational institutions as % of GDP	4.13	3.75	5.16	4.93	-	-	-
3.6 Government Expenditure on pre-primary education as % of GDP	0.27	0.21	0.29	0.32	-	-	-
3.7 Government Expenditure on primary education as % of GDP	1.90	1.50	2.60	2.21	-	-	-

SOURCES : UIS Data Center, 2015.

/1 IMD WORLD COMPETITIVENESS YEARBOOK 2009-2015

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Socialist Republic of Vietnam

Education at a Glance

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I. OVERVIEW

Vietnam is located on the east side of the Indochinese Peninsula, and is bordered by the People's Republic of China to the north, the Lao People's Democratic Republic and the Kingdom of Cambodia to the west, and to the East, South and Southwest surrounded by the sea. Thus situated, Vietnam is attached to the huge Eurasian continent, between China and other Southeast Asian countries. Vietnam has more than 4,600 kilometers of land border: the Vietnam – China border is over 1,400 kilometers, the Vietnam – Laos border is nearly 2,100 kilometers, and the Vietnam – Cambodia border is over 1,100 kilometers. Three quarters of Vietnam's territory consists of mountainous and hilly regions. The country is located in the northern tropical hemisphere, and is affected frequently by the trade winds and tropical monsoons with two distinctive seasons. The North has cold winters with low rainfall and very hot and humid summers with more rainfall. The South has two distinctive seasons, rainy and dry seasons.

The population of Vietnam is just over 90.7 million (2014)²⁸, ranking third among Southeast Asian countries. Vietnam is also a multi-ethnic country with 54 different ethnic groups living together. The Viet (Kinh people) majority account for 86% of the population, and the remaining 53 ethnic minorities make up 14% of the population. There are 63 provinces and cities, of which five cities are under central government administration: Hanoi, the capital, Ho Chi Minh City, Da Nang, Hai Phong and

²⁸ The World Bank. (2015).

Can Tho. The urban population makes up 30% of the total population of Vietnam.

Vietnamese is the official language used in administration, diplomacy, education, and is the common language for communication of all peoples in Vietnam. There are diversified language groups for different ethnic minorities.

The revitalisation of the economy in Vietnam started in 1986. Since then, the economy has been going through a transition toward a modern system. Many Vietnamese exports are of good value, such as oil, rice, seafood, coffee, cashew nuts, pepper, shoes, wooden furniture, textile, and can be found in many countries in the world. GDP per capita in Vietnam has also been increasing to USD 2,052 in 2014²⁹.

II. HISTORY OF EDUCATION IN VIETNAM

Historically, there has been the perception among intellectuals in Vietnamese society that a teacher's position was higher than that of parents, second only to that of the king. For nearly one thousand years, Vietnamese people learnt Chinese characters and used them for writing, but pronounced them in a different, Vietnamese way. This development of learning and the preservation and the strengthening of an awareness of national independence ensured that the Chinese did not assimilate the Vietnamese people. Besides the use of Chinese characters, the

²⁹ The World Bank. (2015)

Vietnamese people adapted such characters to invent an ancient Vietnamese script for writing and expressions. Thanks to this invention, a number of valuable works of literature and history in ancient Vietnamese script have been kept for future generations.

At the turn of the 20th century, the French forcibly colonized Vietnam and the entirety of Indochina. The traditional Confucius-oriented education, which had been built and maintained by Vietnamese people, was replaced by a French-Vietnamese education aimed mainly at training people to serve the colonial apparatus.³⁰

After Vietnamese people took control and declared the country's independence in 1945), during the first meeting session of the government President Ho Chi Minh identified “fighting against poverty, illiteracy and invaders” as three key important tasks of the Vietnamese government and people. In response to the government policies and President Ho Chi Minh's call, there were, within less than a year, 75,000 literacy classes with nearly 96,000 teachers to help 2.5 million people rise from illiteracy. Therefore, with the establishment of the Democratic Republic, fighting illiteracy and improvement of people's educational qualifications became the national policy of Vietnam.

During the years of the War of Resistance (1946 – 1954), schools continued to operate in demilitarized areas. In order to prepare skilled human resources to contribute to the war of resistance and the country's development after victory, the

³⁰ MOET (1996).

government officially passed an education reform project in 1950. From 1955 to 1975, Vietnam was temporarily separated into a Northern and Southern region. The new education reform at this time was set in North Vietnam. Through the second education reform, the 12-year and 9-year general education systems in newly liberated and free demilitarized areas respectively were combined into a 10-year system. This system was somewhat similar to the education system in the Soviet Union.

During the war period from 1965 to 1972, the government identified the goals for education as continued development of education, ensuring safety of students, and strengthening links between school and real life, production and war fighting activities. In April 1975, the Vietnamese people succeeded in protecting independence and reunifying the country. Right after that, the government prepared for an education reform to put in place a unified national education system that was appropriate to the national reconstruction strategies and development of the country. The third education reform started in the 1981 – 1982 school year. The biggest challenge faced by Vietnamese education in the early 1980s was that the State was not able to provide financial resources, while it dismantled the importance of the collective economy. Consequently, the education sector faced a serious shortage of resources; schools had no operation funds, teachers had no salary, and many students left schools. In order to overcome the economic crisis, in 1986, the Vietnamese leadership planned for a major national reform to move from a centralized planning system to a socialist-oriented market mechanism. As a direct consequence of this overall change in national policy, the

education sector also needed to reform. After 10 years of this reform, the education sector experienced positive development and made considerable achievements. In the 1993 – 1994 school year, the size of the education and training system at all levels from pre-school, general education, vocational education to higher education had expanded and surpassed the most successful year of the pre-reform period. Over the period of a decade (1996 – 2005), the size of the education system continued to expand with an increase of the total number of students from 20 million in 1996 to 23 million by 2005.

However, in parallel with these achievements, the Vietnamese education system still faces a number of weakness and mismatches such as low educational quality and efficiency, especially in vocational and higher education. Several negative cases and slow progress are causing social concern. Vietnamese leaders and the people are still calling for stronger reform in the educational sector.

III. ORGANISATION STRUCTURE OF THE MINISTRY OF EDUCATION AND TRAINING

The Affiliated Offices to the Ministry of Education and Training include:

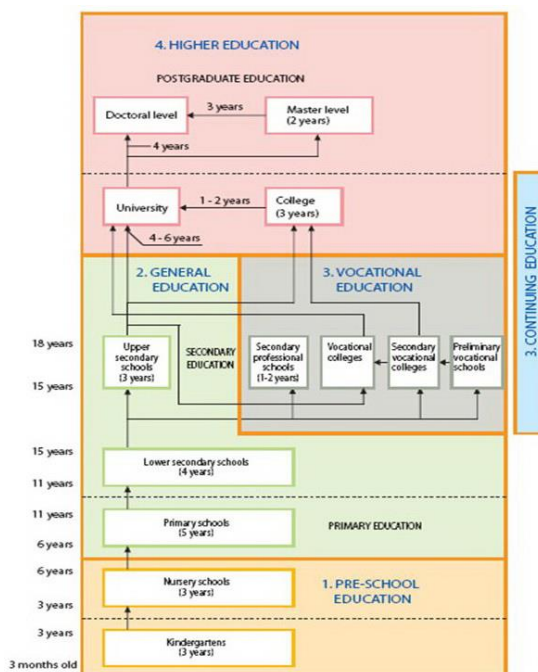
- Administration Office.
- Inspection Office.

- Representative Office in Ho Chi Minh City.
- Educational Quality Assurance, Accreditation and Testing Department.
- Teachers and Educational Managers Department.
- Information Technology Department.
- Educational Facilities, Equipment and Children’s Toys Department.
- International Education Department.
- Personnel Department.
- Planning – Finance Department.
- Student Affairs Department.
- Science, Technology and Environment Education Department.
- International Cooperation Department.
- Legal Affairs Department.
- Pre-school Education Department.
- Primary Education Department.
- Secondary Education Department.
- Secondary Professional Education Department.

- Higher Education Department.
- Continuing Education Department.
- Ethnic Education Department.
- Defense Education Department.
- National Institute for Educational Science.
- Academy for Educational Management.
- School for Educational Management in Ho Chi Minh City.
- Vietnam Education Publishing House.
- The Time Education Newspaper.
- The Journal of Education.
- Educational Support and Human Resource Supply Center.

IV. NATIONAL EDUCATION SYSTEM IN VIETNAM

The national education system of Vietnam encompasses regular and continuing education. There are four levels of education and training in Vietnam, according to the Education Law 2005.



Source: <http://www.hoasen.edu.vn/newsletter/mar2010/education.html>

Figure 10.1 Structure of the National Educational System of Vietnam

4.1 Pre-school Education

Pre-school education consists of nurseries and kindergartens and provides childcare and education for children ages 3 months to 6 years old. The objectives of pre-school education are to help children develop physically, emotionally, intellectually, artistically, and to form the initial quality of their personality, thus preparing them to go to grade 1 at primary school.

Pre-school education development has always been a priority in the policy of the Party and Government. This has been clearly documented at the Party Congresses and institutionalized by the Government.

The Seventh Party Congress set out the following task: “Developing pre-school education, increasing the number of children attending kindergartens of childcare centers, improving childcare knowledge for those who care for the children in the families.”

The resolution of the Second Conference of the Eighth Party Central Committee continued to affirm the goal for pre-school education in 2005: “Develop pre-school education in accordance with conditions and requirements of each locality to ensure that most children at the age of 5 can go to kindergartens to prepare them for grade one at primary schools”.

