EDUCATION IN THAILAND 2005/2006

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KINGDOM OF THAILAND

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Preface

The Office of the Education Council, Ministry of Education, takes great pleasure in presenting this national report on educational development, Education in Thailand 2005/2006. The report will also be made available at http//www.onec.go.th.

The publication provides general information on Thailand's education system relating to the government and administrative structure, administration and management, and standards and quality assurance. It also summarises related aspects of educational reform, ranging from policies to international education and international cooperation on education. It is hoped that the information provided will foster a comprehensive understanding of educational development in Thailand and promote international cooperation and exchange in education.

The Office of the Education Council would like to extend its appreciation to the advisors to this report for their valuable suggestions and comments, and to those agencies that provided information about their work, among them, the Bureau of International Cooperation in the Office of the Permanent Secretary, the Office of the Basic Education Commission, the Office of the Vocational Education Commission, and the Office of the Higher Education Commission. We look forward to their continued cooperation in the years to come.

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Amrung Chantavanich, Ph.D.
Secretary - General
The Education Council

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Chapter 1
General Information on Education

The background information on education in this chapter focuses on government and administrative structure, educational administration and management, the education system and educational standards, and quality assurance.

1.1 Government and Administrative Structure

The provisions relating to constitutional government and monarchy laid down in the 1932 Constitution specified three basic concepts regarding the governmental structure of Thailand.

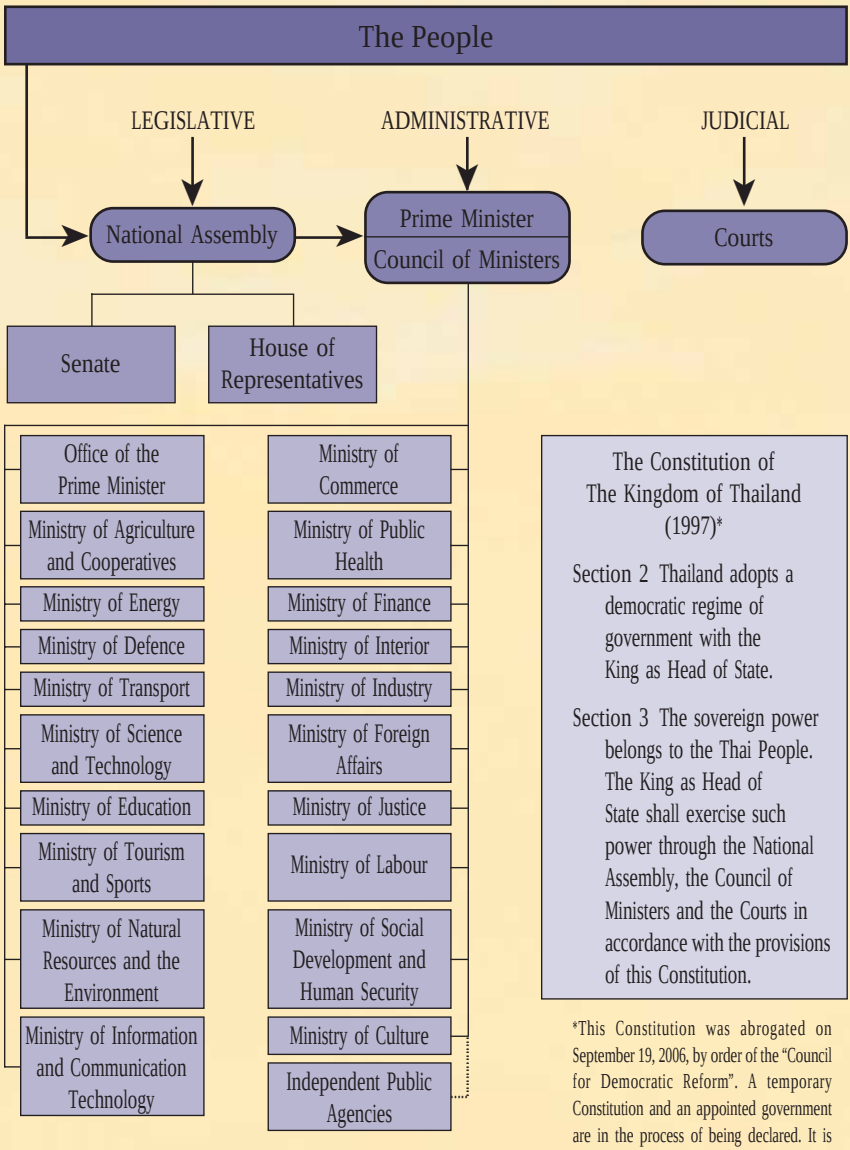
- First, the monarch is regarded as Head of State, Head of the Armed Forces and Upholder of the Buddhist Religion and all other religions.
- Second, a bicameral National Assembly, which is comprised of Members of Parliament and Members of the Senate, administers the legislative branch.
- Third, the Prime Minister, as head of the government and chief executive, oversees the executive branch, including the Council of Ministers, which is responsible for the administration of 19 ministries and the Office of the Prime Minister.

Figure 1.1 presents the organisational structure of the Royal Thai Government following reform of the bureaucratic system in 2002. Six new ministries were established:

1) Ministry of Energy;
2) Ministry of Tourism and Sports;
3) Ministry of Natural Resources and the Environment;
4) Ministry of Information and Communications Technology;
5) Ministry of Social Development and Human Security; and
6) Ministry of Culture.

Within the Ministry of Education, three departments previously under its supervision prior to the bureaucratic reform are now under the supervision of newly established ministries. The Department of Physical Education was moved to the Ministry of Tourism and Sports. The former Office of the National Culture Commission has been upgraded to the Ministry of Culture. At present, religious affairs are under the auspices of two agencies, the Department of Religious Affairs under the *aegis* of the Ministry of Culture, and the Office of National Buddhism, an independent public agency directly under the Prime Minister.

Figure 1.1 Organisation of the Royal Thai Government



The Constitution of The Kingdom of Thailand (1997)*

Section 2 Thailand adopts a democratic regime of government with the King as Head of State.

Section 3 The sovereign power belongs to the Thai People. The King as Head of State shall exercise such power through the National Assembly, the Council of Ministers and the Courts in accordance with the provisions of this Constitution.

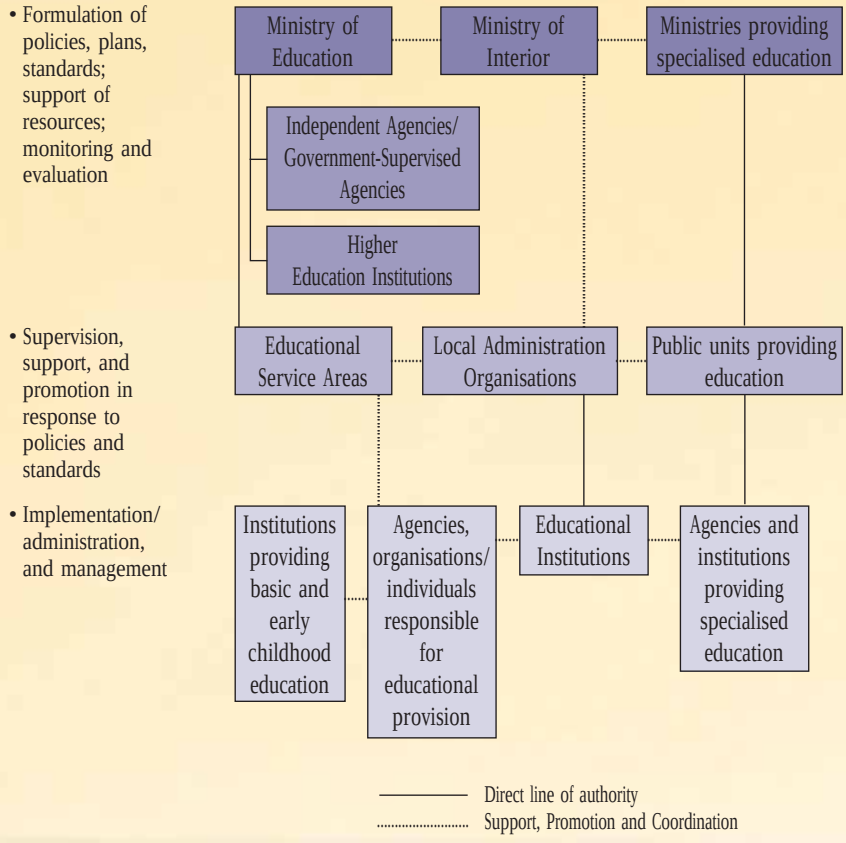
*This Constitution was abrogated on September 19, 2006, by order of the "Council for Democratic Reform". A temporary Constitution and an appointed government are in the process of being declared. It is expected that a new Constitution and an elected government will be in place in 2007.

1.2 Educational Administration and Management

Carried out in accordance with the 1999 National Education Act and the 2002 Bureaucratic Reform Bill, the major reform of educational administration and management has been the merging of 3 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. However, local education administration is under the supervision of the Ministry of Interior. In addition, other ministries undertake management of education in specialised fields or for specific purposes. *(Figure 1.2)*

Figure 1.2 Educational Administration and Management Structure



Conducted by the state, local administration organisations, and the private sector, educational administration and management in Thailand is thus classified into 3 categories:

1.2.1 Administration and Management of Education by the State

Education in Thailand is administered and managed by the government through central agencies, through educational service areas, and by educational institutions.

1. Administration at the Central Level

In accordance with the amendments of the National Education Act, the Ministry of Education is responsible for:

1) promoting and overseeing all levels and types of education;

2) formulating policies, plans and standards;

3) mobilising resources for education;

4) promoting and co-ordinating religious affairs, arts, culture, and sports relating to education; and

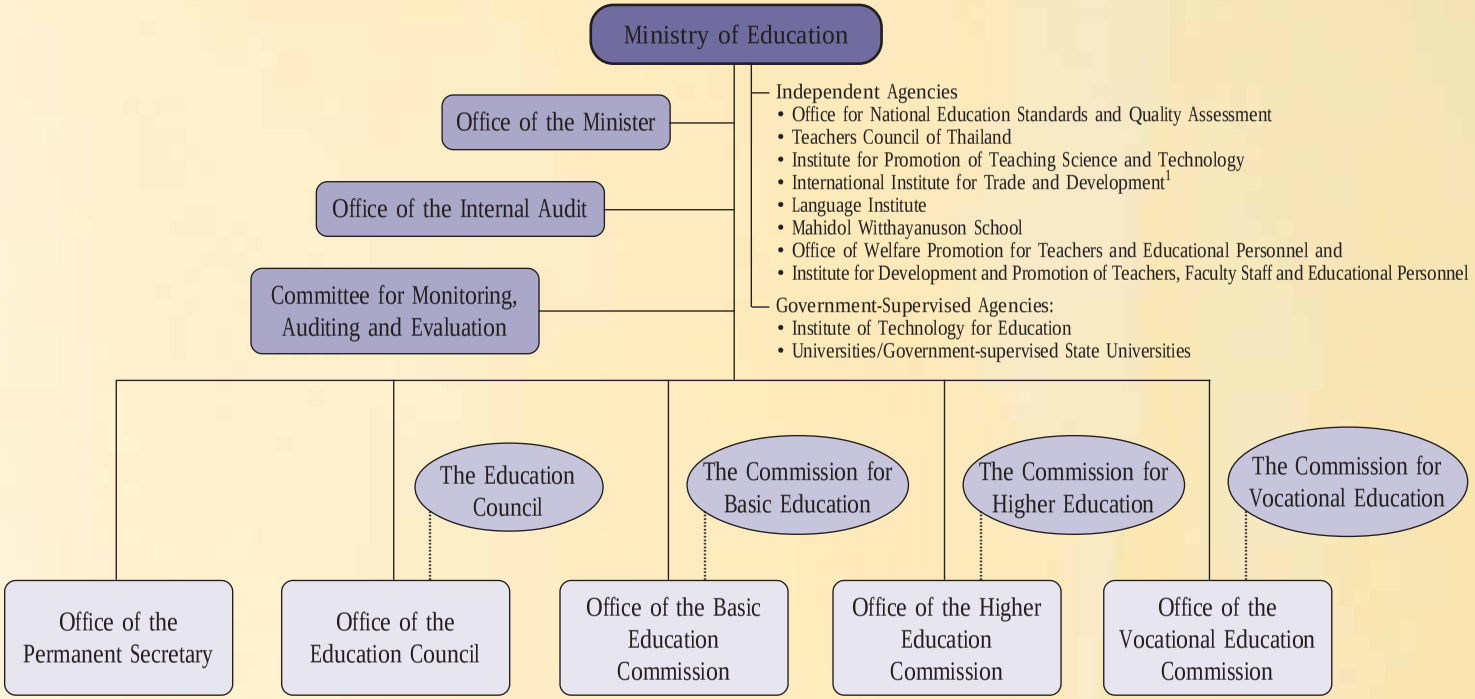
5) monitoring, inspecting and evaluating educational provision.

Administration and management at the central level is under the responsibility of five main bodies:

- the Office of the Permanent Secretary;
- the Office of the Education Council;
- the Office of the Basic Education Commission;
- the Office of the Vocational Education Commission; and
- the Office of the Higher Education Commission.

At the moment, the administrative structure at the central level is organised as presented in Figure 1.3.

Figure 1.3 Organisation of the Ministry of Education at Central Level



[1] Operating as a regional training centre, the International Institute for Trade and Development was established by the Royal Thai Government and UNCTAD as a non-profit and independent organisation.

——— direct line of authority

..... indirect line of authority

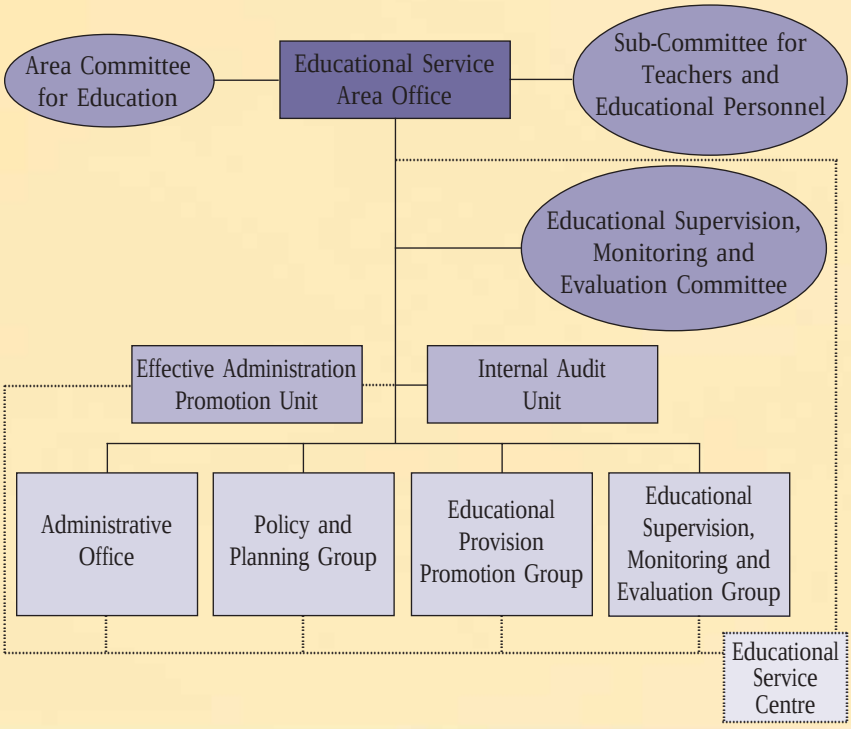
2. Administration in Educational Service Areas

In conformity with the requirement to decentralise authority for educational administration, the Office of the Basic Education Commission has established 175 educational service areas in 76 provinces, with 172 areas in the provinces and the remaining 3 in Bangkok. Each educational service area comprises an Area Committee for Education, with its office responsible for approximately 200 educational institutions and a student population of 300,000 to 500,000.

An evaluation by the Ministry of Education found that 81 of the 175 educational service areas are able to provide satisfactory services, 64 are nearly ready to provide services, 24 still require assistance and 2 need further improvement.

The current organisation of administration in educational service areas is shown in Figure 1.4.

Figure 1.4 Organisation of Administration in Educational Service Areas



3. Administration in Educational Institutions

Educational administration and management in educational institutions can be divided into two categories:

1) Basic Education

Following the decentralisation of authority carried out by the Ministry of Education, administration and management relating to academic matters, budgets, personnel, and general affairs are now the responsibility of the institutions themselves. Oversight is through a 7-15 member board consisting of representatives of parents, teachers, community groups, local administration organisations, alumni, and academicians.

2) Higher Education

To improve the quality of higher education, state universities are moving toward transformation to state-supervised institutions that function as legal entities. Such a structure will enable each institution to develop its own administration and management system with greater flexibility and academic freedom under the supervision of the institutional council empowered by its own Act.

1.2.2 Administration and Management of Education by Local Administration Organisations

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.

1.2.3 Administration and Management of Education by the Private Sector

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 proprietorial schools, with a few prestigious institutions managed by Christian denominations.

1.3 The Education System

Under the present education system, various types and methods of learning are offered to 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 centres organised by individuals, families, communities, community or private groups, local administration organisations, professional bodies, religious institutions, welfare institutes; and other social institutions.

1.3.1 Formal Education

Formal education services are mainly provided to those within the school system, and are divided into basic and higher education.