The Education Development Strategy from 2001 to 2010, approved by the Government, also defined the goals for pre-school education to 2010 as follows: “Ensuring the quality of

childcare for children under 6 years old, creating favorable conditions for children to develop their physical, emotional, intellectual and artistic capacity, expanding the system of childcare centers and kindergartens in all residential areas, especially in disadvantaged and rural areas, providing consultancy services and disseminating childcare knowledge to young parents and families.”

Decision 161/2002/QĐ-TTg of the Prime Minister dated 15/11/2002 on policies for developing pre-school education and Decision 49/2006/QĐ-TTg on the “Development of the pre-school education for the period 2006 – 2015” are a further manifestation of the Government’s determination to speed up the development of pre-school education in Vietnam.

4.1.1 Current status

The number of teachers and managers for pre-school education basically meets the current demand. There are teachers and staff in non-public sectors, mainly in the rural areas, accounting for 63.33%. Since 2008, 86.96% pre-school teachers attained the new teacher standards. Teachers whose performance was still below the standards were mainly found in the rural areas. In the most difficult areas, most teachers had only preliminary or short-term training. Policies on recruitment, employment and payment for teachers have been constantly improved, creating more favorable conditions for the stability and development of the teaching team.

The network for pre-school teacher training has been expanded, contributing actively the improvement of the quantity and quality of the staff. Together with Hanoi Teacher Training

University, ten other universities now offer pre-school teacher training courses at bachelor level, and three Central Pre-school Teacher Training Colleges now offer courses for pre-school teachers at college level for the Northern, Central, and Southern regions. Other provincial teacher training colleges also offer pre-school teacher training courses.

Since the end of the Twentieth century, research into new forms of childcare and education for 5 year old children has been carried out and experimented to provide evidence for the new comprehensive renovation of the educational content and methodologies for childcare and education. Some trial training materials have been compiled, and experiments have been carried out at a number of kindergartens for 5year old children. The experiments were then extended to children from 3 to 4 years old. The child-centered approach which activates children in all childcare and education activities has been applied and widely disseminated. (Table 10A.1)

4.1.2 Objectives for pre-school education development in the future

The first objective is training and improving the quality of teachers at pre-school level so that 100% of teachers will meet the national standards in the near future. Strengthening and expanding the network of schools and classes is another objective aimed at raising the enrolment of children under 3 years old in nurseries from 15% in 2005 to 20% in 2010, and up to 30% by 2015. Another objective of the MOET is to raise the enrolment of children ages 3 to 5 years old in kindergartens from 58% in 2005 to 30% by 2015 and the enrolment of children at the age of 5 in

kindergartens from 58% in 2005 to 75% by 2015. The third important objective is to raise the percentage of national standard nurseries and kindergartens from 9% in 2005 to 50% by 2015. For areas of socio-economic difficulties such as in mountainous, remote, border areas, and islands, the goal is to raise the enrolment of all pre-schooling age children in kindergarten. Other objectives also include the improvement of the quality of feeding, caring for children at pre-schools to reduce the malnutrition rate at pre-school education to under 10% in 2015. In addition, by 2020, it is planned that 100% of children at pre-education facilities will enjoy new childcare programs, and that 70% of the parents in 2010 and 90% in 2015 will have basic knowledge for childcare and education.

4.2 General Education

4.2.1 Current status

General education consists of primary, lower secondary and upper secondary levels. Primary education extends for five years from grade 1 to 5. The student age for grade 1 is 6 years old. Lower Secondary Education is for four years, from grade 6 to grade 9. Students in grade 6 must have reached three age of eleven and have completed primary education. Upper Secondary Education is for three years from grade 10 to grade 12. Students in grade 10 are usually fifteen years old and have completed lower secondary education.

The objectives of general education are to help students fully develop with moral, intellectual, physical and other basic

skills; develop their personal capacity, dynamism and creativity to be responsible Vietnamese citizens; prepare for their further study or working life, and take part in national defense and construction.

The Government has approved a national target program for the period of 2001 – 2005: “Strengthening and developing the results of illiterate eradication and universalisation of lower secondary education” with the goals to increase the percentage of literate people aged 15-35 years old from 94% in 2000 to 98% in 2012; and reducing 50% of illiteracy for ethnic minorities between 15-35 years old; expanding literacy campaigns in northern mountainous areas, the Mekong Delta, the Central Highlands and coastal areas of the South Central Vietnam for people between 15-35 years old. (Table 10A.2)

4.2.2 Universalisation in primary and lower secondary education

Vietnam completed the universalisation of primary education in July 2000. The goals were set for illiterate eradication for Vietnamese people at all age. Primary Education is for five years from grade 1 to grade 5. Student age for primary education from 6 to 10 years old. Therefore, since 2001, the country has focused on improving the results of universalisation of primary education with the new goal of universalising primary education of school-agers. The rate of children in primary school at the right age reached 94.5% in 2000 and increased to 96.06% in 2007, while the repeaters or school drop-outs decreased

gradually. The proportion of students completing primary education has been increasing steadily, making it possible to achieve the goal of universalisation of primary education at the right age. As of April 2009, 47 out of the total of 63 provinces in Vietnam have achieved the universalisation standards for primary education at the right age.

In December 2008, 47 out of 63 provinces achieved universalisation standards for lower secondary education. On the basis of the achievements in universalisation of lower secondary education, many provinces in Vietnam have now developed pilot programs for universalisation of upper secondary education. To improve the universalisation quality, besides increasing the enrolment of students at the right age, the Government has paid much attention to fight against re-illiteracy and reinforce illiteracy eradication results and strengthen the universalisation of primary education in remote provinces. Although Vietnam achieved significant results in general education, the country still faces many difficulties in retaining student attendance, lowering the rate of repeaters and school dropouts, and assuring quality at graduation examinations. It is important to give more active support to disadvantaged students in difficult areas (such as the northern mountainous areas, the Central Highlands, and the Mekong Delta), and to prevent “standard reduction” in universalized primary school education, and fall back into illiteracy.

Curriculums and textbooks for general education are the manifestations of the specific educational objectives defined in

the Education Law for each educational level. The quality and competencies stated in the objectives must be actualized into specific systems of values, including traditional values that need to be inherited and developed to preserve the national identity, as well as new values formed during industrialisation, modernisation and international integration that contributed effectively to the preparation of human resources for the country in the 21st century. Curriculums and textbooks must pay essential attention to “teaching literacy” and “training a human being”, as well as career-orientation in the new social contexts in modern Vietnam.

4.2.3 General education reform

Reform for general education in the early years of the 21st century ensured the consistency of its objectives, the selection of content and teaching methodology, more teachers acquiring higher education, and infrastructure improvement, from elementary level to lower and upper secondary levels. The curriculum will be applied uniformly throughout the country, ensuring equality in education, especially in basic compulsory education. The consistency of the curriculum and textbooks is reflected in educational objectives, scientific pedagogical concepts in all subjects and school level, curriculum standards in teaching, testing, and evaluation.

Due to uneven development among regions and among students, it is essential to introduce a flexible approach to implement the curriculum to different groups of students, with regard to time duration and teaching conditions in each region,

and combining the diversity of learning conditions of students with the uniformed application of the curriculum.

Also implemented was the National Foreign Language Project to teach foreign languages in the national education system, with a particular focus on the teaching of English. The purpose of this project is to ensure that students can study a foreign language from Grade 3 up to vocational schools and universities so that they can acquire proficiency of the language. Besides teaching English as a foreign language (EFL), since 2010, bilingual teaching for some subjects at secondary level has been launched beginning with localities and institutions with suitable conditions and expanding to other regions in subsequent years.

A campaign was implemented in the entire education sector for the innovation of teaching methodologies, evaluation and assessment, developing new materials providing relevant guidelines for teachers, and promoting the application of information technology in teaching and learning. In 2015, about 80% of teachers could apply information technology proficiently in teaching; strengthening inspection on the innovation of teaching methodologies, evaluation and assessment; ensuring that by 2020, 100% of teachers are able to apply effectively new teaching methodologies. In 2012 and 2015, Vietnam participated in the international evaluation of academic results of students (Programme for International Student Assessment, PISA)³¹ to

³¹ OECD. (2015).

ensure that quality of general education in Vietnam is comparable with other countries in the world.

The goals for the period up to 2020 are as follows: 1) Continue to strengthen the teaching staff for the educational institutions so that by 2020, all educational institutions will have sufficient teachers to carry out comprehensive education, to teach integrated and specialized subjects for full-day schooling with an optimal ratio of teacher to students in a class; And 2) organize diversified and flexible training programs for teachers to meet the national standards. By 2020, 100% of primary school teachers are to meet the national standards.; By that same year, 100% of teachers will have acquired college level training or higher, and 100% of teachers at lower and upper secondary schools will have attained a bachelor degree or higher.

Furthermore, Vietnam aims to develop national standards for infrastructure and facilities for all types of schools to ensure adequate physical conditions for schools to implement innovation process in teaching and learning. Hopefully by 2020, there will be no more temporary classrooms at any grade level, and 100% of schools will be connected to the internet and have their own libraries. In order to achieve this goal, the government needs to allocate more land for new school construction, or expand existing schools. There is also a need to promote programs for permanent construction of schools, classrooms and public housing for teachers, giving high priority for education in difficult areas, etc.

Implementing the transparency of all processes and procedures in the educational management system and at each educational institution so that each individual citizen and the whole society can participate in monitoring educational activities is also important.

4.3 Professional Education

4.3.1 Current status

Professional education consists of: a) Professional upper secondary education which is 3 to 4 years of study for learners with lower-secondary education certificates, and 1 to 2 years for those with upper-secondary certificates; and b) Vocational training of under one year for learners with preliminary vocational training, and from 1 to 3 years for learners with vocational upper secondary and college levels.