1. Basic Education

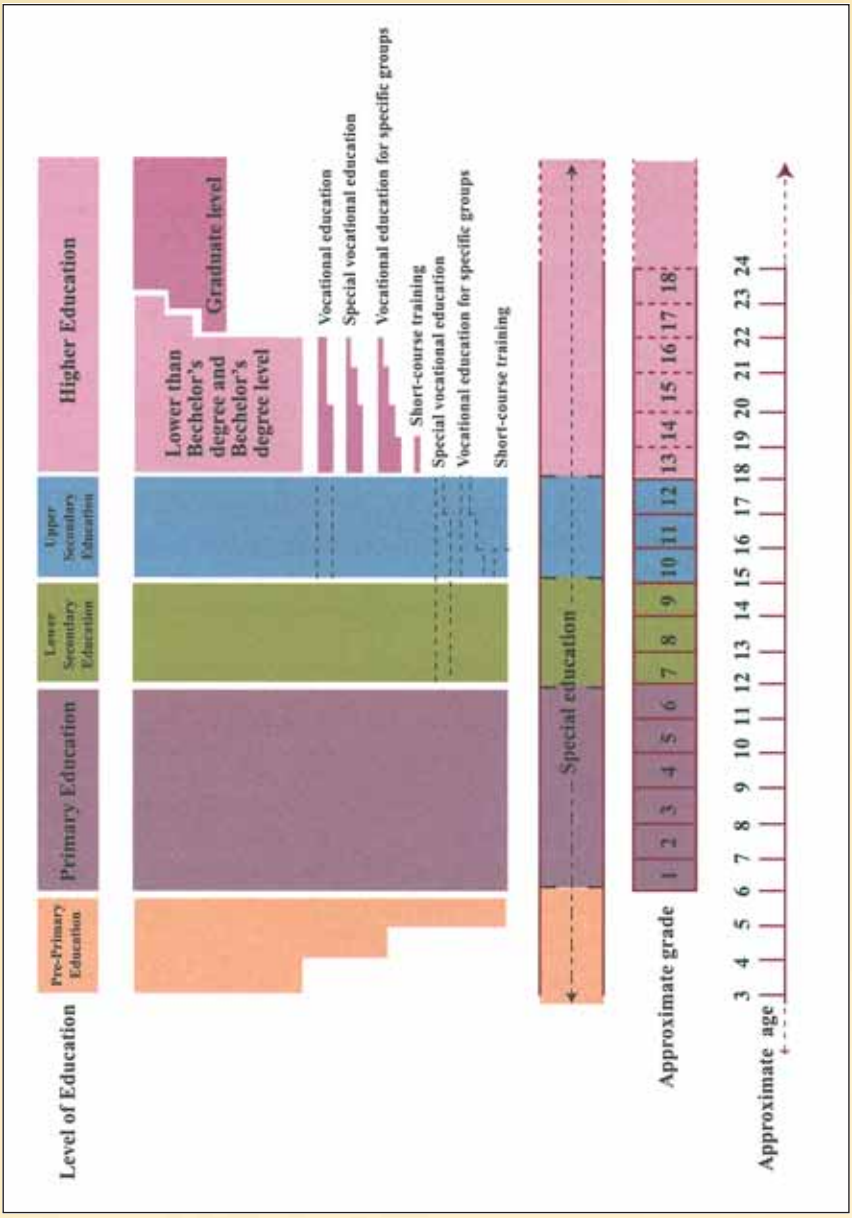
Basic education is provided by early childhood development institutions, schools, and learning centres, and covers pre-primary education, 6 years of primary, 3 years of lower secondary, and 3 years of upper secondary education. The current compulsory education requirement covers 6 years of primary and 3 years of lower secondary education. Children are expected to be enrolled in basic education institutions from age 7 through the age of 16, except for those who have already completed Grade 9.

2. Higher Education

Higher education at the diploma, associate, and degree levels is provided in universities, institutes, colleges, and other types of institutions.

Organisation of the present school system is shown graphically in Figure 1.5:

Figure 1.5 Organisation of the Present School System



1.3.2 Non-Formal Education

Non-formal education services are provided by both public and private bodies. Services provided by the Office of the Non-formal Education Commission targets primarily those outside the school system, *i.e.* infants and pre-school children, the school-age population who have missed out on formal schooling, and the over-school-age population. Currently, services have been expanded to cover specific target groups, including prison inmates, the labor force, the disabled, conscripts, agriculturists, the aged, Hill Tribes people, local leaders, slum dwellers, Thai Muslims, religious practitioners, those having no opportunity to further their studies in formal schooling after compulsory education, Thai people in foreign countries, and other special groups, as well as students in the formal school system.

1.3.3 Informal Education

Informal education enables learners to learn independently in line with their interests, potential, readiness, and the opportunities available from individuals, society, environment, the media and other sources of knowledge.

1.4 Transfer of Learning Outcomes

The 1999 National Education Act acknowledges the importance of all types of education. Relevant agencies and educational institutions are therefore working to create links between formal, non-formal, and informal education approaches to increase access to and enable the transfer of learning outcomes to and from all types of education so that credits can be accumulated and transferred within the same type or between different types of education approaches; and to accredit learning acquired not only from non-formal or informal education approaches, but from vocational training or from work experience as well.

1.5 Educational Standards and Quality Assurance

The purpose of establishing educational standards is to specify certain qualities in the provision of education, such as desired learner attributes, curriculum, and teaching-learning processes. To ensure quality, institutions are expected to develop excellence within the domain of their regular activities and administrative tasks, whereby it is anticipated that educational quality will flourish.

Improvement of quality will be beneficial to direct recipients of the service, including students and parents, as well as indirect recipients, such as employers, individuals, and society as a whole. To ensure improvement in the quality of education at all levels and of all types, two major tasks that need to be accomplished are the development of educational standards and the development of a quality assurance system.

1.5.1 Development of Educational Standards

There are currently three types of standards: national education standards, and standards for internal quality assurance and for external quality assessment.

1. National Education Standards

As specified in the 1999 National Education Act, the Office of the Education Council is responsible for proposing national education standards. Consequently, sets of standards were formulated by the Office in cooperation with the offices responsible for basic, vocational, and higher education as well as the Office for National Education Standards and Quality

Assessment. With approval from the Council of Ministers on October 26, 2004, agencies providing education at all levels are expected to abide by the national education standards, which are comprised of three categories:

I. Desirable characteristics of the Thai people, as both citizens of the country and members of the world community, consist of 5 indicators:

1) sound physical and mental health;

2) required knowledge and skills sufficient for leading a meaningful life and social development;

3) skills in learning and self-adjustment;

4) social skills; and

5) righteousness, public-mindedness, and consciousness of their citizenship of Thailand and the world.

II. Guidelines for educational provision consist of 3 indicators:

1) development of a diversified curricula and ambiance enabling learners to develop themselves in line with their natural inclinations and to the best of their potential; and

2) systematic and effective development of administrators, teachers, faculty staff and education personnel; and

3) practice of school-based management.

III. Guidelines for creating a learning society/knowledge society consist of 3 indicators:

1) provision of academic services and establishment of cooperation between educational institutions and community so as to transform educational institutions into a learning society/knowledge society;

2) research and study, promotion of and support for learning sources and mechanisms; and

3) generation and management of knowledge for the benefit of all levels and components of the society.

At the moment, all agencies concerned have made some progress in the development of relevant educational standards. For example,

learning standards for basic education have been formulated to respond to the 2001 curriculum. In addition, the Committee for Development of a System to Evaluate Higher Education Quality has appointed a sub-Committee to develop and set national standards for higher education.

The national education standards also serve as the basis for setting assessment standards of internal and external quality assurance mechanisms.

2. Internal Quality Assurance

Educational institutions follow guidelines for internal quality assurance standards developed by their supervising agencies.

3. External Quality Assessment

The Office for National Education Standards and Quality Assessment, established as a public organisation in November 2000 to oversee external quality assessment, conducts assessments of both basic and higher education institutions following standards relating to educational achievement (output/outcome); input/processes; and efficiency in administration and leadership.

1) Standards for External Quality Assessment at the Basic Education Level

14 standards and 49 indicators have been developed for external quality assessment of institutions providing pre-primary level education. Assessment at other levels is accomplished through the application of 14 standards and 68 indicators that relate to learners, processes, and inputs.

2) Standards for External Quality Assessment at the Higher Education Level

7 standards for external quality assessment of higher education institutions relate to: (1) Quality of Graduates; (2) Research and Innovation; (3) Academic Services; (4) Preservation of Arts and Culture; (5) Institutional and Personnel Development; (6) Curriculum, Teaching and Learning; and (7) Internal Quality Assurance.

1.5.2 Development of a Quality Assurance System

There are three main issues relating to the development of a quality assurance system: formulation of the system, criteria, and methods for quality assurance; internal quality assurance; and external quality assessment.

1. Formulation of the System, Criteria, and Methods for Quality Assurance

In 2003, the Ministry of Education announced relevant ministerial regulations for the system, criteria, and methods for internal quality assurance of basic and higher education institutions.

2. Internal Quality Assurance

To serve as a basis for external quality assessment, all educational institutions are required to implement an internal quality assurance system comprised of control, audit, and assessment. In support of this effort, a number of activities have been carried out, including: developing personnel; implementing pilot projects; providing financial support; conducting, monitoring, and advisory tasks; and disseminating documents, media and equipment.

3. External Quality Assessment

External quality assessment of all educational institutions is conducted at least once every five years, with outcomes submitted to the relevant agency and made available to the general public. In conducting these assessments, the Office for National Education Standards and Quality Assessment employs the "Amicable Assessment Model", utilising external assessors under contract. Qualified persons from private, professional or academic organisations are selected and trained as external assessors with certification based upon their competency for accreditation and registration. Once certified, their performance is evaluated periodically.

External quality assessment is conducted in both vocational and higher education institutions through the inspection of annual reports and reports from internal quality assurance procedures. External assessors review documents and data and make on-site visits to the institutions in accordance with the assessment process. Successful evaluation leads to certification of quality and standards.

Within the first round of external quality assessment (2001-2005), 36,595 institutions were covered, more than the number previously planned (36,272 institutions). Of these, 35,570 were basic education institutions, 765 vocational education institutions and 260 higher education institutions. In 2006, the first year of the second round of assessment (2006-2010), external quality assessment will be conducted in 8,956 institutions.

The major aspiration in educational reform in Thailand is to provide quality education for all as a means to develop Thai people in all aspects. In this regard, participation from all stakeholders and support from government policy on education are the key success factors in pushing forward educational reform.

Chapter 2
New Education Policies

The Ministry of Education has declared 2006 as the Year of Teaching-Learning Reform to accelerate Thailand's transformation into a lifelong learning society, and to strengthen the capacities of its citizens in analytical thinking, and self- learning, and to instill high moral values. In response to these goals, studies have been conducted on learning innovation; brain-based learning; provision of education for gifted children and youth, models for inculcation of moral and ethical values, integration of research into the learning process, and research and development studies of learner-centred models. These and other new focuses are being incorporated into Thailand's current educational provision, as represented in the government policy on education, and the roadmap and measures for expediting educational reform.

2.1 Government Policy on Education

The 15-year National Education Plan (2002 to 2016) centres on the integration of all aspects of the quality of life, including comprehensive and balanced human development, and the forging of a society of morality, wisdom, and learning. Further details of this plan are available in "Education in Thailand 2004".

The Thai Government supports educational reform with the aim of developing a knowledge-based society as a pre-requisite for a knowledge-based economy. The reform activities are aimed at providing equal access to lifelong education and training, enabling citizens to acquire knowledge as assets to generate production and income. Towards this end, the government adheres to the principle that "Education Builds the Nation, Empowers the Individual, and Generates Employment."

Government education policy is integrated with the overall policy on social development and is called, *"Policy on Quality Human and Societal Development: Building a Lifelong Learning Society".* The 4-year Bureaucratic Administration Plan (2005-2008), also emphasises improvement of the country's human resources in terms of knowledge, morality and ethics, as well as readiness to respond to the measures required to ensure the nation's development and competitiveness.

A number of strategic goals and implementation strategies have been set out to achieve the desired aims.

Strategic Goals:

1. Human development with a focus on knowledge, happiness, health, a loving family, a pleasant environment, and a peaceful and caring society; and
2. Movement toward a knowledge-based society by placing people at the centre of learning and focusing on human worth, potential, competitiveness, morality and ethics.

Strategies:

1. Expedite the reform of education and the teaching-learning process;
2. Create a supportive environment for formal, non-formal, and informal education;
3. Encourage the development of, and increase access to, lifelong learning opportunities through various systems and approaches;
4. Increase labour productivity through networking between the public and private sectors by focusing on necessary skills and modern technology; and

5. Develop systematic cooperation through networking among the public sector, private sector, and educational institutions to accelerate the creation and development of a workforce consistent with the country's needs, and to increase the country's competitiveness.

2.2 Roadmap and Measures for Expediting Educational Reform

Based on the government policy, the strategies for educational reform, the on-going strategies of the Ministry of Education, and relevant studies, a policy and roadmap was issued for the functioning of the Ministry. In addition, the views and recommendations of educational service areas, educational institutions, specialists in the various disciplines, as well as parents and students themselves were also taken into account.

The main areas of reform are concerned with the development of pre-primary, vocational, non-formal, informal, and higher education, as well as with improvements in the basic education curriculum, the teaching-learning process, and professional development of teachers and education personnel throughout the system.

1. Development of Pre-primary Education;

With a view toward developing those in early childhood in a manner consistent with their age, as well as instilling a curiosity to learn from all around them, development of pre-primary education focuses on:

1.1 providing learning that stimulates various aspects of development, including brain-based learning;

1.2 formulating principles and standards for educational provision and necessary mechanisms for close monitoring and effective support; and

1.3 strengthening the role of the family, and providing relevant knowledge to parents, guardians, and others who would undertake parental roles.

2. Reform of the Basic Education Curriculum and the Teaching-Learning Process

To encompass all aspects of learner development, *i.e.* acquisition of general and life skills along with academic achievements, the basic education curriculum and teaching-learning process emphasises:

2.1 greater effectiveness and efficiency in the development of curriculum, textbooks, educational media, assessment, and evaluation of educational achievement;

2.2 improvement of language teaching and learning, with an emphasis on Thai, English, and Chinese languages, and stressing communication skills in real life situations, careers, and further education;

2.3 improvement in the teaching and learning of mathematics and science, as well as computer science, to ensure a sound basis in science and technology and systematic support for talented learners;

2.4 improvement in the quality of teaching and learning in small schools; and

2.5 establishment of a research and development centre for curriculum and learning.

3. Development of Teachers and Education Personnel

With a view toward enabling teachers to improve their ability in organising teaching and learning activities consistent with curriculum standards, as well as to attain professional security, the development programmes of teachers and education personnel will emphasise:

3.1 a paradigm shift in teacher development through the linkage between assessment of the teacher's professional competency and the learner's achievement;

3.2 reduction in teacher workload;

3.3 distribution of academic vouchers to teachers for professional development;

3.4 establishment of an Institute for the Development of Teachers and Education Personnel;

3.5 development of a new teacher education curriculum that provides a variety of options, including continuation courses that aim at increasing qualifications of in-service teachers;

3.6 provision of concrete solutions to problems arising from the shortage of basic education teachers;

3.7 alleviation of problems resulting from teacher indebtedness; and

3.8 the issuance of organic laws required under the Administrative Procedures for Teachers and Education Personnel Act of 2004.

4. Reform of Vocational Education

Reform of vocational education focuses on encouraging close collaboration between educational institutions and the production and service sectors, to ensure the development of manpower with the necessary skills required for employment and/or entrepreneurship, as well to meet the demand for higher competencies increasingly required by industry. These aims will be achieved through:

4.1 organisation of a support system to improve the capacity of all vocational education institutions to provide a good education, and creation of a desirable image and concrete contribution to the society;

4.2 clarification of the roles and responsibilities of different categories of vocational education institutions; introduction and expansion of courses in areas consistent with the needs of the labour market and national development; improvement of the curriculum, along with teaching and learning methodology; and development of assessment and evaluation methods to measure learner achievements;

4.3 improvement of professional standards and the professional qualification system, as well as development of vocational education standards and competency-based courses in collaboration with various enterprises;

4.4 establishment of a networking system for the support and participation in the provision of vocational education by business, industry, the community, and local authorities as well as domestic and foreign cooperative networks; and

4.5 development of research and development capacities and knowledge management systems, to enhance continuous development of vocational education.

5. Reform of Non-Formal and Informal Education to Support Lifelong Learning

Non-formal and informal education systems will promote and support lifelong learning activities to develop a culture of lifelong learning and the creation of a learning society based on active participation from all segments of society, through:

5.1 awareness campaigns to stress the importance of lifelong learning, and surveys to identify interests and needs;

5.2 curriculum improvement and development;

5.3 organisation of different courses through a variety of methods, with emphasis on networking and cooperation;

5.4 collaboration with public and private sector agencies to establish a system for the transfer of learning outcomes and experiences;

5.5 expansion of the learning sources, and increased cooperation with different bodies to promote effective informal education;

5.6 introduction of a system for establishing a learning resource bank comprising bodies of knowledge from local wisdom providers, the educational media, and non-formal education courses; and

5.7 expansion of conduits for lifelong learning through the establishment of a free television channel for education and improvement of programming throughout the media.

6. Reform of Higher Education

To enable universities to produce high caliber graduates consistent with the requirements for social and economic development and national competitiveness, and to serve as centres for the creation of knowledge required for transformation to a knowledge-based economy and society, the reform of higher education will focus on:

6.1 improving the structure and administrative system;

6.2 strengthening the mechanisms and administrative procedures for enhancing the quality of education;

6.3 developing improved teaching/learning and research systems;

6.4 revamping the financial system through partial adjustment of budgetary allocations; and

6.5 enhancing the competencies of higher education faculty, staff, and personnel and through support for further study and research activities.

Based upon the measures discussed above, it is expected that concerned agencies will formulate subsequent action plans and initiate relevant activities in order to move towards successful educational reform.

Chapter 3
Development of Pre-primary Education

Several studies indicate that effective human development must begin right from conception, and that the first 5 years of life are critical for brain development. An independent survey has confirmed that children aged 3-6 years who have participated in pre-primary education programmes are less likely to suffer personality disorders and will on average be healthier and perform better than those without kindergarten experience, especially during the first few years in primary school. In line with these studies, Thailand is attaching great importance to the harmonious physical, intellectual, emotional and social development of children in the 0-5 age group. The current government has made 2 years of free pre-primary schooling available to all children.

3.1 Present Status of Early Childhood Development and Pre-primary Education

Thai people have long recognised the importance of early childhood development. As early as 1964, a number of projects were initiated and

coordinated by the Council for Children and Youth Development[1]. Current projects include: the Office of the Education Council's project on 'Learning Reform of Early Childhood Education: a Student-Centred Approach'; the integration of HIV/AIDS-infected mothers and children into healthcare reform; research studies conducted by the Child Welfare Association of Thailand; as well as several activities, conducted by several other agencies, to strengthen families and communities and to promote early childhood development.

Pre-primary education programmes, provided by early childhood development institutions, nursery schools, or kindergarten and learning centres, aim to prepare children in their physical, emotional, social, and intellectual development before they enter primary school. In addition to state-supported institutions, several private agencies and non-governmental organisations actively participate in early childhood development.

[1] The Council for Children and Youth Development is a non-government organisation under the Office of the Prime Minister.

In 2004, the total number of children in the 0-5 age group in Thailand was 5,842,069. Among these, 2,850,937 children were in the 0-3 age group, and 2,991,132 youngsters were aged between 3 and 5 years.

Most children 3-5 years of age receive pre-primary education through non-compulsory basic education services. In this age group, only 17.5 percent were under the full-time care of their families, while the majority, or 82.5 percent, were participants in child development centres, kindergartens and preschool classes. At the same time, in the 0-3 age group, 97.7 percent were cared for by their families with the remainder, or 2.3 percent, attending nurseries. *(Table 3.1)*

Table 3.1 Population of Children in the 0-5 Age Group, Classified by Type of Care Providers (2004)

Age Group	Type of Care Providers and Percentage					Total Population
	Family care	Nurseries	Child Development Centres	Preschool Classes	Kindergarten	
0-3	2,784,167 (97.7%)	66,770 (2.3%)	-	-	-	2,850,937
3-5	524,439 (17.5%)	-	641,482	11,575	1,813,636	2,991,132
			2,466,693 (82.5 %)			
0-5	3,308,606	66,770	2,466,693			5,842,069

Source: OEC, Thailand Education Statistics Report 2004, Policy and Plan for Early Childhood Development (Drafted by the OEC)

The number of students in formal schooling at the pre-primary level during the academic years 2000-2005 is shown in Table 3.2.

Table 3.2 Number of Pre-primary Students, Academic Years 2000-2005

Pre-primary Level (3-5 Age Group)	Academic Years					
	2000	2001	2002	2003	2004	2005
Total population	2,892,892	2,906,345	2,960,930	2,987,270	2,991,132	2,936,320
Number of students	2,769,826	2,706,442	2,682,835	2,620,197	2,466,693	2,458,790
% of students to total population	95.7	93.1	90.6	87.7	82.5	83.7

Source: Educational Research and Development Bureau, OEC

3.2 Policy and Plan for Early Childhood Development

Government commitment to this first level of education is reflected in the 10-year Plan and Policy for Early Childhood Development, drafted by the Office of the Education Council, in cooperation with several public and private agencies involved in early childhood development[2].

Based upon the guidelines and principles of the Constitution, the 1999 National Education Act, and the National Education Plan, as well as other government policies concerning child and youth development, the Policy and Plan for Early Childhood Development focuses on 3 main strategies:

1) to support early childhood development;

2) to support parents and other stakeholders; and

3) to promote an environment that facilitates early childhood development.

[2] Organisations and agencies involved in the preparation of the Policy and Plan include: the Ministry of Education, the Ministry of Public Health, the Ministry of Social Development and Human Security, the Ministry of Interior, the Ministry of Labour, the Ministry of Justice, the Ministry of Defence, the Ministry of Culture and the Border Patrol Police Bureau, as well as concerned private agencies, including the Thailand Kindergarten Association and other non-governmental organisations, such as the Foundation for Children and the Duang Prateep Foundation.

The Policy and Plan focuses on the 0-5 age group and covers the period 2006-2015. Its objectives are:

1) to formulate a common concept and guidelines for early childhood development at the national level;

2) to prepare concrete operational plans for effective mobilisation, management, and resource utilisation;

3) to provide guidelines for data and information collection, research, follow-up, and evaluation; and

4) to incorporate early childhood development as an integral part of educational reform.

It is expected that the 10-year Policy and Plan will provide all children under five years of age with the opportunity for balanced development, strengthen cooperation among responsible agencies, and increase stakeholder participation, including individuals, families, communities, public and private agencies, and professional and non-governmental organisations.

Apart from supportive government policies and strategies on early childhood development, the key success factors include concrete operational plans and sufficient budget allocations on a continual basis.

It is expected that the Policy and Plan for Early Childhood Development, together with the support from several public and private agencies involved in early childhood development, will contribute to accelerating the development of children in the 0-5 age group and help prepare them for primary education.

Chapter 4
Development of Basic Education

In accordance with the focus on educational reform, many steps - from national policy to institutional level - are being taken to develop the basic education curriculum and the teaching-learning process, to improve the assessment and evaluation of achievement, and to expand access to formal education.

4.1 Present Status of Basic Education

In 2002, in accordance with the National Education Act, 12 years of free basic education was made available to students throughout the country for the first time. The government later increased that number to 14 years to include two years of pre-primary education. Basic education covers pre-primary instruction (already discussed in chapter 3), 6 years of primary, 3 years of lower secondary, and 3 years of upper secondary education, with the 9 years of primary and lower secondary levels considered compulsory.

4.1.1 Access to Basic Education, Participation, and Progression

An examination of student enrolment, transition, and retention rates, as well as special needs provision, will illustrate the country's status in access, participation, and progression in the basic education system.

1. Access to Basic Education

1) Primary Level: For several years until 2005, the percentage of students in primary education institutions had exceeded 100% because of the under-age and over-age student population added to the percentage of children in the 6-11 age group. During the academic years 2000-2005, the gross enrolment ratio, *i.e.*, the percentage of primary students compared to the population aged 6-11, was quite stable, with a small increase between 2001 and 2003, and a slight decline in 2004 and 2005. *(Table 4.1)*

Table 4.1 Enrolment Ratio at the Primary Level, Academic Years 2000-2005

Academic Years	Population Aged 6-11	Number of Students	Percentage of Students *per* Population
2000	5,837,856	6,023,713	103.2
2001	5,835,023	6,056,422	103.8
2002	5,819,773	6,096,715	104.8
2003	5,808,015	6,065,590	104.4
2004	5,801,424	5,967,857	102.9
2005	5,841,796	5,839,088	100.0

Source: Educational Research and Development Bureau, OEC

2) Lower Secondary Level: The percentage of students in lower secondary classes compared to the population aged 11-14, increased from 2.34 million, or 82.8%, in 2000 to 2.63 million, or 89.9%, in 2005. (Table 4.2)

Table 4.2 Enrolment Ratio at Lower Secondary Level, Academic Years 2000-2005

Academic Years	Population Aged 11-14	Number of Students	Percentage of Students *per* Population
2000	2,826,775	2,340,539	82.8
2001	2,845,317	2,338,650	82.2
2002	2,880,829	2,368,457	82.2
2003	2,913,538	2,464,547	84.6
2004	2,931,017	2,633,995	89.9
2005	2,930,209	2,633,884	89.9

Source: Educational Research and Development Bureau, OEC

3) Compulsory Education: The gross enrollment ratio of students in compulsory education compared to the population aged 6-14, during the academic years 2000-2005, increased from 8.36 million, or 96.5%, in 2000 to 8.47 million, or 96.6%, in 2005. *(Table 4.3)*

Table 4.3 Enrolment Ratio in Compulsory Education, Academic Years 2000-2005

Academic Years	Population Aged 6-14	Number of Students	Percentage of Students *per* Population
2000	8,664,631	8,364,252	96.5
2001	8,680,340	8,395,072	96.7
2002	8,700,602	8,465,172	97.3
2003	8,721,553	8,530,137	97.8
2004	8,732,441	8,601,852	98.5
2005	8,772,005	8,472,972	96.6

Source: Educational Research and Development Bureau, OEC

4) Upper Secondary: The proportion of students enrolled in upper secondary classes per population aged 15-17 during the academic years 2000-2005 also increased, from 57.3% in 2000 to 59.3% in 2005. *(Table 4.4)*

Table 4.4 Enrolment Ratio at Upper Secondary Level, Academic Years 2000-2005

Academic Years	Population Aged 15-17	Number of Students	Percentage of Students *per* Population
2000	3,006,166	1,723,799	57.3
2001	2,905,350	1,721,850	59.3
2002	2,841,550	1,707,459	60.1
2003	2,822,844	1,650,866	58.5
2004	2,841,472	1,650,639	58.1
2005	2,877,043	1,705,523	59.3

Source: Educational Research and Development Bureau, OEC

5) Basic Education: During the academic years 2000-2005, the percentage of students enrolled in basic education at all levels compared to the population aged 3-17, decreased slightly, from 12.85 million students, or 88.3%, in 2000 to 12.63 million, or 86.6%, in 2005. *(Table 4.5)*

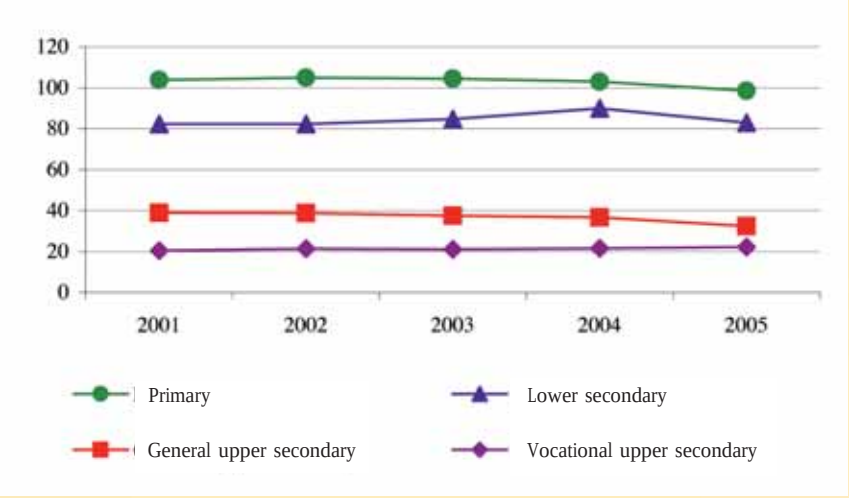
Table 4.5 Enrolment Ratio in Basic Education, Academic Years 2000-2005

Academic Years	Population Aged 3-17	Number of Students	Percentage of Students *per* Population
2000	14,563,779	12,857,877	88.3
2001	14,492,035	12,823,364	88.5
2002	14,503,082	12,855,466	88.6
2003	14,531,668	12,801,200	88.1
2004	14,565,045	12,719,184	87.3
2005	14,585,368	12,637,285	86.6

Source: Educational Research and Development Bureau, OEC

The percentage of children accessing basic education decreased in AY 2005, except for a slight increase in the vocational upper secondary level. *(Figure 4.1)*

Figure 4.1 Enrolment Rates in Basic Education, Academic Years 2001-2005

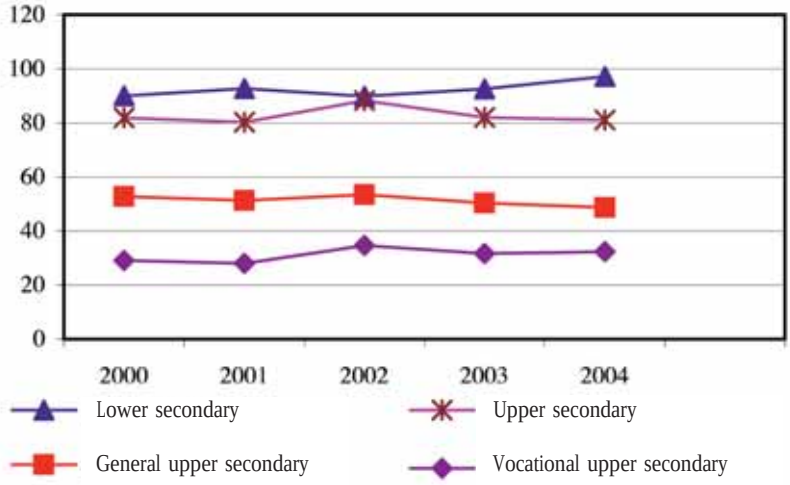


**Pre-primary education is discussed in Chapter 3 and was not included in this figure.*
Source: OEC, Thailand Education Statistics Reports, 2001-2005

The number of children aged 3-17 enrolled in basic education during the coming academic years is expected to increase because of the extension of free basic education from 12 to 14 years, as well as the extension of compulsory education from 6 to 9 years. It is also very likely that students who have completed compulsory education will opt to continue on to 3 years of upper secondary instruction, and to pursue higher education at an increasing rate because the Income-Contingent Loan Fund will be available to pay for their tuition, and hence provide them with greater access.

When compared to the year 2000, the 2004 transition rates increased at the lower secondary and vocational upper secondary levels and decreased at the general upper secondary level. The trend of transition rates in basic education during the academic years 2000-2004 is presented in Figure 4.2.

Figure 4.2 Transition Rates in Basic Education, Academic Years 2000-2004



Source: OEC, Thailand Education Statistics Reports, 2000-2004

4.1.2 Completion of Basic Education

When compared to the year 2001, the number of students completing primary and lower secondary levels in 2004 increased, while the number of students completing upper secondary level decreased slightly. *(Table 4.6)*

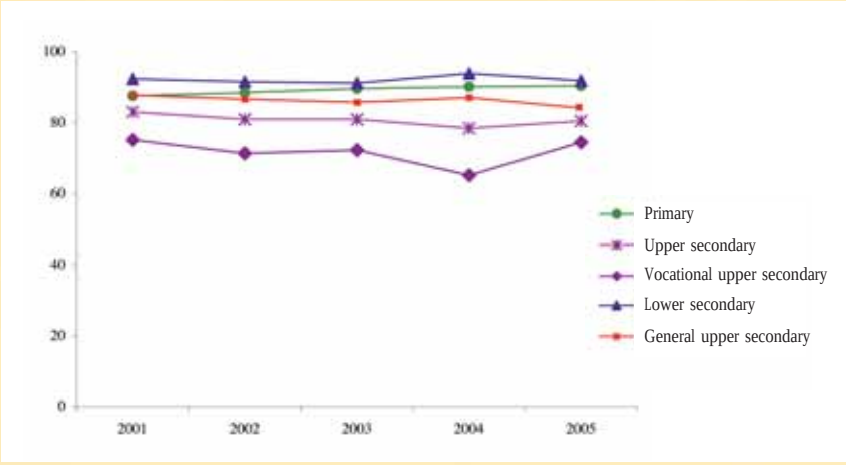
Table 4.6 Completion of Basic Education, Academic Years 2001-2004

Levels of Education	Academic Years			
	2001	2002	2003	2004
Primary	935,269	980,297	977,402	974,187
Lower secondary	706,020	736,391	757,104	775,461
Upper secondary	483,568	522,428	505,770	483,413
- General	335,194	352,324	344,860	343,351
- Vocational	148,374	170,104	160,910	140,062

Source: OEC, Thailand Education Statistics Reports, 2001-2005

The retention rates in primary and vocational upper secondary levels increased, while those in other levels decreased. (Figure 4.3)

Figure 4.3 Retention Rates in Basic Education, Academic Years 2001-2005



Source: OEC, Thailand Education Statistics Reports 2001-2005, Thailand Education Data 2001 and Bureau of Educational Research and Development

4.1.3 Participation in Basic Education of Children with Special Educational Needs

Since promulgation of the 1999 National Education Act, greater attention has been focused on children having special educational needs, with efforts given to the development of education for the gifted, the disabled, and the disadvantaged. The Ministry of Education has announced criteria and procedures for providing facilities, media, services and other forms of educational aid, as well as for budget allocations in these areas.

1. Special Education for Gifted and Talented Students

Suitable curricula, appropriate means to accelerate growth and development, a dynamic and vibrant environment, and well-trained mentors are approaches being implemented to nurture gifted children with talents for science and mathematics, languages, sports, music, computing, visual and performing arts, and many other fields.

In addition to schools for gifted children, special education activities have also been provided through projects such as the 'Junior Science Talent' Project, and the 'Development and Promotion of the Scientific and Technologically Talented' Project.

The Office of the Basic Education Commission has formulated a strategic plan for gifted and talented students, and has initiated pilot studies and numerous research and development projects relating to gifted education, working closely with 34 schools, 351 teachers and 6,472 gifted and talented students. The teacher-to-student ratio in various subjects in these schools is: 60:1,250 (science); 117:2,334 (mathematics); 74:1,069 (Thai language); 86:1,069 (English language); and 14:545 (music, sports, arts, visual arts, dramatic arts, and social studies).

Incentives for teachers and schools, advice to parents, as well as the establishment of the National Centre for the Gifted and Talented, are expected to further stimulate the development, promotion, and support of children with special talents.

2. Special Education for Disadvantaged Students

Several agencies support education for those who are socially and/or culturally disadvantaged[1]. Most disadvantaged students study

[1] Agencies providing education for disadvantaged children include the Ministry of Education, the Border Patrol Police Bureau, the Department of Social Development and Public Welfare, and non-governmental organisations such as the Suan Kaew Monastery Foundation, the Foundation for Children, and the Rajprachasamasai Foundation.

in regular schools, while others study in special institutions, such as those established by the Border Patrol Police and those supervised by the Office of the Basic Education Commission.

1) The Border Patrol Police Schools are under the supervision of the Border Patrol Police Bureau of the Royal Thai Police Department. Charged with maintaining border security along the northern border provinces, where language barriers and cultural differences among hill tribe people and Thais are obstacles to communication, border police officers have undertaken a number of development projects, including the establishment of rural medical aid stations and the schools in remote areas.

Between 1956 and 2005, 713 Border Patrol Police Schools have been established and have been under the patronage of the Royal family for most of this time.[2]

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[2] When activities of the *BPP Schools* became known to His Majesty King Bhumibol Adulyadej and Her Majesty Queen Sirikit in 1962, His Majesty the King and Her Majesty the Queen generously gave their personal funds to establish more *BPP Schools*. In 1964, all the *BPP Schools* came under the patronage of Her Royal Highness the Princess Mother and have been under the patronage of Her Royal Highness Princess Maha Chakri Sirindhorn since 1980.

The UNESCO International Literacy Prize Jury awarded *An Honourable Mention of the International Reading Association Literacy Award for 1989* to the Border Patrol Police School Project in recognition of its significant role in providing basic education to equip deprived groups, particularly highland minorities and people in remote areas, with literacy, communication and vocational schools needed to improve quality of life, self-reliance and participation in the community.

Normally, these schools will be transferred to the Ministry of Education if there are permanent school buildings, a sufficient number of students and a better quality of life of people in the surrounding area. Of the 713 schools, 470 have been transferred to the Ministry, and 52 schools have been closed. In 2004, there were 28,104 students in 191 Border Patrol Police Schools, comprising 177 primary schools, 12 learning centres and 2 secondary schools.

2) The Welfare Schools are under the supervision of the Office of the Basic Education Commission. Disadvantaged students deprived of the opportunity to attend regular institutions are able to study in Welfare Schools, which provide free education, food, clothing, school supplies, and in most cases, accommodations. Special vocational training is usually included. In AY 2004, there were 42 Welfare Schools located in 35 provinces, accommodating 39,731 disadvantaged students, most of whom (approximately 92%) were boarders. Included among these were 5,449 minority children and 608 disabled children. It should be noted that students with disabilities in the Welfare Schools include only those able to study in inclusive schools; others study in special schools that accommodate their type of disability.