The objectives of professional education are to provide potential laborers with knowledge and professional skills, moral and work ethics, discipline awareness, industry-related practices and physical health, employability, self-employability skills and the ability to pursue further study to improve their professional workmanship and qualifications, meeting the needs of the socio-economic development, national defense and security of the country. Professional upper secondary education is to provide workers with basic knowledge and practical skills of a profession, the ability to work independently and creatively, as well as the ability to apply technology to the work place. Vocational training is to provide workers with technical skills so that they are able to

directly participate in the production and service sector, to receive the practical skills of a profession.

Vocational training institutions include professional secondary schools under the management of Ministry of Education and Training (MOET), and vocational training schools and centers under the management of the Ministry of Labor, War Invalids and Social Affairs (MOLISA). The institutions are located in all provinces and cities all over the country. There are eight vocational training colleges and 20 vocational upper-secondary schools in the North East; one vocational training college and five vocational upper-secondary schools in the North-west; 34 vocational training colleges and 81 vocational upper-secondary schools in the Red River Delta; seven vocational training colleges and 23 vocational upper-secondary schools in the North Central areas; six vocational training colleges and 20 vocational upper-secondary schools in the South Central Coastal region; two vocational training colleges and 20 vocational upper-secondary schools in the Central Highlands; 12 vocational training colleges and 33 vocational upper-secondary schools in the South-east; five vocational training colleges and 18 vocational upper-secondary schools in the South-west. There are 101 vocational training colleges and vocational upper-secondary schools are under the supervision of cities or provinces; 178 vocational training colleges and 20 vocational upper-secondary schools are under supervision of ministries, agencies or enterprises. There are 226 state schools and colleges, and 53 private ones. Additionally, a number of industries, trade and

service organisations also provide in-house vocational training. (Table 10A.3)

4.3.2 Future directions

(1) Reforming content, teaching methodology, and assessment for professional education by:

- Establishing a center to forecast human resource demands – creating a basis for developing vocational training for each region;
- Mobilizing the participation of enterprises in identifying training needs, developing curriculum, enrolment, delivering training programs, and creating employment opportunities for graduates of professional education institutions;
- Moving towards credit-based training; by 2020, 100% of the professional education programs will be credit based.
- Promoting the application of advanced training programs of world-class technical and vocational education training institutions.

(2) Expanding the scale of professional education by:

- Increasing the proportion of the labor force trained at all levels from 40% 2010 to 60% by 2020.

- Attracting more potential laborers to professional upper secondary schools.
- Attracting learners with lower secondary education certificates from 15% in 2010 to 30% by 2020
- Attracting learners with secondary education certificates and professional upper secondary education diplomas to professional education programs from 10% in 2010 to 30% by 2020.

(3) Promoting socialisation in mobilising resources for education by encouraging and protecting the legitimate rights of domestic and international organisations and individuals who invest in professional education; facilitating the development of non-state institutions, so that 60% of vocational students (short-term and long-term) will be trained in non-state institutions.

(4) Developing teachers both in terms of quantity and quality to achieve the goal of professional training by:

- Developing technical teacher-training universities and technical teacher training faculties at technical universities to provide enough teachers for professional education institutions.
- Diversifying training programs and increasing the qualification standards for teachers; by 2020, 100% of professional education teachers meets established standards, of which 20% of teachers in secondary

technical schools and 35% in vocational colleges will hold a post-graduate diploma.

- Strengthen training and capacity building for teachers with advanced training courses, in cooperation with foreign partners so that teachers can meet increasing demands in the new context.

4.4 Higher Education

The Government promulgated resolution No. 14/2005/NQ-CP dated 2 November, 2005 on “Fundamental and Comprehensive Renovation of Vietnam Higher Education for 2006 – 2020”. The Education Development Strategy for 2001 – 2010 and the Vietnam Education Development Strategy to 2020 reflect the determination of the Vietnamese Government and society to enhance educational development in Vietnam, and to prepare highly qualified human resources for the country’s international integration with the world.

Vietnamese higher education aims to carry out a fundamental and comprehensive renovation program for higher education in order to create substantial changes in education quality, efficiency, and scale in response to the requirements of the country’s industrialisation and modernisation, international economic integration and the people’s demand for education. By 2020, Vietnam higher education must reach the advanced level of the region, gaining access to the advanced level of the world, and have a high degree of competitiveness, and be responsive to the socialist-oriented market mechanism. (Table 10A.4)

4.4.1 Specific objectives

- Completing the establishment of a national network of higher education with distinctive and appropriate levels, qualifications, training field, and regional structures; suitable for the educational socialisation policy and the socio- economic development master plan for country and localities.
- Developing training programs in two directions: research and applied sciences, and creating a pathway among programs; bringing into full play the quality assurance and higher education accreditation mechanism; and building up world-class universities.
- Expanding educational enrolment to reach 200 students/10,000 people in 2010 and 450 students/10,000 people by 2020, of which 70-80% of students will be with applied science institutions and 40% with non-public institutions.
- Developing teaching staff and higher educational managers with moral qualities, professional ethics, high qualifications, and modern teaching and management styles; ensuring that the student/lecturer ratio in higher educational institutions will not exceed 20/1. By 2020, the number of college lecturers with master degrees will account for at least 65% and with doctoral degrees for 15%. These figures for university lecturers will be 95% and 30% respectively.

- Significantly increasing the scope and efficiency of scientific and technological research at higher education institutions. Leading universities must be major scientific research centers for the whole country; revenue from science and technology-related activities, and from production and services will reach at least 25% of their total income by 2020 respectively.
- Accomplishing policies on higher education development, ensuring the autonomy and social accountability for higher educational institutions, the state management, the monitoring and supervision of the society for higher education.

4.4.2 Reform in university entrance exams

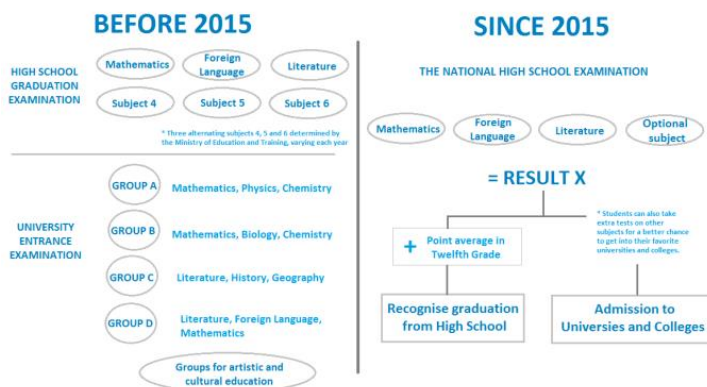


Figure 9.2 University Entrance Exam Before and After 2015

The Vietnamese Ministry of Education and Training (MoET) has planned to remove university entrance exams beginning in 2020. Before 2015, the Ministry still maintained the exams under the enrolment regulation named “three commons”. Between 2015 and 2019, it will allow universities to organize only one exam with many subjects, instead of exams for Groups A, B, C, D, and V as is current practice. Two obligatory subjects in the exam will be Mathematics and Literature and other optional subjects which will be selected in line with training majors. Vietnamese universities and colleges have recently complained about the current enrolment regulations, which enable them to enroll enough students. Experts warned that more education institutions would go bankrupt unless the ministry makes significant changes in the enrolment regulation named “three commons”. Under the “three commons” regulation, the same exam questions, exam dates and exam results are used for all universities and colleges in enrolling students. Vietnam now has about three million students at 700 universities, colleges and vocational training schools. Despite the fast expansion and rapid growth in the numbers of universities and colleges, the quality of education cannot meet the social demand and development in the region”³².

³² Vietnam plans to remove the universities entrance exams, qv. VUFO-NGO Resource Centre (2015).

4.5 Continuing Education

Continuing education enables people to learn while in service, to learn continuously and for their whole lives. In addition, continuing education helps people to refine their personality, broaden their understanding, and to improve their quality of life and employability. (Table 10A.5)

4.5.1 Illiteracy eradication and continuing post-literacy education

Since 2000, 100% of provinces/cities nationwide, 98% of districts/counties and 98.53% of communes/precincts have achieved the national standard of illiteracy eradication and universalised primary education.

On July 2, 2003, the Vietnamese Government ratified the National Program for Education Universalization for All by 2015 with a roadmap and steps in line with Vietnam's eco-social facts and background, and approved the project "Build a Learning Society for the period of 2005 – 2010" with a view to achieve the Millenium Development Goals and the Education Development Strategy for the period of 2001 – 2010.

For the last few years, the number of students attending illiteracy eradication classes and post-literacy education courses has increased, raising the rate of literacy among adults. The rate of literacy among adults in Vietnam is now higher than that in the region. It has tended, however, to grow slowly for the last few years. The results in the effort to eradicate illiteracy have varied

widely among localities, particularly in remote, isolated and ethnic minority areas.

In recent years, the continuing education has diversified, enabling wider participation in these classes. The number of students in the continuation classes in the primary schools, lower and upper secondary schools increased steadily year by year. However, the rate of the students in the age cohort of non-formal primary education universalisation has been remarkably low (only 9.7% of illiterate children from 6 to 10 years of age have been encouraged to attend primary school; and 8.7% from 11 to 14 years of age in lower secondary school).

4.5.2 Distance education

Together with the development of mass media, distance education has made remarkable progress both in quantity and education technologies. Further training in updated knowledge and basic skills in distance education for cadres and active teachers in various regions and schools has been accelerated. A number of distance education projects, ministerial and national, have been put into action. A huge number of classes of foreign languages, information, cultural and social knowledge, and economic management skills have been organized via radio and television programs.