It is difficult to present the actual number of disadvantaged children having access to basic education because of the different terms used to define the groups. Most disadvantaged students in Border Patrol Police Schools are children of minorities and are not classified into other groups, while disadvantaged students in regular and welfare schools are divided into 10 types. In AY 2004, the total number of disadvantaged students was 2,085,553, up from 1,417,496 in 2003, with the

majority classified as impoverished children, children of minorities, and abandoned children/orphans. There were fewer female students in all groups except for those children who were classified as sex workers. *(Table 4.7)*

Table 4.7 Disadvantaged Students, Classified by Type and Gender, Academic Year 2004

Types of Disadvantaged Students	Regular Schools			Welfare Schools	Border Patrol Police Schools	Total
	Male	Female	Total			
1. Children forced to enter the labour market	150	143	293	1		294
2. Child sex workers	123	511	634	370		1,004
3. Abandoned Children and Orphans	33,457	29,145	62,602	4,703		67,305
4. Children in Observation and Protection Centres	394	257	651	113		764
5. Street Children	923	706	1,629	71		1,700
6. Children affected by HIV/AIDS	11,175	10,224	21,399	392		21,791
7. Children of Minorities	26,452	25,124	51,576	5,449	28,104	85,129
8. Physically-abused Children	2,837	2,737	5,574	48		5,622
9. Impoverished children	953,195	894,325	1,847,520	27,855		1,875,375
10. Children affected by narcotic drugs	8,251	6,975	15,226	121		15,347
11. Others	5,529	5,085	10,614	608		11,222
Total	1,042,486	975,232	2,017,718	39,731	28,104	2,085,553

Source: Educational Research and Development Bureau, OEC, MOE
Bureau of Special Education Administration, OBEC, MOE

3. Special Education for Students with Disabilities

Special education for disabled students is provided by the Bureau of Special Education Administration, and by the Department of Social Development and Public Welfare, as well as by some university lab schools, municipal schools and private foundations. Moreover, some hospitals also organise classes for disabled children suffering from chronic conditions.

In accordance with the 1999 National Education Act, the disabled are entitled to receive education at all levels. The Bureau of Special Education Administration recognises 9 types of disability: (1) hearing impairment; (2) mental impairment; (3) visual impairment; (4) physical or health-related impairment; (5) learning disabilities; (6) autism; (7) emotional and behavioral disorders; (8) speech and language disorders; and (9) multiple disabilities.

With an emphasis on individualised education programmes, and commensurate with their potential, disabled students receive education from various types of schools:

1) Special Schools: Special Schools are those specifically arranged for students with disabilities. There are currently 43 such schools, targeting those with mental, physical, visual or hearing impairments. In practice, however, children with any type of disability will be accepted in these schools.

2) Special Centres: Similar to Special Schools, there are currently 76 Special Centres, one in each province throughout the country, that render services in specially set up locations, in inclusive schools, hospitals, and in the home. The centres also organise meetings and seminars for parents of the disabled as well as staff of various organisations, conduct research, and develop curriculum for short-term training for the disabled.

3) Inclusive Schools: There are currently 18,618 Inclusive Schools, which are regular schools that accept disabled children. In providing education for the disabled, these schools are assisted by Special Centres and Special Schools in terms of teachers, training, materials and facilities, and coordination with concerned agencies.

The number of disabled students accessing educational services increased from 144,684 in the AY 2000, to 187,050 in AY 2004. *(Table 4.8)*

Table 4.8 Students with Disabilities, Academic Years 2000-2004

Types of Schools	Number of Schools/ Centres	Number of Students with Disabilities				
		2000	2001	2002	2003	2004
1. Special Schools	43	13,592	10,898	11,053	12,246	12,407
2. Special Centres	76	2,234	2,280	8,995	15,080	16,643
3. Inclusive Schools	18,618	128,858	127,991	143,531	161,231	158,000
3.1 Secondary	895	1,917	2,558	3,839	4,118	8,015
3.2 Primary	17,723	126,941	125,433	139,692	157,113	149,985
Total	18,487	144,684	141,169	163,579	188,557	187,050

Source: Bureau of Special Education Administration, OBEC, MOE

The education budget for students with disabilities comes from 2 main sources: the regular allocations of the Office of the Basic Education Commission, and the Educational Fund for the Disabled. In AY 2004, the Government Lottery Office contributed Bht. 200 million to the Fund, to provide scholarships to teachers for advanced study in fields related to special education.

4.2 Development of the Basic Education Curriculum

Section 28 of the National Education Act calls for curricula to be diversified and commensurate with the education level, appropriate to the individual's age and potential, and aimed at improving the quality of life. Academic and vocational stream curriculum content focuses on individual development to achieve a balance of knowledge, a capacity for critical thinking, capability, virtue, and social responsibility.

The 1990 revisions of the 1978 Primary and Secondary Education Curriculum applied particularly to secondary education, and the content was developed in accord with economic, political and technological changes that had taken place. Local wisdom was also promoted and students were able to choose subjects according to their aptitude, personal interest, and suitability with the local conditions.

A 2001 update of the Basic Education Curriculum called for core requirements as prescribed by the Basic Education Commission, and specific content, directly related to local needs and contexts, to be developed by the educational institutions themselves.

4.2.1 National Level

At the national level, there are 5 curricula:

1. 2001 Curriculum for Basic Education covers 12 years of basic education (Grades 1-12), and is divided into 4 three-year stages, consisting of 1,000-2,000 hours per year.

In this curriculum, the knowledge and skills specified in Section 23 of the National Education Act have been grouped into 8 subject areas: Thai Language; Mathematics; Science; Social Studies; Religion and Culture; Health and Physical Education; Art; Career- and Technology-Related Education; and Foreign Language. Activities that focus on responding to the learner's specific interests are also included.

In 2005, following nationwide training programmes for administrators, supervisors, teachers, and personnel in related departments, the 2001 Curriculum for Basic Education became fully implemented in all grades.

2. 2003 Curriculum for Pre-primary Education: Organised for 3-5 year-olds, this curriculum focuses on preparing children in terms of their physical, intellectual, emotional/mental and social readiness.

3. 2002 Curriculum for Vocational Education (at the lower certificate and associate degree levels): Both curricula are competency-based, specifying the standards of knowledge, skills, attitudes, and personal attributes required by students in their future careers.

The standards cover 9 work fields, comprising trade and industry, commerce, arts and crafts, home economics, agriculture, fisheries, business and tourism, textiles, and ICT. Students studying in these fields will have an opportunity to take part in hands-on training in cooperating factories or companies for at least one semester.

To expand opportunities for students, a number of entrepreneurs and educational institutions are offering a dual education programme, where students engage in on-the-job training for half of their total study period.

4. 2003 Curriculum for Special Education: As mentioned in Section 3 above, special education is organised in both special institutions

and centres for disabled persons, and inclusive schools. Two types of curricula are followed: 1) special curricula offered in special schools and centres; and 2) regular curricula that may be adjusted to meet the special needs of children in inclusive schools.

While the Special Education Curriculum follows the 2001 Curriculum for Basic Education, the learning standards were revised to facilitate students with disabilities. In addition, content materials regarding rehabilitation and life skills were augmented in this curriculum to accommodate autistic and/or mentally-retarded learners.

5. Curricula for Non-formal Education: The non-formal curricula follow the 2001 Curriculum for Basic Education at the lower secondary and lower certificate levels, for both basic and vocational stream learners.

4.2.2 At the Institutional Level

As stipulated in the National Education Act, educational institutions are required to develop curriculum content relating to the needs of the community and society, and include local wisdom and desirable attributes for members of the family, community, society and the nation. The proportion of core curriculum to local content developed by the institution should be approximately 70:30, flexibly applied in compliance with the nature of each subject.

In addition, content relating to special education, programmes relating to specific topics, advanced placement programmes, and the gifted education curriculum may be offered.

4.3 Development of Teaching and Learning

The concept of learner-centred learning has been generally accepted into the teaching-learning process to facilitate learner development at various stages, and to provide a learning environment that allows for freedom, relaxation and enjoyment so that children's intellect can be developed to their full potential.

Several projects have been undertaken to develop the teaching-learning process, including: 1) research on and development of learner-centred learning models; 2) the improvement of teaching and learning quality in small-sized schools; 3) the development of teaching techniques and improvement of analytical thinking skills as practiced in Lab schools; and 4) the improvement of teaching and learning in specific subjects.

4.3.1 Research and Development of Learner- centred Learning Models

Considerable efforts have been made to reform the teaching-learning process, including a shift from teacher-oriented instructional methods to more learner-centred ones, the development of new learning media, equipment, and techniques, and the training of teachers.

Teachers are being trained to adopt the learner-centred approach, in which the instructor's role is viewed as coach and facilitator of student learning, rather than as a controller and transmitter of content. Thus far, the Office of the Education Council has identified and designated 586 individuals as Master Teachers. It was found that 9 teaching-learning techniques used by these professionals could appropriately be adopted by other teachers to develop the thinking and scientific thinking processes of their students. These are:

(1) questioning techniques;

(2) problem-solving techniques;

(3) problem-based instruction;

(4) generating bodies of knowledge through Constructivism;

(5) promotion of constructive thinking;

(6) project-based learning;

(7) use of authentic experience;

(8) integration of multi-intelligence units; and

(9) use of learning sources, such as the ecosystem in rice fields and vegetable farms.

Between 2005 and 2006, teaching models developed around these techniques were piloted in 90 basic education institutions. More than 9,500 teachers and a large number of students participated in the project to develop teaching and learning skills in line with the national education standards. The teaching models will be disseminated further through learning clinics and a distance learning system.

4.3.2 Improvement of Teaching and Learning Quality in Small-sized Schools

A large number of institutions under the supervision of the Office of the Basic Education Commission are small-sized schools. When compared to larger ones, these schools share some typical problems, i.e. a lack of teachers in some subjects; and a shortage of learning materials, especially those utilising media and technology.

To solve the problems, the Office of the Basic Education Commission implemented a project for "Quality Improvement of Small-sized Schools". Between December 2003 and September 2004, approximately Bht. 537 million was provided to small schools in addition to their regular budget allocation to increase educational opportunities, and to improve student quality, teaching and learning activities, and administration and management.

With further support and assistance to strengthen their capacities, these small-sized schools can not only promote equality of access to education for all but also improve the quality of education.

4.3.3 Improvement of Teaching and Learning Quality in Lab Schools

The "One District, One Lab School" project was launched in October 2003 to create at least one high-quality school in every district through the improvement of school facilities and administration, as well as teaching approaches and techniques, students' analytical thinking skills, and the application of ICT for learning.

These schools serve as models or as mentors in developing other schools at the district and sub-district levels, and are building a network for learning among institutions and learning sources throughout the country.

Between 2004 and 2006, the government approved a large budget for the project, with each Lab School receiving Bht. 5 million for developing its library, laboratories, computers, and learning materials for use in teaching and learning. In addition to the government contribution, private organisations, state enterprises, and communities generously donated more than Bht. 500 million worth of equipment for this project.

The project covers 921 schools and is being conducted in three phases. In AY 2004, improvement activities were undertaken in 253 schools selected by district communities. These schools currently provide academic assistance to approximately 10,800 small schools nearby. In the second and third phases, activities are being expanded to other schools at the sub-district level nationwide. It is expected that 668 Lab Schools have been developed during the academic years 2005-2006.

The key tasks in developing the Lab Schools are to:

1) support autonomy and flexibility in administration and management;

2) develop teachers and educational personnel with the support of the Rajabhat Universities;

3) develop curriculum, materials and learning sources to improve intellectual ability, reading habits, and lifelong learning through e-learning systems, e-books, and textbooks;

4) apply ICT to learning activities with cost-effective software, network linkages, data and security systems; and

5) ensure quality through internal and external quality assessment.

4.3.4 Improvement of Teaching and Learning in Specific Subjects

In addition to the improvement of teaching and learning quality in small-sized schools and the support for Lab Schools, the Ministry of Education also focuses on the improvement of teaching and learning in specific subjects, including mathematics, science, and languages, particularly Thai, English and Chinese languages.

Following implementation of the 1992 National Education Act, the government undertook various measures to promote *the teaching and learning of science and mathematics*, and supporting individuals with special abilities in these fields. Young people are encouraged to participate in competitions locally, nationally and internationally. Qualified students are selected to represent the country in the International Academic Olympics. Scholarships at the secondary and higher education levels, both overseas and in Thailand, are granted to students and teachers with special talents in the fields of mathematics, chemical and biological science, physics, and computing.

A number of campaigns have been organised to encourage *the proper use of the Thai language and good reading habits*. Radio and television programmes have been produced and contests organised in essay-writing, public speaking, reading, and creative writing in Thai. The Annual Book Fair, held in cooperation with publishing houses since 1972, has attracted increased public attention and interest.

The teaching and learning of Thai language is also promoted in several neighbouring countries to strengthen political and social relationships in the region.

In August 2006, the Council of Ministers approved a Bht. 2 billion package aimed at *improving foreign language proficiency and instruction*, focusing on English and Chinese.

The Ministry of Education has undertaken several steps to promote *the teaching and learning of English for communicative purposes*. These include formulation of a long-term strategic plan (2005-2015) to increase the ability of Thais to communicate in English, as well as a plan to review the entire system of English teaching and learning.

In order to promote *the teaching and learning of Chinese language for communicative purposes*, the Ministry of Education has drafted a five-year (2006-2010) Strategy on the Promotion of Teaching and Learning of Chinese Language to Increase the Country's Competitiveness. In this effort, the Ministry is working in close cooperation with the People's Republic of China. A task force has been created and an initial framework developed; assistance is being provided in curriculum development, textbooks and teaching-learning materials, teacher training, and evaluation tools.

4.3.5 Admission to Basic Education Institutions

Apart from development of the basic education curriculum and improvement of teaching-learning, the Ministry is also attempting to improve the assessment and evaluation of educational achievement in schools, particularly through *improvement of the admission system* to increase access to formal education.

To ensure transparency, accountability, equity, and equality in educational access, admission criteria are agreed upon by a committee responsible for admission of students in each basic education institution.

Scores on the national educational tests taken in grade 6 is an additional criterion for admission to Grade 7. Since AY 2001, students studying in grades 3, 6 and 9 are obliged to take national educational tests, administered by the Office of the Basic Education Commission, in 2 to 5 subjects. Beginning in AY 2005, Grade 12 students wishing to pursue higher education must take the tests administered by the National Institute of Educational Testing Service. *(Table 4.9)*

Table 4.9 Subjects Required in National Educational Tests

Levels of Education	Mathematics	Subjects Required				Organisers
		Thai Language	Science	English	Social Sciences	
Grade 3	x	x				OBEC
Grade 6	x	x	x	x		OBEC
Grade 9	x	x	x	x	x	OBEC
Grade 12	x	x	x	x	x	NIETS

Source: Bureau of Educational Testing, OBEC and the National Institute of Educational Testing Service

The national tests for Grade 12 students are of 2 types, the Ordinary National Educational Tests (O-NET) and the Advanced National Educational Tests (A-NET). Both O-NET and A-NET require tests in 5 subjects; however, A-NET focuses more on thinking and analytical skills. Results from O-NET and A-NET are used as one of the factors in the revised higher education admission system. *(See chapter 6 for further information.)*

The responses to the Ministry of Education's focus on teaching-learning reform include the ongoing improvements in school quality and access, the further refinement of the basic education curriculum, and development of more effective teaching and learning approaches, which will contribute to all aspects of learner development, not only in academic achievement, but in the acquisition of general and life skills as well.


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Chapter 5
Development of Vocational Education

Thailand recognises the important role of technical and vocational education and training as a critical tool for producing manpower with the necessary skills required for employment and/or entrepreneurship as well as for poverty alleviation. Several agencies, including the Office of Vocational Education Commission and the Office of Higher Education Commission under the Ministry of Education, the Ministry of Labour as well as the business sector have initiated several activities to strengthen vocational education and training so as to increase the manpower skills in both production and services sectors. These include the improvement of curriculum and instruction, establishment of Thai Vocational Qualification, validation of experience, research and innovation, and career development.

5.1 Present Status of Technical and Vocational Education

The provision of vocational education varies according to the types and programmes of vocational education and fields of study. Two main types of vocational education are available: special vocational education; and technical and vocational education and training.

5.1.1 Types and Levels of Formal Technical and Vocational Education and Training

1. Special Vocational Education

Special vocational education includes:

1) Sports Schools, under the supervision of the Ministry of Tourism and Sports, which provide admission and full financial support to students from all over the country who demonstrate a particular athletic talent; and

2) Dramatic Arts and Fine Arts Colleges, under the supervision of the Ministry of Culture, which offer certificates equivalent to lower and upper secondary education.

2. Technical and Vocational Education and Training

The provision of technical and vocational education and training is offered through the formal school system in both the general and vocational education streams, as well as through non-formal education opportunities.

Vocational education and training is arranged in the formal school system under the supervision of the Office of the Vocational Education Commission. In the general stream of basic education at the primary level, career and technology-related education is offered to school children as elective, compulsory, and free elective courses to provide them with work experience and basic knowledge for career preparation and technological application.

After completing lower secondary grades, students wishing to further their education at the upper secondary level can choose to study in either the general or the vocational stream. In the general stream, secondary students participating in the Cooperative Study Training Programme are able to select vocational subjects as their major or minor, or as an elective. Through the vocational stream, secondary students in the Technical and Vocational Education and Training programme are able to study in a variety of areas, within which different options are available. There are 4 programmes offered at certificate, diploma, and higher diploma levels:

2.1 Certificate in Vocational Education

Offered to those who have completed lower secondary education, this upper secondary programme leads to a lower certificate of vocational education.

- *Certificate in Vocational Education*

Students completing the lower-secondary level are able to study in this three-year formal programme in which theoretical and practical subjects are studied in a school setting with a semester spent in the workplace.

- *Certificate in Dual Vocational Education*

This programme is offered at the certificate or upper secondary level as well as at the diploma or post-secondary level. The learning and training takes place at two *venues*, at a college and a company with whom students conclude a contract for training. During the training, students receive an allowance from the company.

Students in this programme will spend part of their time studying theory in the school setting and the rest of the time participating in hands-on training in enterprises. Depending upon the contract between the institution and the enterprise, a student can spend 1 or 2 days studying in school and the rest of the week in the enterprise. He can also spend an entire week, month, or semester in the enterprise to ensure continuation and quality of training.

Collaboration with the private sector, especially industry and business requiring vocational skills, is given important consideration at both the policy and institutional levels. Such participation is needed for the Dual Vocational Education programme, curriculum development, workplace training, professional development of teachers, and programme evaluation. During AY 2003-2004, 43,800 vocational education students, or 7 percent of the total number, participated in Dual Vocational Education programmes conducted in 8,900 companies.

- *Certificate in Vocational Education: Credit Accumulating System*

This programme provides 3-5 year courses for adults who are unable to participate in full-time study at an institution. An assessment system to evaluate their knowledge and skills for validation of their experience is also provided. In addition, accumulated credit can be transferred within the same or between different institutions.

- *Certificate in Vocational Education: Evening Class*

This programme is similar to the Credit Accumulating System Certificate in Vocational Education. It is specially designed for those who are in the labour market and wish to study in evening classes.

2.2 Diploma in Vocational Education

Those who have completed a Certificate in vocational or upper secondary education can study in this programme, which is offered at post-secondary level and leads to a technical diploma or an associate degree in vocational education. Four Diplomas are offered in types similar to the Certificate in Vocational Education.

2.3 Higher Diploma in Technical Education

This two-year programme is designed for those completing a Diploma in Vocational Education who plan to teach in vocational education institutions and is offered at the university level, leading to a higher technical diploma or a degree.

5.1.2 Types of Vocational Colleges and Fields of Study

The National Education Act provides for technical and vocational education and training to be provided in public and private educational institutions, enterprises, or through programmes organised through cooperation between educational institutions and enterprises.

Under the supervision of the Office of the Vocational Education Commission, technical and vocational education is provided in 12 types of college: 1) Technical; 2) Vocational; 3) Agricultural and Technology; 4) Commercial; 5) Industrial and Ship Building Technology; 6) Fishery; 7) Administration and Tourism; 8) Polytechnic; 9) Industrial and Community; 10) Automotive Industry; 11) Arts and Crafts and 12) the Golden Jubilee Royal Goldsmith College.

At present, 9 major fields of study are offered: trade and industry, agriculture, home economics, fishery, commerce and business administration, tourism, arts and crafts, textiles, and information technology and communication.

5.1.3 Students in Technical and Vocational Education

A demand for greater access to short courses in technical and vocational education and training in the non-formal education stream was noted in 2005, showing an increasing interest to upgrade their qualifications among those in the rural areas, economically-disadvantaged groups, the disabled, and those already in the work force.

The number of students, as shown in Table 5.1, includes those in both the formal and non-formal streams. The total number rose from 839,784 in 2000 to 1,047,139 in 2004, declining slightly to 1,028,106 in 2005. If only short courses are considered, however, the number has increased.

Table 5.1 Number of Students in Vocational Stream, Classified by Level, Academic Years 2000-2005

Levels of Education	Academic Years					
	2000	2001	2002	2003	2004	2005
Certificate	404,206	395,199	406,067	392,246	448,622	424,628
Diploma	188,605	196,641	189,097	178,057	238,110	187,779
Higher Diploma	233	1,017	1,545	985	1,087	543
Short courses	246,740	242,760	306,820	374,064	359,320	415,156
Total	839,784	835,617	903,529	945,352	1,047,139	1,028,106

Source: OVEC Bureau of Policy and Planning and Website

The total number of vocational education graduates also declined, from 234,604 in 2000 to 217,038 in 2004. *(Table 5.2)*

Table 5.2 Number of Graduates in Vocational Stream, Classified by Level, Academic Years 2000-2004

Levels of Education	Academic Years				
	2000	2001	2002	2003	2004
Certificate	99,390	85,609	86,702	92,133	87,896
Diploma	65,908	76,865	72,676	77,453	67,864
Higher Diploma	0	164	485	451	233
Short courses	69,306	57,969	55,093	67,143	61,045
Total	234,604	220,607	214,956	237,180	217,038

Source: OVEC Bureau of Policy and Planning and Website

Among 1.7 million students enrolled in upper secondary classes in AY 2005, the proportion of students in general and vocational education programmes was 59:41. Since 2001, the number of general education graduates has doubled that in vocational education. *(Table 5.3)*

Table 5.3 Number and Ratio of Students in General and Vocational Education at Upper Secondary Level, Academic Years 2000-2005

Academic Years	Education Streams	Number of Students	Ratio of General to Vocational Ed.	Number of Graduates
2000	Both	1,723,799	64:36	
	- General	1,100,768		318,450
	- Vocational	623,031		189,632
2001	Both	1,721,850	66:34	
	- General	1,129,480		335,194
	- Vocational	592,370		148,374
2002	Both	1,707,459	65:35	
	- General	1,101,384		352,324
	- Vocational	606,075		170,104
2003	Both	1,650,866	64:36	
	- General	1,059,516		344,860
	- Vocational	591,350		160,910
2004	Both	1,650,639	63:37	
	- General	1,038,585		343,351
	- Vocational	612,054		140,062
2005	Both	1,705,523	59:41	
	- General	1,007,367		na
	- Vocational	698,156		na

Source: Educational Research and Development Bureau, OEC

When compared to general education, the rates of enrolment, transition, and retention in vocational education at the upper secondary have been lower since 2000. *(Table 5.4)*

Table 5.4 Rates of Enrolment, Transition and Retention in General and Vocational Education at Upper Secondary Level, Academic Years 2000-2004

Academic Years	Streams of Education	Enrolment Rates	Transition Rates	Retention Rates
2000	General	36.7	52.8	87.2
	Vocational	20.7	29.1	78.2
2001	General	38.9	51.3	87.7
	Vocational	20.4	28.0	75.1
2002	General	38.8	53.5	86.6
	Vocational	21.3	34.7	71.3
2003	General	37.5	50.3	85.7
	Vocational	21.0	31.7	72.2
2004	General	36.6	48.7	87.0
	Vocational	21.5	32.4	65.1
Average	General	37.7	51.3	86.8
	Vocational	21.0	31.2	72.4

Source: OEC, Thailand Education Statistics Reports, 2000-2004

It is evident that the number of vocational education students and graduates at the upper secondary level has been lower than in general education for several years. There are a number of reasons behind the decreasing popularity of vocational education, including the perceived greater prestige of the general education stream among parents and their children, higher costs of vocational education, and greater distances between vocational education institutions when compared to general education institutions. Nevertheless, the most important reason seems to be the social value of Thai society that favours white-collar workers, and the fact that advancement in careers for those with technical and vocational certificates is usually lower when compared to those with degrees.

In response to an increasing social demand for skilled labour and in an attempt to increase the popularity of vocational education, public vocational education institutions recently implemented a new admission policy.

Under this policy, an entrance examination will not be required and every student wishing to study at a public vocational education institution will be guaranteed a seat in the field of his/her preference and aptitude. This has resulted in an increased enrolment in the 412 public vocational education institutions, from 154,385 in AY 2003 to 180,000 in AY 2004. The total number of students, including those studying at upper secondary, post secondary and higher diploma levels and short courses, in these educational institutions increased from 945,352 in AY 2003 to 1,047,139 in AY 2004.

This policy may have inadvertently had an adverse effect on private vocational education institutions, which have traditionally played a significant role in providing vocational education. The guaranteed seating policy in public vocational education institutions, in combination with the decreasing popularity of and higher costs associated with vocational education, has resulted in a substantial reduction in the number of private institutions and their share in providing vocational education.

5.2 Major Efforts in Vocational Education Development

In AY 2004, the Office of the Vocational Education Commission focused on 4 main strategies: 1) provision of universal access to technical and vocational education and training; 2) improvement of teaching-learning quality; 3) increase in the country's competitiveness; and 4) integration of technical and vocational education and training for poverty alleviation.

Strategy 1: Universal Access to Vocational Education

In AY 2004, the Office of the Vocational Education Commission attempted to provide alternatives to students to choose subjects in line with their preferences and aptitudes through the following activities and projects:

1) Open admission of all students with a focus on their preferences and aptitudes;

2) Provision of technical and vocational education and training to those with disabilities and the disadvantaged through coordination with other public and private agencies;

3) Transfer of learning outcomes;

4) Establishment of a Career Guidance and Counseling Office in 28 vocational education institutes and 412 colleges to give advice regarding different career paths;

5) Promotion of career preparation through a one-year programme of occupational training for unemployed individuals who had Grade 9 or Grade 12 to enable them to start their own businesses. In AY 2004, there were 20,196 trainees in the programmes; and

6) Provision of dual vocational training through cooperation with business enterprises.

Strategy 2: Improvement of Teaching and Learning Quality

To improve quality, teaching-learning approaches and assessment systems were changed to enable students to spend more time gaining practical experience in real work situations. Heavy emphasis was also given to project-based learning and an assessment system that is based on student performance as well as their project work. Maintenance and repair services for public benefit are also regarded as part of the learning process. The following measures were undertaken in this connection:

1) In cooperation with Kasetsart University, training programmes in basic research were conducted to improve the quality of instructors, classroom teaching and innovation development.

2) The teaching-learning process was revised to focus on integrated learning in the form of modules and skills practice. During their study, students are encouraged to undertake community service work, wherein they have opportunities to gain skill and receive credit.

Activities supported by the Office of the Vocational Education Commission include:

- cooperation with the Office of the Basic Education Commission in building and repairing primary schools;

- construction and repair of schools damaged during the disturbances in the three southern border provinces;

- construction of 10 prototype schools under the supervision of the Office of the Basic Education Commission; and

- establishment of 'Public Vocational Centres' in vocational colleges to assist communities, such as free car-repair service during floods and services for people incurring accidents.

3) The quality of learners was improved through encouraging students to

- work and earn money during their studies. This not only helps alleviate poverty but also provides opportunities for students to practice their skills and gain authentic work-related experience;

- join in activities arranged by the Thai army to improve their potential and create discipline, self-esteem and pride; and

- participate in other activities that serve the community to impart a good image of vocational students and also to keep them away from drugs and narcotics.

Strategy 3: Increase the Country's Competitiveness

Several initiatives were undertaken to increase the country's competitiveness:

1) *Cooperation with the private sector to produce qualified graduates in line with market demands:* An example is a project with the Kenan Institute of Asia to develop new entrepreneurs by providing entrepreneurial skills to teachers and diploma students.

2) *Support to the 'City of Fashion' Project: In this project, 6 vocational colleges were selected as prototypes in improving the instructors in fashion design.* In addition, a certificate level curriculum was developed and 5 regional fashion promotion centres established, where fashion parades are organised to demonstrate the design talents of students and also for commercial purpose.

3) *Support to the 'World's Kitchen' Project:* Several courses on food production are offered by 28 vocational colleges to encourage learners to become self-employed in food production. Each college developed 2 food products to be licensed by the Food and Drug Administration;

4) *Development of a Bachelor Degree in Practical Engineering Technology:* During the past few years, a number of colleges have developed curricula to offer degree level courses focusing on practical work experience in several fields. The pilot colleges are prepared to offer relevant courses once the Vocational Education Act is approved.

5) *Implementation of the 'Value-Added OTOP Products' Project:* Through cooperation with government and private agencies, vocational colleges help add value to the 'One Tambon One Product' scheme through developing teamwork skills and appropriate technologies related to production processes, package design and quality improvement. Thus far, around 80 products have been developed.

6) *Support of New Inventions:* This project encourages new inventions by young people through annual competitions held at the regional and national levels. In 2004, 21 items were selected for copyright registration and cooperation with the private sector in commercialising them.

7) *Sponsorship of an Annual Robot Competition:* The Office of the Vocational Education Commission organises an annual robot competition involving 3,000 teachers, students, and other interested people. Two teams won first prize at the international level in 2003 and in the International Robot Contest in the Republic of Korea in 2004.

Strategy 4: Integration of Vocational Education for Poverty Alleviation

In response to government policies, a number of projects were initiated in the three border provinces in southern Thailand, including:

1) *establishment of the Pattani Fishery College:* A budget was allocated for construction, supplies, and staff, enabling the college to admit 250 students in AY 2004;

2) *a Bachelor Degree in Rubber and Polymer Technology:* Begun in AY 2004 in the Yala Technical College, the programme has 26 students enrolled. Recently, the Office of the Vocational Education Commission allocated Bht. 1.1 million to the College for the purchase of equipment and supplies;

3) *the Kuruthayath Project:* This project provides diploma students in the 3 southernmost provinces with 2-year scholarships to complete a bachelor degree. After graduation, they will be expected to teach in the vocational colleges in these provinces;

4) *the Halal Food Production Project:* Vocational colleges in the 3 southernmost provinces train Muslim students to grow vegetables, raise animals and process food according to Muslim beliefs and practices; and

5) a project to provide vocational skills training in *'Pondok'*, or private Islamic boarding schools: With cooperation among the Vocational Education Institutes, and 'Pondok' schools, students in around 20 schools are provided with vocational training opportunities.

In AY 2005, the Office of the Vocational Education Commission focused on 3 main issues:

1. Middle Level Manpower Development and Poverty Alleviation: This mission seeks to:

1) provide universal access to technical and vocational education and training;

2) promote learning by doing and earning while learning;

3) increase efficiency and effectiveness through competency-based curricula and work-based learning;

4) provide technical and vocational education and training opportunities to workers through flexible programmes;

5) focus on validation of experience;

6) increase the participation and involvement of all stakeholders;

7) promote the knowledge, skills, and experience of small and medium enterprises;

8) focus on occupational and career path counseling and guidance;

9) integrate occupational training for poverty alleviation; and

10) facilitate self-learning and e-learning through ICT systems.

2. Development of Thai Potential: In response to government policy and the market demand for qualified workers, the Office of the Vocational Education Commission will attempt to adjust the proportion of students in general education and vocational education from 60:40 to 50:50 as well as develop the potential of the workforce in terms of computer literacy, English Language proficiency, international culture knowledge, business plan skills and basic research skills.

3. Partnership with Industry: Several attempts were made to carry out technical and vocational education and training in close cooperation with industry. A competency-based curriculum was developed by a joint committee comprising educators and representatives from the Federation of Thai Industries, the Chamber of Commerce, and other occupational associations.

Industry is also involved in formulating assessment and certification standards as well as training trainers and participating in governing bodies of vocational education institutions. In addition, industrial enterprises also play an important role in providing the work-experience programmes such as the Dual Vocational Education Programme.

5.3 Main Issues in the Vocational Education Bill

Drafted by the Office of the Vocational Education Commission, the Vocational Education Bill focuses on three directions:

1. Promote cooperation between the public and private sectors in providing additional skill training for workers in various enterprises.

2. Decentralise functions and responsibilities to local administrative organisations in the areas of budget, personnel management and part of the curriculum formulation. While policies and vocational qualifications will still be under the supervision of the Office of the Vocational Education Commission following decentralisation, local citizens will also be encouraged to participate in decision-making and in the monitoring operations.

At present, management of technical and vocational education and training is delegated to 28 institutes. Once the Vocational Education Act becomes effective, the number of institutes will be expanded to 76, covering every province.

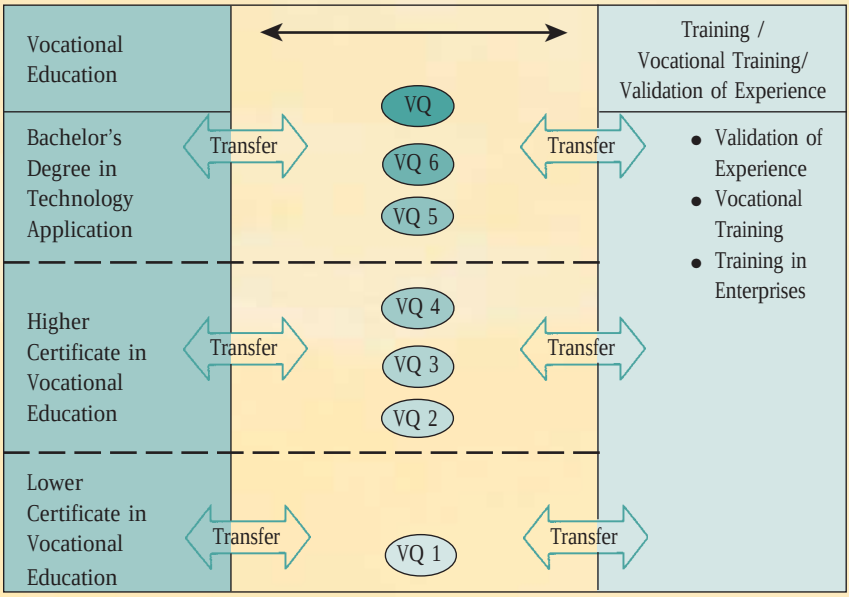
3. Offer Bachelor degrees in technology fields, focusing on practical work in line with domestic and regional market demand and niche markets. The degrees to be offered include Automotive Technology, Fashion Design, Jewelry, Mould and Die Technology, Mechatronics, Garment and Textile Technology, Retailing, Information Technology, Hotel Management and Tourism.

5.4 Establishment of Thai Vocational Qualification

Qualified workers are needed to facilitate change for international competitiveness and keep abreast of new technology and to advance in their careers. To meet these goals, continuing vocational education must be accessible, and vocational education and training must be shifted towards development and recognition of 'competencies'.

The Thai Vocational Qualification (TVQ) is based on occupational competency standards, assessment and validation of work experience, and organisation of training to bridge the skill gap at workplace-based institutions or in the workplace, in cooperation with educational institutions. The TVQ will be interrelated with vocational education and training so as to promote lifelong vocational education, as shown in Figure 5.1.

Figure 5.1 The Interrelationship between Vocational Qualification, Vocational Education and Vocational Training Systems



Source: Power Point Presentation titled "The Government's View on the Private Sector's Role in Provision of Vocational Education and Guidelines in Supporting Its Role."

5.5 Validation of Experience

In addition to the transfer of learning outcomes, concerned agencies and educational institutions have initiated the 'validation of experience' to enable qualified applicants to further their study and to promote continuing education and lifelong learning.

Actions taken by the Office of the Vocational Education Commission to implement this concept include: formulation of a 'validation of experience' system; revision of the curricula at the certificate and diploma levels; provision of credit accumulation and transfer for further education and work; and promotion of the connection between short course training and regular courses.

The 'validation of experience' corresponds to the competency-based vocational curriculum in which competency-based training is underscored and competence is assessed against performance criteria in terms of theoretical

knowledge, know-how (practical skill), and attitude/personality that are necessary in the learner's career.

An example of this approach is the Thai-French Continuing Vocational Education Project, in which trainees, trainers and representatives from enterprises (administrators and mentors) work in close cooperation; the trainers who act as teachers/coordinators also conduct the follow-up activities to monitor the competency of the trainees in the workplace.