In order to develop distance learning, the Government, since 1994, has permitted the setup of Hanoi Open University and Ho Chi Minh City Open University with the main function of distance education. Since then, there have been other universities

(Hanoi National University of Education, Hue University, Da Nang University, Vietnam National University – HCM, Hanoi University, Da Lan University, Hanoi University of Foreign Studies – VNU, etc.) that have permission to undertake distance learning courses.

4.5.3 Continuing education programs

Program and teaching methodology for continuing education are diversified and divided into four key groups:

- Group 1: Illiteracy eradication and continuing post-literacy education programs.
- Group 2: On-demand education program for learners, knowledge and skill updates and technology transfer.
- Group 3: Programs for training, enrichment and enhancement of professional capacity.
- Group 4: Education programs for qualification of accreditation from the national education system.

4.6 Basic Education Curriculum

Table 9.1 Primary Education Curriculum: Weekly Lesson Timetable

Subject	Number of weekly periods in each grade				
	I	II	III	IV	V
Vietnamese language	11	10	9	8	8
Mathematics	4	5	5	5	5
Moral education	1	1	1	1	1
Nature and society	1	1	2	-	-
Science	-	-	-	2	2
History and Geography	-	-	-	2	2
Arts	3	3	3	-	-
Music	-	-	-	1	1
Drawing	-	-	-	1	1
Technology/Handicraft	-	-	-	21	2
Physical education	1	2	2	2	2
Other activities	1	1	1	1	1
Total weekly periods	22	23	23	25	25

Source: MOET. (2013).

**Table 9.2 Lower Secondary Education Curriculum:
Weekly Lesson Timetable**

Subject	Number of weekly periods in each grade			
	VI	VII	VIII	IX
Vietnamese language and literature	4	4	4	5
Mathematics	4	4	4	4
Biology	2	2	2	2
Physics	1	1	1	2
Chemistry	-	-	1	2
History	1	2	1.5	1.5
Geography	1	2	1.5	1.5
Civics	1	1	1	1
Foreign Language	3	3	3	2
Physical education	2	2	2	2
Technology	2	2	2	2
Art	1	1	1	0.5
Music	1	1	1	0.5
Optional subjects			3	2
Class activities	1	1	1	1
School activities	1	1	1	1
Total weekly periods	25	27	29	30

Source: Asian Development Bank.

**Table 9.3 Upper Secondary Education Curriculum:
Weekly Lesson Timetable**

Subject	Number of weekly periods in each grade		
	Grade 10	Grade 11	Grade 12
Literature	2	2	2
Vietnamese Language	2	2	1
History	1	1	2
Geography	1	2	1
Civics	1	1.5	1.5
Mathematics	4	5	5
Physics	3	3	3
Chemistry	2	2	2
Biology	1	1	2
Foreign language	3	3	3
Technology	2	2	2
Military education	2	2	2
Art education	2	2	2
Other activities	13	10.5	10.5
Total	39	39	39

Source: MOET. (2013).

ANNEX: KEY INDICATORS AND STATISTICS

**Table 9A.1 The Development of Pre-school Education
(2007 – 2013)**

SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
SCHOOLS	11,629	12,190	12,357	12,908	13,172	13,548
Nursery	58	43	41	39	28	34
Public	36	22	29	23	22	24
Non-Public	22	21	12	16	6	10
Kindergarten	2,839	2,858	2,870	2,877	2,560	2,807
Public	2,188	2,219	2,302	2,416	2,400	2,549
Non-Public	651	639	568	461	160	258
Pre primary	8,732	9,289	9,446	9,992	10,584	10,707
Public	3,463	3,950	4,704	5,895	8,028	9,146
Non-Public	5,269	5,339	4,742	4,097	2,556	1,561
CHILDREN	3,195,731	3,305,391	3,409,823	3,599,663	3,873,445	4,148,356
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Nursery	508,694	494,766	508,190	528,869	553,117	597,274
Female	242,811	234,190	241,694	244,705	255,724	263,132
Minority	50,947	50,236	53,013	64,551	72,637	82,343
Public	123,583	156,844	183,316	273,713	347,320	413,901
Non-Public	385,111	337,922	324,874	255,156	205,797	183,373
Kindergarten	2,687,037	2,810,625	2,901,633	3,070,794	3,320,328	3,551,082
Female	1,308,022	1,341,342	1,374,341	1,420,183	1,549,499	1,627,390
Minority	398,572	417,608	452,539	489,968	545,037	594,603
Public	1,270,618	1,457,940	1,609,634	2,062,500	2,628,513	3,047,328
Non-Public	1,416,419	1,352,685	1,291,999	1,008,294	691,815	503,754
TEACHERS	172,978	183,443	195,852	211,225	229,724	244,478
Nursery	44,140	45,385	49,256	52,244	55,715	56,302
Public	13,292	15,502	20,353	26,778	36,027	42,336
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Non-Public	30,848	29,883	28,903	25,466	19,688	13,966
Children/teacher ratio	11.52	10.90	10.32	10.12	10.45	10.61
Qualified by training and upper (%)	79.59	79.62	89.48	89.74	91.13	93.22
Kindergarten	128,838	138,058	146,596	158,981	174,009	188,176
Public	60,650	71,818	82,870	106,626	137,182	162,242
Non-Public	68,188	66,240	63,726	52,355	36,827	25,934
Children/teacher ratio	20.86	20.36	19.79	19.32	18.79	18.87

Qualified by training and upper (%)	94.33	94.74	95.38	96.03	97.08	97.57
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Source: MOET. (2013).

**Table 9A.2 The Development of General Education
(2007 – 2013)**

SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
SCHOOLS	27,900	28,114	28,413	28,593	28,803	28,916
Primary	14,939	15,051	15,172	15,242	15,337	15,361
Public	14,844	14,957	15,080	15,148	15,243	15,266
Non-Public	95	94	92	94	94	95
Class/Classroom ratio	1.08	1.08	1.08	1.12	1.12	1.08
Triple shifts	13	12	9			
Basic Education	717	674	620	601	554	557
Public	712	669	613	591	538	544
Non-Public	5	5	7	10	16	13
Lower Secondary	9,768	9,902	10,060	10,143	10,243	10,290
Public	9,740	9,868	10,041	10,127	10,223	10,269
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Non-Public	28	34	19	16	20	21
Class/Classroom ratio	1.10	1.05	1.17	1.19	1.14	1.10
Triple shifts	39	29	14	0	0	
Secondary	309	295	319	319	319	283
Public	234	226	218	208	245	209
Non-Public	75	69	101	111	74	74
Upper secondary	2,167	2,192	2,242	2,288	2,350	2,425
Public	1,591	1,735	1,852	1,954	2,034	2,064
Non-Public	576	457	390	334	316	361
Class/Classroom ratio	1.17	1.12	1.20	1.16	1.11	0.99
Triple shifts	6	6	4	0	0	
PUPILS	15,800,302	15,212,028	15,022,759	14,851,820	14,782,561	14,747,926
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Female	7,620,022	7,422,961	7,391,451	7,225,186	7,301,981	7,228,413
Ethnic minority	2,278,742	2,345,070	2,286,053	2,275,771	2,318,731	2,339,471
Of which:						

Primary	6,871,795	6,745,016	6,922,624	7,048,493	7,100,950	7,202,767
Female	3,175,825	3,233,049	3,271,858	3,337,266	3,447,654	3,438,338
Ethnic minority	1,099,045	1,203,690	1,202,769	1,210,907	1,244,771	1,265,096
Public	6,832,218	6,704,614	6,875,818	7,011,413	7,061,633	7,164,292
Non-Public	39,577	40,402	46,806	37,080	39,317	38,475
Lower Secondary	5,858,484	5,515,123	5,214,045	4,968,302	4,926,401	4,869,839
Female	2,856,483	2,636,448	2,598,267	2,395,682	2,388,172	2,363,611
Ethnic minority	874,642	842,611	800,301	776,741	774,358	777,521
Public	5,790,187	5,454,999	5,170,958	4,939,578	4,897,118	4,843,281
Non-Public	68,297	60,124	43,087	28,724	29,283	26,558
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Upper secondary	3,070,023	2,951,889	2,886,090	2,835,025	2,755,210	2,675,320
Female	1,587,714	1,553,464	1,521,326	1,492,238	1,466,155	1,417,899
Ethnic minority	305,055	298,769	282,983	288,123	299,602	296,854
Public	2,238,141	2,324,672	2,430,774	2,503,429	2,503,406	2,430,993
Non-Public	831,882	627,217	455,316	331,596	251,804	244,327
GENERAL EDUCATION TEACHERS						
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
TEACHERS	791,858	804,183	804,183	818,538	828,148	847,752
Female	552,454	561,108	578,361	575,276	588,437	594,830
Ethnic minority	63,840	67,950	70,855	74,314	79,351	79,711
Of which:						
Primary	344,853	347,840	347,840	359,039	366,045	381,432
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Female	266,676	269,632	270,912	276,896	283,361	291,228
Ethnic minority	38,057	39,360	40,448	43,552	46,739	47,096
Public	342,647	343,095	344,946	356,338	363,102	378,541
Non-Public	2,206	2,410	2,894	2,701	2,943	2,891
Qualified by training and upper (%)	97.37	98.58	99.09	99.46	99.63	99.69
Teacher/Class ratio	1.29	1.3	1.3	1.3	1.3	1.3
Lower Secondary	312,759	313,911	313,911	312,710	311,970	315,405
Female	210,774	210,997	216,961	211,035	213,072	212,184
Ethnic minority	20,118	22,377	23,405	23,719	24,770	24,668
Public	310,201	309,885	310,573	309,890	308,325	312,142
Non-Public	2,558	3,651	3,338	2,820	3,645	3,263
Qualified by training and upper (%)	97.36	97.41	98.25	98.84	99.22	99.33

SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Teacher/Class ratio	1.95	2.06	2.09	2.07	2.12	2.16
Upper secondary	134,246	142,432	142,432	146,789	150,133	150,915
Female	75,004	80,479	90,488	87,345	92,004	91,418
Ethnic minority	5,665	6,213	7,002	7,043	7,842	7,947
Public	105,092	113,500	119,905	129,333	134,899	135,283
Non-Public	29,154	25,237	22,527	17,456	15,234	15,632
Qualified by training and upper (%)	97.47	98.04	98.91	99.14	99.60	99.61
Teacher/Class ratio	2.01	2.08	2.13	2.20	2.27	2.20

Source: MOET. (2013).