Considering the value of the learning experience that Thai workers gained while working abroad and the occupational skills that they obtained, a similar project was initiated by the Office of the Education Council in cooperation with the Ministry of Labour through its Regional Institute for Skill Development in Khon Kaen and the Non-Formal Education Centre in Lampang.

The project, 'Validation of Work Experience of Thai Workers', gave emphasis to quality improvement of basic education, development of occupational skills, and validation of occupational knowledge/skills and work experience against the Standards Criteria for Knowledge and Experience and the National Standards Criteria for Occupational Skills.

Several activities have been undertaken to improve the image of vocational education institutions, including improvement of the curriculum and increased collaboration between educational institutions and the production and service sectors. To serve a growing demand for skilled workers, it is necessary that vocational education be reformed systematically and continuously, both in terms of improved quality and increased quantity. It is expected that the reforms underway will result in more qualified manpower, with appropriate skills and competencies for both production and service sectors, and will create a more balanced proportion of students in general and vocational education.

Chapter 6
Development of Higher Education

Higher education is essential to human resource development, especially in this era of globalisation, where a country's international competitiveness depends a great deal on the capability of its citizens to thrive in a knowledge-based economy and society.

In response to government policy, the Office of the Higher Education Commission proposed a roadmap to serve as guiding principles for promoting and developing the quality of Thai higher education. Covering between 2005 and 2008, the roadmap consists of measures to enhance the quality of graduates, lecturers, research projects and management of higher education institutions.

To increase access to and improvement in the quality of higher education, several endeavors have been undertaken: the provision of the Income Contingent Loan (as discussed in Chapter 11); establishment of new universities and transformation of existing public institutions into autonomous universities; reform of the central university admission system; and promotion of research and innovation in Thai higher education institutions.

6.1 Present Status of Higher Education

The demand for higher education has risen over the years because of the increasing demand for qualified manpower that can contribute to the modern economic development.

1. Levels of Higher Education

Higher education is provided at the associate degree and degree levels, and is offered in universities, educational institutions, colleges, and other types of institutions at associate degree and degree levels.

1.1 Associate Degree or Diploma Level: Higher education at the associate degree or diploma level 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 arts and fine arts. The majority of courses offered are related to vocational and teacher education.

1.2 Degree Level: Programmes leading to a degree require 2 years of study beyond the diploma level, and 4-6 years of study for those completing upper secondary education or the equivalent. 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, with six years required 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.

2. Student Enrolment and Graduation

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 specialised institutions under the charge of other ministries and agencies.

As shown in table 6.1, student enrolment in higher education institutions, including that in open universities, rose continuously from 1,797,840 in 2000 to 2,993,499 in 2004.

Table 6.1 Student Enrolment in Higher Education Institutions, Academic Years 2000-2004

Levels of Education	Academic Years				
	2000	2001	2002	2003	2004
Diploma	470,002	462,187	439,363	400,071	397,127
Undergraduate	1,232,215	1,294,561	1,371,058	1,396,242	2,436,940
Certificate	2,615	2,324	2,138	4,139	8,353
Master Degree	89,818	108,055	108,774	120,116	142,845
Doctorate	3,190	5,080	5,120	8,040	8,234
Total	1,797,840	1,872,207	1,926,453	1,928,608	2,993,499

Source: OEC, Thailand Education Statistics Reports, 2000-2004

It is expected that there will be a larger number of high school graduates as a result of the extension of compulsory education from 6 to 9 years and the provision of 12 years of free basic education as stipulated in the 1999 National Education Act.

According to the paper, *'Higher Education in Thailand and the National Reform Roadmap'*, it is estimated that the number of high school graduates will increase from 0.7 million in 2000 to 1.8 million in 2016, an increase of 150 percent in 15 years.

Demand for higher education should also increase because of the rising demand for more highly skilled manpower for modern economic development, as well as the greater access to higher education afforded by the establishment of the Income-Contingent Loan (ICL) Fund, which provides direct financial support for learners.

With a larger number of high school graduates going on to college and with greater educational needs for adults, higher education will be faced with increasing challenges.

6.2 University Autonomy

The concept of university autonomy was introduced in Thai higher education over 3 decades ago. The First 15-Year Plan for Higher Education (1990-2004) stipulated that future public universities be established as autonomous institutions from the beginning, whereas existing public universities should also be incorporated.

Currently there are 6 autonomous universities under the supervision of the Office of the Higher Education Commission. While the government is still able to direct, supervise, audit and evaluate the institutions through this office, they enjoy a greater degree of flexibility and innovation, receiving funding through block grants, and having full control over the administration and management of finance and budgets (budget management and procurement system), academic matters (academic programmes and university structures), and personnel matters (personnel system, recruitment, remuneration and benefits).

Although existing public higher education institutions can function under their own charters and have considerable autonomy in academic matters, with increased autonomy, they would be able to lessen bureaucratic constraints and increase flexibility in financial and personnel administration and management. Partnerships with the private sector could be undertaken more easily to help support the role of higher education institutions as incubators for young and technologically-oriented entrepreneurs.

Autonomy is seen as a significant step toward strengthening public higher education institutions so that they will be more accountable to the public, more adaptive to educational and social needs and market demand, and more proactive and dynamic in prioritising their goals, outputs and outcomes. Continuous effort will be made to encourage public higher education institutions to transit to autonomous universities to generate innovation, cost-effectiveness, accountability, performance-based assessment, good governance and long-term social and economic development.

6.3 Community College Administration

In 2001, a government policy prescribed the establishment of community colleges in provinces where other opportunities for higher education was not available, to offer education and training necessary for economic and social development in those communities. Initially, 17 community colleges have been set up.

Community colleges offer 2-year associate degree programmes suitable for professional development in areas relevant to local economic and social development needs. The currently approved curricula for associate degree programmes from community colleges include: Early Childhood Education, Community Development, Local Government, Tourism Industry, General Management, Accounting, Computer, Business Computer, Business Electronics, Technology Programmes in Livestock Production, Agricultural Industry, Electricity, and Auto-Mechanics.

6.4 Reform of the Higher Education Admission System

Beginning in AY 2006, students completing Grade 12 are obliged to take national educational tests of 2 types: the Ordinary National Educational Test (O-NET) and the Advanced National Educational Test (A-NET).

Both examinations are administered by the National Institute of Educational Testing Service to assess student proficiency in Mathematics, Thai language, Science, English language and Social Studies, Religion and Culture. The A-NET tests focus more on thinking and analytical skills, as well as aptitude in relation to particular academic and professional disciplines, such as engineering, teacher education, medicine, architecture, foreign languages, fine arts, and music.

The newly-modified university admission system can be summed up as follows:

(1) The Direct University Admission System: Under this system, each higher education institution determines and administers its own admission criteria and procedures in certain fields of study consistent with its mission and philosophy. For admission to some fields of study, the Direct Admission System may also include O-NET and/or A-NET results. Aptitude tests not included in the national tests but required for certain fields of study will be administered by the particular institution.

(2) The Central University Admission System: The previous national admission system, in effect since 1967, depended solely upon an entrance examination that evaluated a student's academic performance only through that particular test. As a result, students tended to place less importance on learning for knowledge and skills in their regular classrooms and concentrated their efforts on tutorials in particular subjects just to be successful in entrance examination. Consequently, responsible agencies, such as the Office of the Higher Education Commission, the Council of University Presidents of Thailand, and the educational institutions themselves called for a change in the previous approach with a new Central University Admission System (CUAS).

Redesigned and implemented in 2006, the revised CUAS integrates multiple indicators to evaluate student achievement and performance. These include: (1) the overall cumulative grade point average (GPAX) for Grades 10-12; (2) the grade point average (GPA) in Grades 10-12 in 3 to 5 of the 8 subject groups of the core curriculum; and (3) results of the O-NET and/or A-NET Tests.

The agencies involved are striving to further improve the CUAS so that students will be able to study in the university programmes they select, while at the same time focusing on attaining a well-rounded education at the secondary level.

(3) Special Programmes and the Quota System

Apart from the normal admission system, a number of students are also admitted through special programmes and a quota arrangement set by the institution. For example, in cooperation with the Ministry of Public Health, the faculties of medicine at Chulalongkorn, Chiang Mai, Khon Kaen, Mahidol and Prince of Songkla universities admit about 15 percent of their students through the 'Promotion of Medical Science Education for Rural Areas' Project. Other programmes admitting students through special university quotas include the 'Development and Promotion of Science and Technology Talents' Project, the Sports Promotion Programme and the Arts Promotion Programme.

6.5 Reform of the Higher Education Curriculum

During 2004-2005, a number of measures were taken for curriculum reform in higher education. The University Council of each institution is authorised to approve the offering of additional programmes so long as the curriculum is in line with the criteria specified by the Board of Higher Education Committee. The Office of the Higher Education Commission acknowledges and reviews the Council-approved curriculum.

A Cooperative Education curriculum is being promoted to enhance students' work skills through direct experience during their studies, to reduce unemployment, and to update the curriculum in line with recommendations of the business community.

In this programme, students studying in their third and fourth years will work part of the time in offices and factories participating in the project. A minimum of 16 weeks of employment provides students not only with hands-on experience, but with credits toward their degree as well.

In 2004, Bht. 67 million was allocated for the Cooperative Education Project. During Phase I, 850 students studying in 29 fields at 38 universities participated in hands-on training in 826 companies. During Phase II, there were 5,389 students in 34 fields from 49 universities in the programme in 1,890 companies.

6.6 Promotion of Research and Innovation

In response to the government policy to enhance Thailand's competitiveness, a number of new projects support higher education institutions in research and development to generate new products and innovations for commercial purposes.

1) Cooperative Research Network Project

The Cooperative Research Network Project was initiated in 2002 to strengthen graduate programmes, especially at the doctorate level, and to synergise research capacities already extant in Thai higher education institutions.

The project attempts to combine and fortify academic strengths among universities and the private sector through mobilisation of resources and maximisation of academic resources. At present, 55 not-for-profit cooperative research networks concentrate on the strengthening of graduate programmes and focus on social and economic development through cooperation in science and technology, medical science, engineering, nanotechnology, biotechnology, languages and tourism.

2) The University Business Incubator Project

To support capacity building for economic competitiveness at the local community level, and at the macro-level to respond to the national policy on the development of industrial clusters, the 'University Business Incubator' Project acts as a link between university research and development studies and industry to generate new products and innovations, and to create and develop entrepreneurs.

Around 15 incubator units have been set up in universities with the capacity to implement the project, and at least 30 start-up companies, comprising 75 joint-ventures and involving 1,000 students and graduates, are participating between 2004 and 2006. For maximum efficiency, the project links mainly with local companies and focuses on only a single stream of business or a few clusters that directly correspond to the fields in which the participating universities have expertise.

3) The Thai Business Incubator and Science and Technology Park Association

To further support the University Business Incubator Project, the Office of the Higher Education Commission, in cooperation with the Office of Small and Medium Enterprise Promotion and the National Electronics and Computer Technology Centre, established the Thai Business Incubator and Science and Technology Park Association to help unite communities involved in business incubators, science parks and technology parks to generate new enterprises and enhance Thailand's competitiveness in the international arena.

4) Establishment of the Technology Licensing Office

The Technology Licensing Office was established as an independent agency under the Office of the Higher Education Commission to support the registration of intellectual properties developed by Thai higher education institutions. In cooperation with the Department of Intellectual Property, instructors and officers were trained in the registration of intellectual properties. The first office will be established at the Office of the Higher Education Commission, with 10 more offices established in participating universities.

5) Establishment of the Thailand Cyber University

Internationally, e-learning has become a widespread tool in both conventional and open teaching and learning. The increasing popularity of e-learning in Thailand can be seen in several institutions.

In early 2005, the government approved a 5-year budget of Bht. 600 million to encourage university participation in a pilot project, Thailand Cyber University, initiated by the Office of the Higher Education Commission to promote low-cost online learning in higher education and lifelong education, as well as to enhance IT literacy and generate a knowledge-based society. During the trial period, a Memorandum of Understanding was signed with 5 universities and 4 additional universities are expected to join the project shortly.

The Thailand Cyber University currently offers 10 undergraduate and post-graduate degrees and involves 4,389 students, 209 teachers, 122 courses and 2 study programmes through its e-learning components such as e-classroom, e-library, e-community, e-learning Professional Development and e-learning Showcase.

Participating universities receive free courseware as well as a copy of the Learning Management System developed by Chulalongkorn University to assist partner universities in managing student time, attendance, courseware guidelines, meetings and examinations.

Standards for courseware development, hardware requirements, and measurement of study credits in each curriculum are formulated by the Office of the Higher Education Commission to ensure the quality of online education offered under the Thailand Cyber University project.

It is anticipated that this project will help increase educational access to those wishing to pursue higher education who are unable to attend classes, as well as to encourage participating universities to share courseware, lecturers, and library materials, such as e-journals and other research materials.

The systematic and continual improvement of higher education is essential to enable institutions to produce graduates of high caliber in accordance with the requirements of the country's social and economic development needs, and to serve as centres of excellence for innovation, research and development needed for the transformation into a knowledge-based economy and society.

Chapter 7
Reform of Non-Formal and Informal Education to Support Lifelong Learning

A more flexible education system, with the ability to transfer learning outcomes and validate experience, will help increase access to and create links between all types of education. This will not only draw future generations of Thai people toward lifelong learning but also eventually lead to a learning and knowledge-based society. The reform of non-formal and informal education is necessary to cultivate the culture of lifelong learning and create a learning society.

7.1 Present Status of Non-Formal and Informal Education

7.1.1 Non-Formal Education

Non-formal education services are provided by both public and private bodies to those outside the school system, *i.e.* the early childhood population, school-age population who have missed formal schooling, and over-school-age population:

1. Provision of Non-Formal Education for Pre-School Children:

- Education services to 2-6 year-old children or from birth to 6 years;

- Early childhood development in centres established by local communities for children aged 3-6 years;

- Family-based early childhood development;

- Child development of the private sector organised by the Council of Early Childhood and Youth Development Organisations, comprising 50 member organisations.

2. Provision of Fundamental Education for Literacy

Non-formal activities organised to promote literacy among illiterate adults aged 14 years and over include:

- *the Literacy Campaign*, which utilises volunteer teachers and volunteer village tutors;

- *the Functional Literacy Programme*, which integrates literacy and problem-solving skills to improve the quality of life;

- *the Promotion of Thai Language Usage*, aimed at Thai Muslims in 5 southern border provinces;

- *Hill Area Education*, aimed at promoting literacy among the hilltribe peoples, using non-formal education volunteer teachers.

3. General Non-Formal Education

This service provides continuing education programmes for those who have missed out on formal education opportunities from primary to higher levels, and is normally organised in public schools or official premises, factories, or other organisations. Learners are awarded the same qualifications as those in the formal school system. The learning process is organised through classroom learning, distance learning, and self-learning.

4. Non-Formal Technical and Vocational Education and Training

Polytechnic, industrial, and community colleges under the supervision of the Office of Vocational Education Commission, as well as the Office of the Non-formal Education Commission, offer non-formal technical and vocational education and training.

Partners in the provision of this type of education include the Ministry of Industry, the Ministry of Agriculture and Cooperatives, and the Ministry of Labour (through regional institutions and provincial skills training centres under the supervision of the Department of Skills Development).

Agencies responsible for education, welfare, and public services for the general public also provide vocational training activities concerned with quality of life improvement. Generally, non-formal technical and vocational training can be divided as follows:

1) Non-Formal Programme for the Certificate in Vocational Education

Non-formal education activities leading to the Certificate in Vocational Education are available to lower secondary school graduates through distance learning approaches.

Both employed and unemployed adults can participate in this programme, which requires at least 3 years of study, except when there is a transfer of academic performance or experience.

2) Short-Course Vocational Training

At present, short-course vocational training programmes are offered by both public and private institutions and agencies, and are designed to serve the needs for self-employment and to articulate with formal programmes that encourage lifelong learning. Pre-employment training and upgrading courses range from 6 hours to 225 hours, depending on the content and objectives.

● *Short Training Course for Vocational Certificate (225 hours):* This programme is designed for primary school graduates in rural areas who have had no chance to study at a higher level, and does not require an entrance examination. The training in vocational skills and quality of life promotion leads to a certificate equivalent to the lower secondary Certificate in Vocational Education.

● *Short Courses (6-225 hours) or Interest Group Programmes:* Those with similar interests can form a group of 5-15 persons and receive training in a variety of short courses ranging from 6 to 225 hours. The duration and content of the courses as well as teaching and learning activities are organised according to objectives based on individual needs and interests of the local people and community.

● *Agricultural Short Courses:* Each college of agriculture and technology provides short training courses for local farmers. Course content varies according to the needs of the participants.

3) Special Vocational Education Programme for Young Farmers

The programme is designed to upgrade young farmers between 15-25 years of age who have completed compulsory education. These young people are able to further their study at colleges of agriculture and technology and, upon completion, are awarded a special certificate equivalent to a Certificate in Vocational Education.

The number of students studying in the functional literacy and vocational non-formal education programmes increased in 2004 over the number in 2000, while the number of students studying in general non-formal education programmes decreased. *(Table 7.1)*

Table 7.1 Students in Non-Formal Education Programmes, Classified by Level and Type of Education, Academic Years 2000-2004

Levels and Types of Education	Academic Years				
	2000	2001	2002	2003	2004
1. Functional Literacy Programme (Equivalent to grade 4)	74,829	44,774	74,762	195,102	83,878
2. Continuing Education	1,625,790	1,853,997	2,057,136	1,671,534	1,583,485
2.1 Primary	142,935	211,677	284,982	116,338	131,961
2.2 Secondary	1,482,855	1,642,320	1,772,154	1,555,196	1,451,524
• Lower Secondary	849,252	938,373	982,612	702,144	556,959
• Upper Secondary	633,603	703,947	789,542	853,052	894,565
- General	621,753	683,171	777,854	841,410	882,809
- Vocational	11,850	200,776	11,688	11,642	11,756
3. Vocational Education/ Training	2,218,542	2,205,826	1,972,619	NA	3,135,326
- ONFEC Programmes	1,009,622	1,159,712	1,012,449	1,505,254	1,913,438
- OVEC Programmes	141,087	115,052	100,356	NA	308,977
- BMA Programmes	23,423	23,423	5,674	NA	19,795
- OPEC Programmes	1,044,410	907,639	854,140	NA	893,116
Total	3,919,614	4,104,597	4,104,517	3,371,890	4,802,689

Source: OEC, Thailand Education Statistics Reports, 2000-2004 and ONFEC

7.1.2 Informal Education

Informal education programmes enable learners to learn independently about topics consistent with their interests, potential, and the opportunities available from various knowledge sources, such as:

- programmes provided by libraries, museums and science/ technology centres, as well as through the mass media - radio, television, newspapers and magazines, *etc.*;

- programmes of community learning networks; *i.e.*, community learning centres, village reading centres, sub-district health and agricultural offices, as well as natural learning sources in each community;

- learning from

1) those who transmit local wisdom, including the culture and body of knowledge in each community;

2) the local media, which plays an important role in passing on knowledge and social values;

3) the family, which is a learning source from birth; and

4) 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 programmes for different target groups relating to the responsibilities of each organisation.