**Table 9A.3 Development of Professional Education
(2007 – 2013)**

SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
SCHOOLS	275	273	282	290	295	294
Public	203	200	207	199	198	196
Non-Public	72	73	75	91	97	98
Trainers	614,516	625,770	685,163	686,184	623,050	555,684
Female	341,693	338,050	375,360	377,310	362,558	266,220
Ethnic minority	34,858	35,197	37,749			
Of which:						
Public	503,605	486,612	511,004	499,271	456,700	406,316
Non-Public	110,911	139,158	174,159	186,913	166,350	149,368
Full-time	532,379	559,705	610,626	623,263	574,258	507,405
Part-time	82,137	71,008	74,537	62,921	48,792	43,124
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Graduated	199,629	196,993	207,304	239,213	216,130	176,143

TEACHERS	14,658	16,214	17,488	18,085	19,956	18,302
Female	6,458	6,852	7,526	8,278	9,182	8,642
Public	10,737	10,636	10,995	10,216	10,767	10,110
Non-Public	3,921	5,578	6,493	7,869	9,189	8,192
Classified by qualification						
PhD	234	325	407	483	625	393
Master	2,089	2,882	3,286	3,836	4,610	4,082
University & College degree	11,112	12,094	12,776	12,782	14,029	12,945
Professional Secondary	826	656	757	789	565	698
Other degree	397	257	262	195	127	184

Source: MOET. (2013).

**Table 9A.4 Development of Higher Education
(2007 – 2013)**

SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
COLLEGES & INSTITUTIONS	209	227	230	226	215	214
Public	185	198	199	196	187	185
Non-Public	24	29	31	30	28	29
Students	422,937	476,721	576,878	726,219	756,292	724,232
Female	214,686	244,200	305,905	386,265	393,771	345,979
Public	377,531	409,884	471,113	581,829	613,933	589,039
Non-Public	45,406	66,837	105,765	144,390	142,359	135,193
Full-time	344,914	429,544	527,533	675,724	702,830	695,992
Targeted students	1,323	662	794	1,060	1,717	
Part-time	76,700	46,515	48,551	49,435	51,745	27,904
Graduated	81,694	79,199	96,325	130,966	169,400	176,917
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013

Teaching Staff	17,903	20,183	24,597	23,622	24,437	26,008
Female	8,796	10,071	11,970	12,051	13,122	13,631
Public	16,340	17,888	20,125	19,933	20,690	23,954
Non-Public	1,563	2,295	4,472	3,689	3,747	2,054
Classified by qualification						
PhD	243	338	656	586	633	693
Master	4,854	5,785	6,859	7,509	8,766	10,015
University & College degree	12,468	13,689	16,242	14,939	14,696	14,714
Other qualification	338	371	840	588	342	221
UNIVERSITIES						
INSTITUTIONS	160	169	173	188	204	207
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Public	120	124	127	138	150	153
Non-Public	40	45	46	50	54	54
Students	1,180,547	1,242,778	1,358,861	1,435,887	1,448,021	1,453,067
Female	571,523	602,676	659,828	693,175	698,662	673,767
Public	1,037,115	1,091,426	1,185,253	1,246,356	1,258,785	1,275,608
Non-Public	143,432	151,352	173,608	189,531	189,236	177,459
Full time	688,288	773,923	862,569	970,644	1,039,169	1,076,233
Targeted students	5,765	5,562	7,189	7,448	7,660	
Part-time	486,494	463,293	489,103	457,795	401,192	370,934
Graduated	152,272	143,466	161,151	187,379	232,877	248,291
Teaching Staff	38,217	41,007	45,961	50,951	59,672	61,674
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Female	16,459	18,185	20,849	23,306	28,051	29,194
Public	34,947	37,016	40,086	43,396	49,742	49,932
Non-Public	3,270	3,991	5,875	7,555	9,930	11,742
Classified by qualification						
PhD	5,643	5,879	6,448	7,338	8,519	8,869
Master	15,421	17,046	19,856	22,865	27,594	28,987
Specialist 1-2	314	298	413	434	443	489
University & College degree	16,654	17,610	19,090	20,059	22,547	23,002

Other qualification	185	174	154	255	569	327
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Source: MOET. (2013).

**Table 9A.5 Development of Continuing Education
(2007 – 2013)**

SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
SCHOOLS	275	273	282	290	295	294
Public	203	200	207	199	198	196
Non-Public	72	73	75	91	97	98
TRAINERS	614,516	625,770	685,163	686,184	623,050	555,684
Female	341,693	338,050	375,360	377,310	362,558	266,220
Ethnic minority	34,858	35,197	37,749			
Of which:						
Public	503,605	486,612	511,004	499,271	456,700	406,316
Non-Public	110,911	139,158	174,159	186,913	166,350	149,368
Full-time	532,379	559,705	610,626	623,263	574,258	507,405
Part-time	82,137	71,008	74,537	62,921	48,792	43,124
SCHOOL YEAR	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Graduated	199,629	196,993	207,304	239,213	216,130	176,143
TEACHERS	14,658	16,214	17,488	18,085	19,956	18,302
Female	6,458	6,852	7,526	8,278	9,182	8,642
Public	10,737	10,636	10,995	10,216	10,767	10,110
Non-Public	3,921	5,578	6,493	7,869	9,189	8,192
Classified qualification	by					

PhD	234	325	407	483	625	393
Master	2,089	2,882	3,286	3,836	4,610	4,082
University College degree &	11,112	12,094	12,776	12,782	14,029	12,945
Professional Secondary	826	656	757	789	565	698
Other degree	397	257	262	195	127	184

Table 9A.6 Government Budget on Education and Training (2008 – 2012) (Billion VND)

GOVERNMENT EXPENDITURE FOR EDUCATION	2008	2009	2010	2011	2012
Total	74,017	94,635	120,785	151,200	170,349
Central Government	18,912	23,834	30,680	37,263	41,656
Local	55,105	70,801	90,105	113,937	128,693
Capital expenditure	12,500	16,160	22,225	27,161	30,174
Of which					
Central	5,900	7,450	9,316	10,781	13,174
Local Government	6,600	8,710	12,909	16,380	17,000
Recurrent expenditure	61,517	78,475	98,560	124,039	140,175
Of which					
Central Government	13,012	16,384	21,364	26,482	28,482
Local Government	48,505	62,091	77,196	97,557	111,693

Source: MOET. (2013)

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People's Republic of China
An Overview of the Education Systems and
Policies of the People's Republic of China

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I. OVERVIEW

The People's Republic of China lies in the eastern part of the Asian continent and to the west of the Pacific Ocean, covering a land mass of 9.6 million square kilometers and occupying a maritime territory of 3 million square kilometers. In terms of land area, China is the third largest country in the world, and has a population of over 1.4 billion. With Beijing as its capital city, China's provincial-level administrative areas include 23 provinces, five autonomous regions, and two special administrative regions. In this united country of 56 ethnic groups, the Han ethnic group forms a 91.51 percent majority of the total population. China is the second largest economy in the world, with a total GDP volume of 9.4 trillion USD (in 2013) and a per capita GDP of 6,629 USD (in 2013).

In terms of number of students, China boasts the largest education system in the world. According to 2013 statistics, there were 198,600 kindergartens in China, with 38.9 million children and over 1.8 million teachers and directors at kindergartens (including those in pre-school programs). In 2013, 16,953,600 new students matriculated into 213,500 primary schools nationwide, bringing the total number of primary school pupils to 93,605,500 for the calendar year. Of these, 15,810,600 graduated that year. Across the nation, there were 52,800 lower secondary schools (including 40 vocational schools), serving 44,401,200 students. In 2013, 15,615,500 students successfully graduated from lower secondary school. There were 3,481,000 full-time teachers in the lower secondary system, implying a student-teacher ratio of 12.76:1. There were 13,400 upper

secondary schools with 162,900 teachers serving a population of 24,358,800 students. The student teacher ratio was 14.95:1. In 2013, 798,980 students successfully graduated upper secondary school. The total number of students in higher education in 2013 was over 34,600,000. Among China's institutions of higher education, 1,170 were authorized to provide undergraduate programs, and 830, including 548 regular universities and 282 research institutes, were authorized to provide postgraduate programs. The number of full-time teachers in regular institutions of higher education was 1,496,900, with a student-teacher ratio of 17.53:1. In 2013, the total number of entrant postgraduate students was 611,400 of which 70,500 were admitted as doctoral students and 540,900 as master students. 6,998,300 new students enrolled for regular higher education and 2,564,900 for adult higher education respectively. The total enrolment of postgraduate students was 1,794,000 and the number of graduates was 513,600. (Table 11A.1, Table 11A.2, Table 11A.4, Table 11A.5)

Over the past three decades, China has achieved tremendous progress in education reform and development. In 2013, the gross enrolment ratio of the three-year pre-school education was 67.5 percent; the net enrolment ratio of the primary school education was 99.71 percent, 99.7 percent for boys and 99.72 percent for girls, respectively. The gross enrolment ratio of lower secondary school education reached 104.1 percent, and 91.2 percent of graduates entered a higher level of education; upper secondary school education enrolment was 86 percent and higher education 34.5 percent. The gross enrolment rate for lower secondary education reached 104.1

percent. In the same year, the gross enrolment rate for higher education reached 34.5 percent. (Table 11A.3)

Such progress is partly attributable to the government's commitment to investing in education. China's annual financial expenditure on education has increased from 385 billion Chinese Yuan in 2003, to 2.449 trillion in 2013, a figure equivalent to 4.3 percent of total GDP. The structure of educational expenditure has been upgraded towards sustainable and sound development of Chinese education. In 2013, China's national expenditure on education totaled 3,036.5 billion Chinese Yuan, of which 2,448.8 billion was public expenditure, including fiscal budget on education, taxes for educational development collected by governments at every administrative level, funds from companies for company-funded schools, and revenues generated from school-based businesses and social services and invested in education development. The national public fiscal expenditure on education registered 2,140.6 billion Yuan, which included 388.4 billion Yuan from the central government.

Additionally, annual expenditure per student has increased from the previous year. The percent increase of public expenditure on education in 2013, was 15.27 percent of over 14 trillion Chinese Yuan. This was 0.86 percent point lower than percent the proportion of public expenditure on education in 2012. Moreover, China's GDP in 2013 was 56,884.5 billion Yuan; 4.3 percent of this constituted educational expenditure, which was 0.02 percent higher than the 4.28 percent figure in 2012. (Table 11A.6)

II. EDUCATION ADMINISTRATION SYSTEM

2.1 The Ministry of Education

The Ministry of Education (MOE) is the highest educational government agency in China, with its creation following that of its predecessor, the National Education Committee, which operated from 1985 to 1998. Unique among Chinese administrative agencies, the MOE serves as both a public administration agency and the management body of public schools and universities. Specifically, there are 19 departments and one international agency, the Chinese National Commission for UNESCO, that comprises the Ministry of Education, and there are another 15 educational public institutions under the Ministry's direct supervision.

The MOE's mandate covers several areas, including: designing educational reform and development strategies and policies; drafting and implementing the educational laws and regulations; coordinating and supervising the development of all forms of education at all levels; setting building and construction standards of schools in collaboration with other relevant agencies; guiding schools in their education and teaching reform; collecting, analyzing, and publicizing general information about China's education; promoting balanced development and educational equality; accreditation and endorsement of textbooks; and organizing and guiding nation-wide educational inspection and evaluation.

2.2 The Finance of Education

According to the Law of Education of the People's Republic of China, the State Council is tasked with defining governmental obligations at various levels in providing public educational services, improving the system on educational expenditure, and guaranteeing a stable source of growth for school funding. At the stage of non-compulsory education, educational input primarily comes from the government. At the same time, those receiving education also provide educational input. Additionally, fundraising through multiple channels is also allowed. China has constantly increased its educational investment in rural, remote and poverty-stricken areas, and regions with ethnic minorities. Through intensified transfer payment, the central government supports less-developed rural areas and regions with ethnic minorities in developing education, strengthening key areas, and addressing outstanding problems. In doing so, China has set up a multi-dimensional and dynamic system to cover China's educational needs from pre-primary education to post-graduate education.

2.3 Accreditation of Educational Qualifications

The Department of Degree Administration and Postgraduate Education (Office of the State Council Academic Degrees Committee), under the leadership of the State Council Academic Degrees Committee and the Ministry of Education, undertakes the following tasks: a) organizing the implementation of Degree Regulations for the People's Republic of China; b)

planning and supervising the nation's degree affairs and postgraduate education; c) designing and publishing the nationally unified certificate format for bachelors, masters, and doctoral degrees; d) organizing the research on student recruitment, education, assessment of degree-awarding qualification, international cooperation, and hierarchical and classified management of postgraduate education; and e) pushing forward regulation formation and system reform, to strengthen the Ministry's governing ability.

III. THE SCHOOLING SYSTEM

China adopts an educational system where education is mainly sponsored by the government, and various sectors of society are encouraged to participate in school operation. Currently, pre-primary education is directed by the government but also involves social participation from both public and private entities. Compulsory education is primarily sponsored by local governments, and tertiary education is primarily sponsored by central and provincial-level (including autonomous regions and municipalities directly under the central government) governments, in which the private sector is also encouraged to run schools through various forms. Under the supervision of the government, vocational and adult education are largely sponsored by non-governmental social bodies such as private businesses and public institutions.

3.1 Pre-primary Education

In a broad sense, pre-primary education refers to the education after the children's birth and before their entry into the primary school. Specifically, this is the education of 3 to 6-year-old pre-school children. In China, the latter definition is generally accepted. Pre-primary education is an important part of the Chinese national education system and is offered exclusively in kindergartens where the 3 to 6-year-old children will study for one, two, or three years. Kindergarten can be attended in either full-day, half-day, hourly, seasonal or boarding formats, or a combination of several different styles.

For many years, the Chinese government has put an emphasis on pre-primary education, which has seen rapid development since the adoption of China's Reform and Opening up policy. This is especially the case after the turn of the 21st century. The National Mid- and Long-term Education Reform and Development Outline (2010-2020) issued in 2010 mandates that, by the year 2020, all children should have access to at least one year of pre-school education, in most cases two years. Children in regions with proper facilities should have access to three years of pre-school. Priority is given to the education of children from birth to the age of three years old. In 2013, the gross enrolment of the 3-year pre-primary education reached 67.5 percent.

3.2 Primary and Secondary Education

The Chinese government has always placed great importance on the universalisation of basic education. The current duration of basic education is five to six years. The duration of lower secondary education and upper secondary education are three to four and two to three years respectively.

Grades 1 to 9 are designated as compulsory education. The Compulsory Education Law of the People's Republic of China was enacted in 1986 and amended in 2006. By the year 2012, China had achieved the universalisation of nine-year compulsory education on a national scale.

3.3 Higher Education

Students who have successfully finished their upper secondary school education or equivalent may enter into regular higher education, which lasts for three to four years. There are also short-term and special training programs in some institutions of higher education. In line with the innovation-oriented national development strategy, China has made great efforts in developing degree education for professional postgraduates. Since the year 2009 the professional postgraduate education has demonstrated significant growth, leading to an optimisation of the admission structure of postgraduate students.

3.4 Vocational Education

China's vocational education system consists of primary, secondary and higher vocational education, covering both vocational school education and vocational training. Primary vocational education lasts for three to four years, and aims to prepare students for careers with some basic professional knowledge and skills. The secondary level of vocational education, which is the principal part of China's vocational education, generally lasts three years and is given in secondary specialized schools, technical schools, and vocational high schools. The two to three-year higher vocational education produces professionals competent in management and various skills and techniques. Institutions that are aligned with this type of education include higher specialized colleges, vocational universities, regular two-year colleges, traditional institutions of higher education, and adult learning universities.

3.5 Education for Ethnic Minorities

Education for ethnic minorities in China refers to the education of people from any of the 55 ethnic groups other than the Han group. According to the 6th National Population Census conducted in 2010, the population of the ethnic minorities was about 114 million or 8.49 percent of the total population. The Chinese government has placed a high emphasis on the education of ethnic minorities, which is viewed as a key benchmark for the reification of ethnic equality and common prosperity. The government manifests this goal in a series of educational laws and regulations for the basic policies on the education for ethnic

minorities. These regulations include a mandate to: 1) respect and ensure the autonomous educational right of ethnic minority areas, safeguard the minorities' right to equal education, and stick to the principle of separation of education from religion; 2) organize one-on-one support programs between developed and minority areas to help with the educational development in minority areas; 3) set up executive government bodies to administer ethnic education and to train teachers; 4) provide financial support; 5) promote school-operation models and teaching methods that suit both the regional situation and the minorities' characteristics; and 6) give policy priorities to minority students with regard to their school entry, study and job-hunting. With these policies, a complete minority education system has been set up, the 9-year obligatory education has been universalized in minority areas, and illiteracy has been eliminated. Additionally, as the number of minority students and teachers for minorities continues to grow, the educational level of the population in minority areas has been steadily elevated.

3.6 Special Education

Special education in China refers to the education of the physically handicapped who, according to the Law for the Safeguard of the Disabled, suffer from a loss or a malfunction of a body tissue or function, or fully or partially lose their ability to conduct a certain activity in a normal way. This includes shaving visual or auditory impairments, limited usage of language, limbs, intelligence, or mental capacities, and various other disabilities. Education of children with autism and cerebral palsy falls

underneath the special education umbrella as well. The Constitution, Law of Obligatory Education, and Educational Regulation of the Disabled all indicate that the government avers the right of the disabled to receive education.

Children with disabilities in China can receive education in both regular schools and schools for special education. Most special education schools are those for children with vision, auditory, and/or intelligence disabilities. Schools for children with autism only recently emerged in the past decade. Special education in traditional schools includes mixed classes and special classes operating in places adjacent to regular schools. Recently, a new form of special education has appeared, Special Education at Home, which mainly serves severely disabled children who are registered at the local special education schools but unable to attend. Currently, special education in China adopts a Trinity Format whereby schools of special education that pivot mixed classes and special classes affiliated to regular schools are the mainstream, and other educational methods serve as complements.