7.2 Establishment and Development of Lifelong Learning Sources

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, 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 centres (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.

7.2.1 The Office of Knowledge Management and Development

The Office of Knowledge Management and Development, a public organisation under the aegis of the Office of the Prime Minister, comprises 8 separate entities described below, each with the common objective of stimulating new ideas and creativity.

1. *National Institute for Brain-Based Learning:* The Institute provides information on proper child care to help parents understand the needs of their children in order to ensure their mental and intellectual development commensurate with their age.

2. *National Centre for the Gifted and Talented:* The Centre arranges special education curricula and appropriate learning processes for gifted children from childhood to adulthood.

3. *Thailand Knowledge Park:* The TK Park is a place where children can read in a relaxing atmosphere. Parents wishing to instill in their children the love of reading and learning outside the classroom can take them to learn from the wide range of multimedia resources that includes an innovative and lively library where children can perform and embrace their creativity on a specially provided stage.

4. *National Discovery Museum Institute:* This institute features a new approach to relate Thai history with the traditional ways of life.

5. *Thailand Creative and Design Centre:* The Centre presents works of famous designers from all over the world to enable Thais to learn various aspects of design methodologies and product development, from the concept to the product. Presentations are displayed in a friendly atmosphere aiming to encourage new ideas to make Thai products and services truly unique and outstanding.

6. *Thailand Centre of Excellence for Life Science:* The Centre exhibits advances in biotechnology and the ways that knowledge of biology combined with Thai local wisdom can be turned into products that respond to the world demand.

7. *National ICT Learning Centre:* The Centre aims to enhance computer literacy and knowledge of information technology systems through the Internet.

8. *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.

7.2.2 The National Science Museum Organisation

The National Science Museum Organisation, a state enterprise under the supervision of the Ministry of Science and Technology, operates four museums.

1. *The Science Museum* is Thailand's most modern science museum. It is located in Pathum Thani, north of Bangkok and was built at a cost of Bht. 1.4 billion in 2000 to celebrate the 60th anniversary of the birth of H.M. Queen Sirikit. The Museum focuses on the nation's sustainable development through increasing public interest, understanding and direct participation, with interactive exhibits displaying the links between science and technology present in nearly every aspect of our lives.

2. *The Information Technology and Telecommunications Museum* presents interactive exhibits relating to history and the future of computer technology and telecommunication technology.

3. *The Natural History Museum* offers for public viewing some of the specimens and collections preserved mainly for the purpose of its research.

4. *The Environment and Ecology Museum* displays living exhibits of 3 ecosystems, comprising a North American temperate forest, an Asian tropical forest, and the frozen arctic/Antarctic plains. Through the use of automatic temperature and humidity control systems that replicate the changing of seasons and climates for each region, visitors will understand the complexities and vulnerability of natural ecosystems and appreciate the beauty and value of Thailand's natural heritage.

7.2.3 The Bangkok Children's Discovery Museum

The *Bangkok Children's Discovery Museum* was 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. The museum responds to the interest of H.M. Queen Sirikit to provide children with insights into art, science, nature, culture, society, and history through hands-on experiments in a specially designed recreation area.

7.2.4 Other Learning Sources

In addition to the above-mentioned learning sources, several new public libraries have been established, and services in all have been improved. For example, free Internet service is provided in all Chalermrachakumari libraries as well as in provincial and district public libraries, while many higher education institutions, including those in the Rajamangala University of Technology, are developing e-libraries and Living Libraries.

Other types of lifelong learning sources have also been renovated and improved, including museums and historical parks under the supervision of the Department of Fine Arts, arts and cultural centres, sports and recreation centres, as well as museums of Natural Science. Several botanical gardens have been established through the initiation of HRH Princess Maha Chakri Sirindhorn to preserve local botanical species.

In addition, printing and electronic media for English Centres, such as ERIC and Self-Learning Centres, were set up and training activities were organised for personnel responsible for lifelong learning sources. The trainees range from English teachers who supervise English Centres to librarians in schools and personnel looking after botanical gardens in schools.

For the country to effect the transformation into a knowledge-based society, all types of education, including continuing education and lifelong learning, must be available for Thai people. This can be made possible through the transfer of learning outcomes, the validation of experience and the establishment and development of learning sources. Con- tinuous and concerted efforts are needed from all parties to ensure that this goal is attained.

Chapter 8
Utilisation of ICTs for Education

Realising the importance of technology in enhancing the competitiveness of Thailand and its people in a knowledge-based economy and society, a number of important steps were taken to promote the utilisation of technologies for education, including: establishment of the Ministry of Information and Communications Technology; formulation of laws, policies and plans; development of infrastructure and networking systems; development of materials and technologies for education; and development of personnel and learners.

8.1 Development of National Policies and Plans

Plans and policies being implemented to promote the utilisation of technologies for education, include:

1) The NESDB Plan for Development of Mass Communication and ICT for Human and Social Development (1999-2008);

2) the National IT Policy (2001-2010);

3) the National ICT Master Plan (2002-2006);

4) the 'National Education Network (EdNET)' Project;

5) the National ICT for Education Master Plan (2004-2006);

6) master plans relating to the broadcasting media; and

7) government policy relating to the production, development and use of materials and other technologies for education.

8.2 Development of the Infrastructure and Networking System

Several activities have been implemented to develop public utilities and facilities, systems and information infrastructure:

1. IT Infrastructure and Networking System for Educational Institutions

Most of the basic and higher education institutions are now able to link through the basic infrastructure of electricity grids and telephone networks under the EdNET and SchoolNet networking systems.

2. Access to Television and Radio

As shown in the following table, a much higher percentage of the population has access to the traditional media of television and radio than computers.

Table 8.1 Percentage of Household Ownership of Television/Radio Sets and Computers, Classified by Region (2003)

Types of Media	Percentage of Household Ownership of Television/Radio Sets				
	Bangkok	Central Region (excl. Bangkok)	North	Northeast	South
Radio Sets	63.7	48.4	57.1	44.3	51.3
Television Sets	94.2	93.3	91.0	93.1	90.0
Computers	8.2	24	7.5	6.1	4.5

Source: National Statistical Office (NSO)

3. Educational Television and Radio

(1) Educational Radio Programmes

Only 25 out of 514 radio broadcast stations have been designated for educational purposes. Frequencies were distributed as follows: 12 stations for the higher education institutions, 11 stations for the National Educational Radio Network of the Department of Public Relations and 2 stations with 3 frequencies for the Ministry of Education.

• At the basic education level, the Educational Technology Centre, supervised by the Office of the Non-Formal Education Commission, provides supplementary programmes for those in the formal, non-formal and informal education streams.

• At the higher education level, radio stations operated by a number of higher education institutions broadcast programmes of general knowledge as well as entertainment.

(2) Educational Television Programmes

Educational television programmes in Thailand are offered by the following agencies:

1) The *Distance Learning Foundation*, established with an initial fund of Bht. 50 million from H.M. the King, broadcasts educational programmes *via* satellite in cooperation with the Thai ministries and organisations as well as foreign governments and international agencies.

DLF broadcasts are transmitted around the clock and can be accessed at downlink sites in schools, factories and other places throughout the kingdom. Internet users can also access live broadcasts of the 14 channels operated by the DLF and the 7,000 on-demand programmes.

Courses in the basic education curriculum are broadcast through 12 of the 14 channels. One of the two channels offers international programmes in Thai, English, French, German, Japanese and Chinese, and another focuses on vocational and university education.

Regular contributors to the programmes include the Wang Klaikangwon Vocational College, the Ministry of Public Health, the Ministry of Agriculture and Cooperatives, the Ministry of Interior, the Tourism Organisation of Thailand, as well as various academic institutions and associations. Popular features include instruction in cooking, tailoring, handicrafts and souvenir making, home economics, computer science, engineering and farming techniques.

2) The Educational Technology Centre produces educational TV programmes for formal education (Grades 3-9), non-formal education (Grades 7-12 and the lower vocational level), and informal education, as well as general supplementary programmes and education news.

These programmes are broadcast through Television of Thailand (Channel 11), under the administration of the Department of Public Relations, and through a dedicated Ku-Band channel with a national satellite-based network.

3) The Rajamangala University of Technology and Sukhothai Thammathirat Open University (STOU) produce televised teaching programmes for their students. The Rajamangala University of Technology broadcasts *via* C-band satellite transmission while STOU broadcasts through Channel 11 and *via* Ku-band satellite transmission through a DLF channel. Occasionally, both institutions also produce supplementary general education programmes.

4) Government agencies and state enterprises broadcast general supplementary programmes through Channel 11 or other commercial channels and *via* Ku-band satellite transmission through the DLF channels.

8.3 The Use of Computers for Education

Computer technology has become an indispensable aid to education, and government policies and budget allocations continue to focus on improving the infrastructure, developing educational content, and enabling universal access to the Internet.

(1) Access to Computers

The 'Affordable Budget PC Programme', introduced in 2003 by the Ministry of Information and Communications Technology, resulted in significant price reduction of both generic and brand-name computers and an increasing number of computer users in 2003 and 2004, when compared to the year 2001. However, access to computers is still very low and exposes the digital divide between Bangkok and the rest of the country. *(Table 8.2)*

Table 8.2 Percentage of Household Ownership of Computers, Classified by Region (2001, 2003-2004)

Years	Percentage of Household Ownership of Computers					
	Entire Kingdom	Bangkok	Central Region (excluding Bangkok)	North	Northeast	South
2001	5.1	19.8	5.1	2.8	2.0	2.3
2003	8.2	24	7.5	6.1	4.5	6.1
2004	11.1	28.1	11.6	9.0	6.3	8.6

Source: National Statistical Office

The students-to-computer ratio also increased as a result of the 'ICT for Children' Project of the Ministry of Information and Communications Technology, which expanded computer distribution to schools in deprived areas in cooperation with the Education Bureau of the Bangkok Metropolitan Administration, the Ministry of Education, and the private sector. The modestly set targets in the National ICT for Education Master Plan for 2004-2006 were easily achieved in both primary and secondary schools under the Ministry of Education. *(Table 8.3)*

Table 8.3 Students to Computer Ratio in 2004

Levels and Types of Education	Number of Students	Number of PCs	Number of Students per PC	
			Targeted	Actual Use
Primary	6,595,828	73,292	120	90
Secondary	2,539,657	105,674	54	24
Vocational	686,737	25,699	23	27
Tertiary*	645,089	78,290	NA	8
Non-Formal	2,342,751	3,311	NA	708

** Figures do not include private universities*

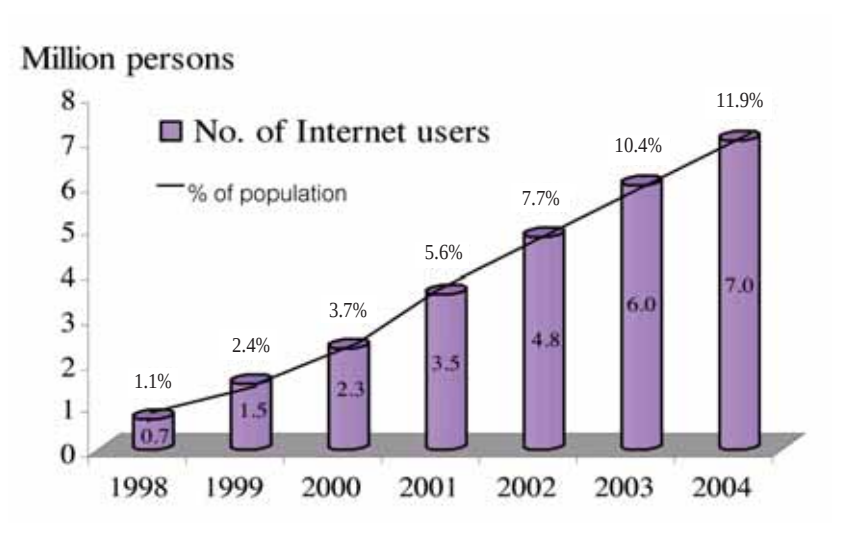
Source: Office of the Permanent Secretary, Ministry of Education

(2) Access to the Internet

To narrow the digital divide between Thailand and other countries, as well as between Thai people living in urban areas and those in rural areas, reductions were made in the price of computers and domestic long-distance calls. This resulted in an increase in household ownership of computers as well as in the number of Internet users in Thailand from around 700,000 people in 1998 to 7 million people in 2004.

Despite the upward trend in the number of Internet users, the percentage of the population using the Internet is still very low, accounting for only 1.1 percent in 1998 and 11.9 percent in 2004. *(Figure 8.1)*

Figure 8.1 Number of Internet Users in Thailand (1998-2004)



Source: Thailand ICT Indicators 2005

Since 2001, Internet penetration has been significantly higher in Bangkok and adjacent provinces than in other regions. The percentage of users (*per* 100 inhabitants) in 2004 is highest in Bangkok and its vicinity and lowest in the Northeast *(Table 8.4)*

Table 8.4 Internet Penetration, Classified by Region (2001-2004)

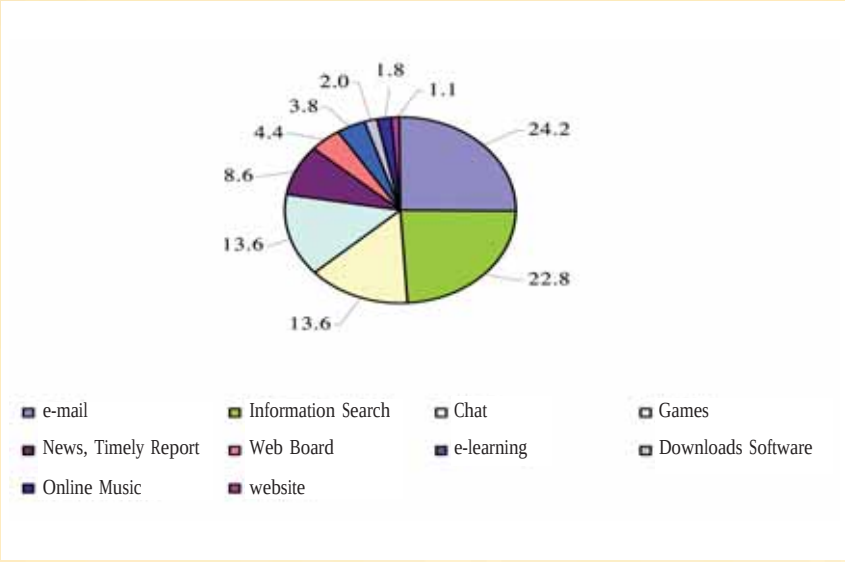
Region	Number of Users (Million Persons)			Users per 100 Inhabitants		
	2001	2003	2004	2001	2003	2004
Bangkok and Vicinity*	1.23	2.01	2.00	16.0	26.9	26.6
North	0.52	1.34	1.52	4.6	10.1	11.2
Central Region	0.83	1.00	1.21	5.9	9.7	11.4
Northeast	0.56	1.07	1.49	2.6	5.6	7.7
South	0.39	0.62	0.76	4.7	8.2	9.9
Entire Kingdom	3.53	6.03	6.97	5.6	10.4	11.9

** Pathumthani, Nonthaburi, Samut Prakarn, Samut Sakhon and Nakhon Pathom*

Source: National Statistical Office (NSO)

In 2005, the National Electronics and Computer Technology Centre conducted a survey of Internet users in Thailand which also revealed types of activities and educational attainment of Internet users. It was found that information searches and e-mail correspondence were the two most common activities. However, from 2004 to 2005, the proportion of both information searches and e-mail correspondence decreased, from 35 to 22.8 percent and from 29.2 to 24.2 percent, respectively. In contrast, the proportion of games and chatting increased, from 3.9 to 13.6 percent and from 9.1 to 13.6 percent, respectively. *(Figure 8.2)*

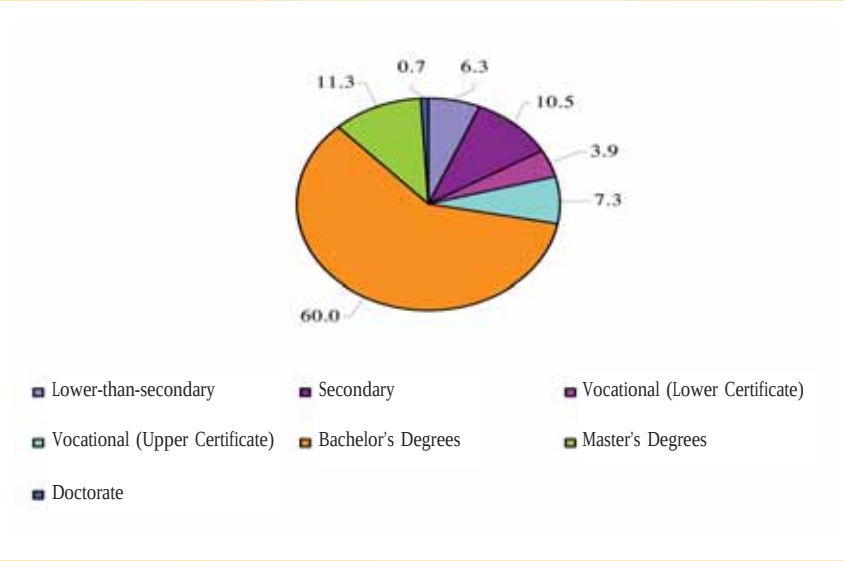
Figure 8.2 Top Ten Activities on the Internet



Source: Internet User Profile of Thailand 2005

The educational attainment of Internet users ranged from lower-than-secondary to doctorate levels, with 72 percent holding of bachelor's degrees or higher. *(Figure 8.3)*

Figure 8.3 Educational Attainment of Internet Users



Source: Internet User Profile of Thailand 2005

(3) Internet-Based E-Learning

In the formal education stream at the higher education level, the increasing popularity of Internet-based e-learning is seen in several universities and in the establishment of Thailand Cyber University to promote higher education online and low-cost lifelong education.