3.7 Non-governmental Education

Non-governmental education refers to schools and other educational bodies set up by non-governmental social organisations or individuals and are operated with non-fiscal funds. Non-governmental education in China can generally be divided into two categories: 1) schools providing officially accredited formal education, pre-school education, education for self-taught examinations and other types of education; and 2)

training institutions providing technical and skills training programs. Both non-governmental education and public education are critical parts of Chinese education and contribute significantly to its development.

Non-governmental education enjoyed rapid development, as the market economy gradually took form after the introduction of the Reform and Opening Up policy. The government adopted a policy to actively encourage, strongly support, properly guide, legally supervise, and issued the Law for the Promotion of Non-government Funded Education of the People's Republic of China in 2002. Additionally, the 2010 Guideline explicitly mandates that we should strive for a configuration where the government is the principal player of non-governmental education, the entire society actively participates, and both public and non-government education may benefit from development. The Guideline demonstrates that non-governmental education of various types and levels has provided the public with a great deal of educational options and has ensured a huge supply of human resources for the Chinese social development.

IV. BASIC EDUCATION CURRICULUM

4.1 Curriculum Structure

Course offerings in primary schools are balanced and comprehensive, and the number of elective courses is on the rise. Pupils in lower grades have access to courses on morality and life, Chinese language, mathematics, physical education, and arts (e.g. music and painting), while those in higher grades have

additional access to foreign languages, outdoor activities, and physical education.

Courses in lower secondary schools include both discipline-oriented and integrated classes, focusing on ideology and morality, Chinese language, mathematics, foreign languages, sciences (e.g., physics, chemistry and biology), history and society (history and geography), physical education and health, the arts (e.g. music and painting), and outdoor activities. Schools are encouraged by the government to offer integrated courses and provide elective courses. At this stage, Chinese handwriting is given special emphasis in courses on Chinese language, the arts, and painting. Courses in upper secondary schools are still, however, primarily discipline-oriented.

Integrated Hands-on Activity (IHA) is one of the mandatory courses offered from primary through upper secondary school. This course includes studies related to Information Technology (IT), investigative study, community service, social practice, and labor and skills education. The rationale is to train, by means of practice and experiential learning, a student's explorative and innovative mindset so as to facilitate the mastery of scientific research skills and the use of knowledge in a comprehensive way. Schools are encouraged to establish a close relationship with society to cultivate a sense of social responsibility in students. IT training has been strengthened to elevate student capability and awareness in using information technology. Students are also trained to know general skills and

the classification of occupations, so that they will acquire basic technical competence.

4.2 Curriculum Administration

To ensure that the curriculum adequately caters to the needs of different areas, schools, and students, China adopts a three-level primary-school curriculum administration system. This involves administration at the, national, local and school level.

The Ministry of Education (MOE) designs overall plans for the primary school curriculum, creates the curriculum administration policies and makes decisions on course categories and academic hours. Additionally, the MOE designs national curriculum standards and tests new curriculum appraisal systems. Taking into account the national curriculum administration policies and local situation, the provincial-level educational government agencies craft a local implementation plan, design local curriculums and report to the MOE, and organize the actual implementation of the local curriculum. With the approval of the MOE, provincial-level educational government agencies are equipped to make independent curriculum plans and standards that will be applied at the local level. When implementing the national and local curriculum, schools should pay due attention to the local social and economic development level, as well as the schools' tradition and characteristics, and the students' interest and needs, in order to develop a curriculum that is best suited for the school's culture.

To guide, research, and supervise the implementation of national primary-school curriculum, the MOE has set up a center for school curriculum and textbook development, a consulting committee of experts, an executive committee, and numerous research centers at certain normal universities.

V. RECENT EDUCATION POLICIES

5.1 Deepening Curriculum Reform and Strengthening Moral Education

The goal is to build up a curriculum and textbook system that ensures a smooth transition between education stages, to cultivate talent in a way such that all the related departments are well coordinated, and to build up an education system that employs a wide range of resources in and out of school. This reform requires the establishment of a student development core-quality system, which defines the essential qualities and fundamental abilities that help students adapt well to lifelong learning and a progressing society. To complement the current curriculum standards, standards of schoolwork will be drawn up to provide better reference to the evaluation of teaching and examination. Additionally, curriculum standards system will be revised. Specifically, revision of the upper secondary school curriculum and standards will begin in the near future, course and teaching outlines for secondary vocational schools will be made or revised, and research and suggestions will be made on the compilation, revision, and use of university textbooks.

5.2 Improvement of School Facilities and Conditions of Compulsory Education in Poverty-Stricken Areas

This policy sets explicit goals for full-scale improvement of school facilities and conditions for compulsory education in poverty-stricken areas. It mandates the financial commitment of local governments for the 2014-2018 work schedule and route map. In 2014, investment by the central government totaled 49.2 billion Chinese Yuan, of which 31 billion was spent on the improvement plan, including 5 billion spent on the Lower Secondary School Project, and 13.24 billion earmarked for classroom maintenance and redecoration of primary and secondary schools.

5.3 State Council Guidelines on Pre-primary Education 2010

The Guidelines recognize the important position of pre-primary education and its current status as a weak link in the educational system. The Guidelines require that pre-primary education in China should be public, non-profit and generally beneficial, and the country should strive to set up a well-configured and well-balanced public pre-primary education system covering both urban and rural areas. To this end, China should stick to a system where the government is the principal player, all of society participates, and both public and non-government education are encouraged to take part. China needs to implement a variety of methods to enrich the pre-primary educational resources, multiply the investment channels, strengthen the security supervision of kindergartens,

optimize the administration system, and organize the implementation of concrete measures such as the Three-year Action Plan of pre-primary education.

5.4 National Project on the Growth of Children in Impoverished Areas (2014-2020)

The Project is aimed at using a variety of interventions to improve rural child health and education from birth until the end of compulsory education in the 680 poverty-stricken counties. Doing so would allow the formation of a safety net to ensure growth of children in poverty-stricken areas, with the goal of having the overall child development in the poverty-stricken areas approach or reach the national average level by 2020. The key priority areas are child health and education, while taking into account child welfare and safety. Consequently, the five primary tasks that this project is undertaking include: 1) focusing on the health of newborn infants; 2) child nutrition; 3) child medical care; 4) childhood education accessibility; 5) and education and care of children with special difficulties. These tasks would enable working towards a complete policy system with which children in poverty-stricken areas will be cared for during all development stages, in all aspects of their daily life, and by all the relevant social agencies.

5.5 The Reform of Examination and Enrolment System

The overall direction of China's education reform is to set up a modernized, fair and scientific examination and enrolment

system with Chinese characteristics. This involves focusing on the following four major aspects: 1) an enrolment quota allocation method; 2) form and content of examinations; 3) a recruitment and admission mechanism; 4) and a supervision and administration system by 2020. Prior to implementing this enrolment system, pilot comprehensive reforms of the university entrance examination, will be initiated. This reform will be one of the most important and most challenging reforms in the educational field, as well as the most inclusive and systematic in recent decades.

5.6 Building a Modern Vocational Education System

By 2020, a modern vocational education system will take form and the role of vocational education in the overall national education system will be strengthened. The policy explicitly acknowledges 12 tasks as central tenants of the reform, including the optimisation of the industrial layout of vocational education service, the balancing of vocational education development in different regions and pushing forward the development of non-governmental vocational education.

The vocational education system will embody the philosophy of lifelong education, respond to the needs of social development, and integrate with industry, covering both secondary and higher vocational education. Additionally, more connections will be created between vocational education and regular education. A number of regular universities will be transformed into universities focusing on applied technology. In the process, the market mechanism shall play its due role.

5.7 Developing a Modern University System with Chinese Characteristics

Included in this university system are university constitutions, university academic committees, and university management councils. The constitution of a university will outline the basic requirements and principles for running a university autonomously and lawfully, and for university management and community services. Through this university system, regulations on academic committees and management councils will specify fundamental issues such as membership, responsibilities, and a code of conduct. Moreover, it will be required for universities and colleges to abide by the regulations of the Modern University System, improve their legal-person management structure and internal management system, governance by law, and strive to work towards scientific development.

5.8 Elevation Plan for Special Education 2014-2016

The plan has been designed to push forward an all-inclusive education, giving every physically handicapped child a chance to receive proper education. The goal is outlined in a three-year effort, which provides the basis for a system of special education that has optimal configuration, ensures a smooth transition between academic stages, connects regular and vocational education, and emphasizes medical treatment as well as academic education. At the end of the three-year period, the state of educational facilities and the quality of education will have improved.

This special education system is primarily funded by the government and supported by the society with the goals to achieve full coverage and run smoothly. By 2016, compulsory education for handicapped children will be widely universalized. With this universalisation, it is expected that the gross enrolment ratio of compulsory education of children with hearing, visual, and intellectual disabilities will rise to over 90 percent, and that education opportunities for children with other kinds of disabilities will remarkably increase as well. After the implementation of the plan, many provincial-level governments proclaimed their implementation measures.

ANNEX: KEY INDICATORS AND STATISTICS

Table 10A.1 Number of Schools by Level and Type

Number	2013	2012	2011	2010	2009	2008
Pre-school Education Institutions	198,553	181,251	166,750	150,420	138,209	133,722
Regular Primary Schools	213,529	228,585	241,249	257,410	280,184	300,854
Lower Secondary Schools	52,804	53,216	54,117	54,890	56,320	57,914
Regular Lower Secondary Schools	52,764	53,167	54,063	54,823	56,167	57,701
Vocational Lower Secondary Schools	40	49	54	67	153	213
Upper Secondary Education	26,225	26,868	27,638	28,584	29,761	30,806
Regular Upper Secondary Schools	13,352	13,509	13,688	14,058	14,607	15,206
Adult High Schools	611	696	857	654	753	753
Secondary Vocational Education	12,262	12,663	13,093	13,872	14,401	14,847
Regular HEIs	2,491	2,442	2,409	2,358	2,305	2,263
HEIs Offering Degree Programs	1,079	1,090	1,112	1,129	1,145	1,170
Higher Vocational Colleges	1,184	1,215	1,246	1,280	1,297	1,321
Institutions Providing Postgraduate Programs	830	811	755	797	796	796
Regular HEIs	548	534	481	481	481	479

Research Institutes	282	277	274	316	315	317
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Source: National Statistic Bureau, <http://data.stats.gov.cn/english/easyquery.htm?cn=C01>

Table 10A.2 Total Enrolment in Number of Students by Level and by Type

	2013	2012	2011	2010	2009	2008
Pre-Primary Education (aged 3-5)	67.5	64.5	62.3	56.6	50.9	47.3
Primary Education (According to Provincial Entrant Age Primary Schools Years)	104.4	104.3	104.2	104.6	104.8	105.7
Lower Secondary Education (aged 12-14)	104.1	102.1	100.1	100.1	99.0	98.5
Upper Secondary Education (aged 15-17)	86.0	85.0	84.0	82.5	79.2	74.0
Higher Education (aged 18-22)	34.5	30.0	26.9	26.5	24.2	23.3

Source: National Education Development Statistics Bulletin: http://old.moe.gov.cn/publicfiles/business/htmlfiles/moe/moe_335/index.html

Table 10A.3 Gross Enrolment Ratio of Education by level

	2013	2012	2011	2010	2009	2008
Pre-school Education	38,946,903	36,857,624	34,244,456	29,766,695	26,578,141	24,749,600
Regular Primary Schools	93,605,478	96,959,000	99,263,674	99,407,043	100,714,661	103,315,122
Junior Secondary Schools	44,390,681	47,630,607	50,642,058	52,759,127	54,336,420	55,741,542
Senior Secondary Education	43,699,228	45,952,782	46,866,060	46,773,297	46,409,122	45,760,735
Regular Senior Secondary Schools	24,358,817	24,671,700	24,548,227	24,273,351	24,342,783	24,762,842
Adult Senior Secondary Schools	110705	144199	264,533	114,970	114,676	127,020

Vocational Education	Secondary	19,229,700	21,137,000	22,053,300	22,384,976	21,951,700	20,870,900
Higher Education		34,600,000	33,250,000	31,670,000	31,050,000	29,790,000	29,070,000
Regular and College Students	Undergraduates	24,680,726	23,913,155	23,085,078	22,317,929	21,446,570	20,210,249
Regular Undergraduate Courses	Full	14,944,353	14,270,888	13,496,577	12,656,132	11,798,511	11,042,207
Regular Courses	Specialized	9,736,373	9,642,267	9,588,501	9,661,797	9,648,059	9,168,042
Postgraduates students		1,793,953	1,719,818	1,645,845	1,538,416	1,404,942	1,283,046
Postgraduate (Master's Degree)	students	1,495,670	1,436,008	1,374,584	1,279,466	1,158,623	1,046,429
Doctor's Degree		298,283	283,810	271,261	258,950	246,319	236,617

Source: China Education Statistics Almanac

**Table 10A.4 Number of Full-time Teachers of schools
(millions)**

Indicators	2013	2012	2011	2010	2009	2008
Pre-school Education	1.66	1.48	1.32	1.14	0.99	0.90
Regular Primary Schools	5.58	5.59	5.60	5.62	5.63	5.62
Regular Lower Secondary Schools	3.48	3.50	3.52	3.52	3.51	3.47
Regular Upper Secondary Schools	1.63	1.60	1.56	1.52	1.49	1.48
Vocational Upper Secondary Schools	0.87	0.88	0.88	0.87	0.87	0.90
Regular Institutions of Higher Education	1.50	1.44	<u>1.39</u>	<u>1.34</u>	<u>1.30</u>	<u>1.24</u>

Source: Database of National Statistical Bureau:
<http://data.stats.gov.cn/english/easyquery.htm?cn=C01>

Table 10A.5 Student-Teacher Ratio by Level of Regular Education

Indicators	2013	2012	2011	2010	2009	2008
Primary Education	16.76	17.36	17.71	17.70	17.88	18.38
Lower Secondary Education	12.76	13.59	14.38	14.98	15.47	16.07
Regular Upper Secondary Education	14.95	15.47	15.77	15.99	16.30	16.78
Regular Institutions of Higher Education*	17.53	17.52	17.42	17.33	17.27	17.23

*Note: Of the student-teacher ratio of regular institution of higher education, full-time teachers include those from other schools.

Source: Database of National Statistical Bureau:
<http://data.stats.gov.cn/english/easyquery.htm?cn=C01>

**Table 10A.6 Education Expenditure in Chinese Yuan
(CNY)**

	2013	2012	2011	2010	2009	2008
National Educational Budget (trillions) (CNY).	3.036472	2.769597	2.386929	1.956185	1.650271	1.450074
National Fiscal Education Budget (trillions) (CNY).	2.446034	2.223623	1.85867	1.467007	1.223109	1.044963
Public fiscal education spending as a percentage of public fiscal spending (%).	15.27	16.13	14.78	15.76	15.69	16.32
National fiscal education expenditure as a percentage of GDP.	4.30	4.28	3.93	3.65	3.59	3.33
Budgetary per student concurrent expenditure of regular primary schools (CNY).	6,901.77	6,128.99	4,966.04	4,012.51	3,357.92	2,757.53
Budgetary per student concurrent expenditure of regular lower secondary schools (CNY).	9,258.37	8,137	5,999.6	5,213.91	4,331.62	3,543.25
Budgetary per student concurrent expenditure of regular upper secondary schools (CNY).	8,448.14	7,775.94	5,999.6	4,509.54	3,757.6	3,208.84
Budgetary per student concurrent expenditure of secondary vocational schools (CNY).	8,784.64	7,563.95	6,148.28	4,842.45	4,262.52	3,811.34
Budgetary per student concurrent expenditure of regular institutions of higher education (CNY).	15,591.72	16,367.21	13,877.53	9,589.73	8,542.3	7,577.71

Source: National Education Expenditure Spending Statistical Bulletin: http://old.moe.gov.cn/publicfiles/business/htmlfiles/moe/moe_83/index.html

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APPENDIX



National Institute of Education Sciences (NIES)

Established in 1957, the National Institute of Education Sciences (NIES) is a research branch of the Ministry of Education, the People's Republic of China, and the only national-level comprehensive education research institution in China. The predecessor of the NIES, the Education Research Division of the Central Research Institute was founded in 1941. For over 70 years since its original establishment, the NIES has strived to contribute to education reform and development in China by advising on policy-making processes, advancing theoretical innovation and guiding local practice.

Now the institute employs 236 staff, including 153 researchers engaged in research on education policy, basic education, curriculum and pedagogy, teacher development, education inspection and evaluation, physical, health and arts education, higher education, psychology and special education, etc.

The NIES hosts the Secretariat of the National Education Planning Learning Group that plans and administers all the national level educational research projects, with over 400 projects endorsed each year of 45 million Chinese Yuan in total.

The NIES publishes nine journals and one newspaper, among which, Education Research is regarded as the topnotch journal in the field of education research in China. The Education Sciences Publishing House, known as the “flagship education publisher” in China, is affiliated with the NIES.

In recent years, the NIES has developed partnerships with sixteen district authorities located in the north, east, west, south and middle parts of China, which the NIES provide with advisory and informative assistance for their education reform experimentation.



ASEAN-China Centre

According to MOU on Establishing ACC signed by the Governments of ASEAN Member States and the Government of the People's Republic of China, ACC is an inter-governmental organisation, a one-stop information and activities centre to promote ASEAN-China cooperation in trade, investment, education, culture and tourism. ACC headquarters is located in Beijing, with affiliated centres being set up in ASEAN Member States as well as other parts of China in future. The 10 ASEAN Member States and China are ACC Members. Ventures and organisations from ASEAN Member States and China can apply, through ACC Secretariat, to become Associates of ACC.

ACC is governed by three bodies: The Joint Council as the policy-making body, the Joint Executive Board as the advisory body, and the Secretariat as the operating body. Executing body of the Centre, composed of a Secretary-General as its chief executive and four divisions, including General Affairs and Coordination Division, Trade and Investment Division, Education Culture and Tourism Division, and Information and Public Relations Division.



Southeast Asian Ministers of Education Organization (SEAMEO)

The Southeast Asian Ministers of Education Organization (SEAMEO) is a regional intergovernmental organization established in 1965 among governments of Southeast Asian countries to promote regional cooperation in education, science and culture in the region.

As an organization that has continued to nurture human capacities and explored the peoples' fullest potential, the SEAMEO maintains its work and aspirations for development with peoples of the region to make lives better in quality and equity in education, preventive health education, culture and tradition, information and communication technology, languages, poverty alleviation and agriculture and natural resources.

The organisation's highest policy-making body is the SEAMEO Council, which comprises the 11 Southeast Asian education ministers. The SEAMEO Secretariat is located in Bangkok, Thailand.

National Institute of Education Sciences of China

ASEAN-China Center

Southeast Asian Ministers of Education Organization