In the informal education stream, the e-learning service and e-school projects are examples of the education and lifelong learning opportunities made possible by H.M. King Bhumibol.

• *The e-school Project*, targeting Thai citizens living in the U.S., is implemented in collaboration with Distance Learning Centres in Wat Padhammachat, in Los Angeles, and the Royal Thai Consulate in Chicago.

• *e-learning Service:* The Distance Learning Foundation (DLF)[1] launched this service in 2002 to honour H.M. King Bhumibol on his 6th Cycle Birthday Anniversary. Internet users are able to view live Webcasts of educational programmes, as well as participate in the Flexible Learning Scheme *via* video conferencing and the Internet.

It is worth mentioning that the achievement of the DLF in carrying out His Majesty's policy on lifelong learning came about through concerted efforts and mutual support from various public and private organisations, both within Thailand and abroad. These include TOT Corporation, the Telecommunications Authority of Thailand, the Telecommunications Association of Thailand, the Ministry of Education, the Royal Thai Army and the Institute for the Promotion of Teaching Science and Technology. Foreign partnerships include, among others, the United States Embassy and the Swedish Agency for Flexible Learning on Distance Education Methodology.

[1] The Website for the Distance Learning Foundation is www.dlf.ac.th



Other government agencies taking part in providing online learning include the National Science and Technology Development Agency and Thailand Graduate Institute of Science and Technology which launched "LearnOnline" to serve as a central repository for Web-based courses from universities and organisations.

8.4 Development of Materials and Technologies for Education

Since 2002, the Ministry of Education has implemented a number of projects to develop software, media, and learning content, along with technologies for education, for use at the basic education level. Under the sponsorship of the SchoolNet Project and the Ministry, educational institutions and the private sector have developed multimedia centres, multimedia and software, electronic books, and websites. The Office of the Higher Education Commission has developed a standardised database system for higher education institutions and is supporting the production of multimedia software to aid the teaching-learning process.

8.5 Development of Personnel and Learners

According to the Software Industry Promotion Agency, the demand for software personnel will reach 100,000 by the year 2008. At the same time, it is expected that educational institutions will be able to deliver only 40,000. Anticipating the personnel shortage and recognising the importance of improving ICT literacy in Thailand, educational institutions and several agencies have organised courses focusing on the use of ICT for education, development of the ICT workforce, and promotion of ICT literacy in the country.

In addition to the EDNET project, several other plans and projects focus upon issues relating to the development of technology producers and users, as well as the development of learner capabilities to utilise these technologies for education. These include:

1) 'The Use of ICT in Developing the Capability of Thai Children', a project of the Ministry of Information and Communications Technology;

2) the ICT Master Plan for Higher Education (2002-2006); and

3) IT plans of several agencies, which include training courses for developing teaching-learning materials.

Effective utilisation of technologies for education can improve the quality of teaching and learning as well as make continuing education and lifelong learning for all Thai people more promising. To achieve these goals, however, concrete action must be taken in terms of the provision of ICT for education, including educational television and radio, and the development of personnel, materials and technologies for education.

Chapter 9
Development of Teachers and Education Personnel

Thailand attaches great importance to improving the status and quality of teachers and education personnel. Teachers, in particular, are the key agents in reforming the teaching-learning process.

9.1 Present Status of Teachers

Except for AY 2003, the total number of teachers in basic education gradually increased during the academic years 2001-2005. *(Table 9.1)*

Table 9.1 Number of Teachers in Basic Education, Academic Years 2001-2005

Responsible Agencies	Academic Years				
	2001	2002	2003	2004	2005
Ministry of Education	588,899	568,283	532,814	597,680	614,481
Ministry of Tourism and Sports		1,128	116	1,131	983
Ministry of Culture		12,538	886	980	1,009
Ministry of Interior	42,923	44,054	57,408	72,142	61,863
- Department of Local Administration	29,407	29,792	43,286	57,720	47,372
- BMA	13,516	14,262	14,135	14,422	14,491
Ministry of Social Development and Human Security			755	779	106
Royal Thai Police		1,805	1,669	1,778	1,830
Total	633,818	650,548	593,648	674,490	680,272

Source: Thailand Education Statistics Reports 2001-2005

In contrast, the number of teachers in higher education increased steadily during the academic years 2001-2005. *(Table 9.2)*

Table 9.2 Number of Faculty in Higher Education, Academic Years 2001-2005

Responsible Agencies	Academic Years				
	2001	2002	2003	2004	2005
Ministry of Education	42,080	42,541	46,992	57,159	60,262
Ministry of Tourism and Sports				874	988
Ministry of Culture				176	145
Total	42,080	42,541	46,992	58,209	61,395

Source: Thailand Education Statistics Reports 2001-2004

The Basic Education Curriculum is comprised of 8 core academic subjects, namely, Mathematics, Science, English, Thai Language, Arts, Social Studies, Careers and Technology, and Physical Education. Despite attempts to attract qualified persons to teach in the core academic subjects, shortages remain in required areas.

According to research conducted by Pruet Siribanpitak, Faculty of Education, Chulalongkorn University, many teachers do not have qualifications that match the subject they teach, and the practice of out-of-field teaching adds to the scarcity in critical subjects. The percentages of secondary school teachers with qualifications in the subjects taught as well as those teaching out-of-field in the 8 core subjects in AY 2004 are shown in table 9.3

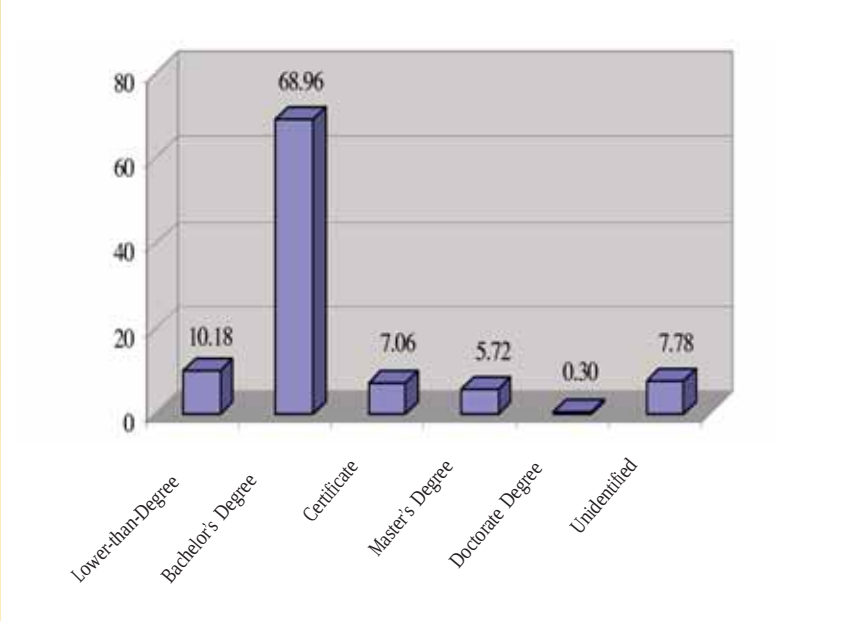
Table 9.3 Secondary School Teachers with and without Qualifications in the Subjects Taught, Academic Year 2004

Core Subjects	Teachers with Qualifications in the Subject Taught	Teachers Teaching Out-of-Field
Mathematics	93.63	6.37
Science	94.63	5.37
English	95.33	4.67
Thai Language	92.89	7.11
Arts	82.38	17.62
Social Sudies	89.97	10.03
Careers and Technology	84.42	15.58
Health/Physical Education	87.82	12.18
Average	91.06	8.94

Source: Pruet Siribanpitak, 'Qualifications of the Teaching Force in Seven Nations'

Ideally, teachers must complete a bachelor's degree in the subject matter of a particular field and in pedagogy and teaching methods. Not all teachers meet the requirements, however. Approximately 10% of teachers do not hold a degree, while nearly 70% have completed a bachelor's degree and 13% hold a master's degree or higher. The percentages of teachers with and without degrees are shown in Figure 9.1.

Figure 9.1 Qualifications of Teachers, Academic Year 2003



Source: http://www.onec.go.th/doc_onec/table/table6.htm.

Upgrading in quality and support of teachers and education personnel is being undertaken in the 4 key areas of training, development and promotion, professional standards control, and personnel management.

9.2 Training of Teachers and Administrators of Educational Institutions

Given the shift from teacher-centred to learner-centred approaches, teachers must be able to function as facilitators, to enable students to become independent in thought, action, and problem solving while adhering to ethical and moral values of the society.

Under the current reform measures, Thai teachers are being supported and encouraged to attend training courses locally and abroad. The following training activities are among those organised especially for teachers and education personnel:

(1) *Development of the 5-year Pre-service Education Programme:* This programme requires completion of a 5-year bachelor's degree, with the first 4 years dedicated to coursework and a final year devoted to teaching practice at an approved school. College graduates with a bachelor's degree in fields other than education must complete a 1-year graduate certificate programme in education before being certified.

(2) *Training for teachers of English:* Between 2005 and 2006, the Ministry of Education allocated approximately Bht. 300 million for nearly 20 projects focused on improving the English language proficiency of in-service teachers. Among these are: a project to upgrade the English language proficiency of 15,000 primary and secondary school English teachers in 80 educational service areas in 30 provinces; an 'Intensive Course for ERIC 2006', to train 180 qualified individuals as trainers of English teachers; and a project to introduce Total Physical Response (TPR) techniques to 400 primary school teachers.

In carrying out these projects, the Ministry works closely with international agencies, including the British Council and the Regional English Language Office of the United States Embassy, as well as the AUA Language Center, and ERIC Centres.

Training activities responded to 5 indicators of the national standards for English language proficiency of teachers, comprising linguistic competence, communicative competence, knowledge of foreign language teaching theories and approaches, ability to organise learning consistent with the syllabus, and on-going professional development.

(3) *Training activities to strengthen professional standards of teachers and education personnel:* It is expected that the first round of training will be completed in 2006, with further rounds of training to be implemented in 2007 and 2008 as required.

(4) *Completion of the Bachelor's Degree in Education for in-service teachers:* In accordance with the 1999 National Education Act, a professional teaching licence is required of in-service teachers and school directors, for which a Bachelor's Degree in Education is a requirement. Rajabhat Universities have been conducting special programmes since 2003 for in-service teachers

who must meet this requirement. It is expected that all in-service teachers will have attained at least a Bachelor's Degree in Education by the year 2007.

(5) *In-service programmes for a Post-graduate Certificate and Master's Degree in Teaching:* Teachers holding a bachelor's degree in fields other than teaching are encouraged to undertake in-service programmes leading to a Post-graduate Certificate or a Master's Degree in Teaching.

(6) *In-service Post-graduate Certificate Programme for Administrators:* Educational institution administrators must have a licence. This licence requires a Bachelor's Degree, or at least a Post-Graduate Certificate, in Educational Administration in addition to a bachelor's degree in another field. Administrators, who hold a bachelor's degree in fields other than educational administration, are thus required to acquire at least a Post-graduate Certificate in Educational Administration.

During 2003 through 2007, Rajabhat Universities, in cooperation with other agencies, are offering a programme to enable administrators to study for this certificate at their workplace.

(7) *In-service Master's Degree Study for Administrators:* Administrators of educational institutions holding a Bachelor's Degree in Educational Administration are encouraged to study towards a master's degree in the field.

9.3 Development and Promotion

The development and promotion of teachers and education personnel has been undertaken in a number of ways:

1) Establishment of an Independent Organisation for Teacher Development

The National Institute for Development of Teachers and Educational Personnel, formerly known as the Institute for Development of Educational Administrators, carries out the following development tasks: (1) formulation of policies, plans and guidelines; (2) implementation of promotion and support activities; (3) development of systems and standards; (4) coordination and networking among relevant agencies; and (5) improvement of internal efficiency.

Approximately Bht. 60 million will be expended by the Institute between 2006 and 2009 to expand and strengthen its network for development and to train 600,000 teachers and education personnel. A variety of training methods will be employed, including networking, e-learning self-study kits, peer-group teaching, classroom research, seminars, and distance learning.

2) Personnel Development

To attract qualified individuals to the teaching profession and retain them, special salary scales have been introduced, and a 4-year (2005-2008) strategic plan has been formulated to solve the problem of teacher indebtedness.

Scholarships for master's and doctorate degrees as well as academic training activities in science and technology areas are being provided to qualified teachers with special abilities in these fields.

Teachers and students with special abilities in the fields of mathematics, chemical science, biological science, physics, and computing are fully supported in their research projects and training activities. Qualified students are selected to represent Thailand in the International Academic Olympics.

3) Development and Promotion of School Principals and Administrators

To fully utilise the resources of the country's higher education institutions in the development of teachers and administrators, the Office of the Education Council has established a coordinating body to create a network of educational administration departments offering graduate degrees and training courses. The initial membership of the body, called the Education Administration Directors Council of Thailand, is currently comprised of 57 departmental directors.

Now known as the Association for Professional Development of Educational Administration of Thailand, the organisation has played an important role in strengthening educational administration science through seminars and symposiums, as well as by selection of and awards for outstanding research, textbooks, and lecturers.

The Association also recognised and rewarded 15 Model Administrators with outstanding knowledge, capabilities and performance in school administration. The Office of the Education Council recently published a study describing the administration models, school board development, and network creation in the schools managed by these model administrators.

4) Recognition and Rewarding of Outstanding Teachers

The most significant agents of learning reform are teachers, and the contributions of outstanding teachers are recognised by organisations such as the Teachers' Council of Thailand and the Association of Science Teachers. The Office of the Education Council has selected outstanding teachers under three categories, National Teachers, Master Teachers, and Teachers of Thai Wisdom, to recognise professional excellence and to enhance the quality of teaching and learning.

(1) National Teachers

The National Teacher Award recognises innovations that improve the quality of learning. The award consists of a salary supplement, a grant to accomplish a proposed innovative project, and a grant to the teacher's school to facilitate integration of the teacher's project into the school.

From 1998 to 2006, 4 groups, comprising 26 individuals, have been recognised as National Teachers, and have become agents of change for learning reform. Each National Teacher is expected to conduct research over a 3-year period on means of improving the teaching-learning process and to disseminate the results of the study to at least 50 other teachers for application in their own classrooms.

(2) Master Teachers

586 Master Teachers, or Model Teachers, have been selected as key agents for learning reform. Each Master Teacher is required to spend 4 months disseminating his learner-centred teaching techniques to at least 10 colleagues. These Master Teachers have so far directly assisted 8,848 colleagues.

The techniques used by the Master Teachers have been grouped into 15 teaching models, categorised under thinking and managerial

skills, utilisation of authentic experience, integrated learning, and utilisation of learning sources. These teaching models have been published for dissemination.

Between 2005 and 2006, the Master Teachers are participating in an ongoing project of the Office of the Education Council, "Research and Development of Learner-Centred Learning Models", in which 9 of the 15 models have been selected for presentation. Nearly 9,500 teachers as well as students in 90 schools have participated in this project. Further details of the project were already mentioned in Chapter 4.

(3) Teachers of Thai Wisdom

In order to promote local knowledge and national arts and culture, a number of local knowledge experts have been honored as "Teachers of Thai Wisdom". The teachers so honored are experts in 9 fields of knowledge: agriculture; industry and handicrafts; Thai traditional medicine; natural resources and environment management; community trusts and enterprises; fine arts; language and literature; philosophy, religion, and traditions; and nutrition.

From 2002 to 2006, 282 local experts have been recognised as Teachers of Thai Wisdom. These individuals are provided with financial support to carry out the three main tasks: (1) mobilising local wisdom in school settings; (2) integrating local knowledge into the school curriculum; and (3) establishing local wisdom learning centres and networks.

Local wisdom learning centres are a new approach in the teaching–learning process; they are accessible to all, and have the potential to really become alternative schools for lifelong learning in the community. It is expected that these learning centres will enable learners to learn on their own according to their interests, potential, readiness and opportunities; and learners will be able to transfer knowledge acquired into the formal education system, apply the knowledge and skills of local wisdom in pursuing careers, and improve their quality of life.

At present, only 82 centres have been established, mostly at the teachers' residences; however, while the number of centres is still limited, the individuals, organisations, and networks involved are tremendous. Today, the networks comprise 5,848 organisations and 117,547 individuals, and the number is increasing every month.

The models of teaching and bodies of knowledge gained from these Teachers of Thai Wisdom are being compiled by the Office of the Education Council, and the relevant documents will soon be published for dissemination as case studies.

9.4 Maintaining Professional Standards

To ensure the maintenance of professional standards, the main areas that have been addressed are institutional development and the development of professional standards and ethics.

1) Institutional Development

Two organisations under the supervision of the Ministry of Education focus on teacher professionalism. The Office for Welfare and Security Promotion of Teachers and Education Personnel oversees welfare and security of teachers and education personnel. The Teachers Council is to take on the added responsibilities of setting professional standards, issuing and revoking professional licenses, as well as monitoring adherence to professional standards and ethics.

2) Development of Standards and a Code of Ethics for Educational Professionals

The Teachers' Council has established a set of standards and a code of ethics for educational professionals, in line with the 2003 Teachers and Education Personnel Council Act, which specifies that professional standards be comprised of professional knowledge and experience, of performance, and of conduct.

Standards of professional knowledge for teachers include criteria relating to language and technology, curriculum development, learning management, psychology, educational measurement and evaluation, classroom management, educational research, educational innovation, and information technology.

Performance standards consist of professional training and practice teaching during study and teaching experience in specific subjects.

The standards of conduct relate to personal, professional, client-centred, collegial, and societal ethics.

9.5 Personnel Management

Three laws were issued to implement reforms in personnel management of teachers and educational personnel:

1) *The Act on Administrative Procedures for Teachers and Educational Personnel:* In accordance with the Act, the personnel management system has been decentralised, with duties and authorities organised at 3 levels:

(1) The Commission for Teachers and Educational Personnel, responsible for personnel management at the central level;

(2) a Sub-Commission for Teachers and Educational Personnel, attached to each Educational Service Area; and

(3) Educational Institution Committees, responsible for personnel management in each school.

2) *The Act on Administrative Procedures for Civil Servants in Higher Education Institutions:* Under this Act, civil service personnel in each state university will become employees of that institution. State universities that

opt for autonomy will therefore undergo a tremendous change in their personnel management system.

To reduce the impact of the transformation, the Office of the Higher Education Commission will allow each institution to establish its own rules and regulations, and set its own timeframe for the changeover in personnel administration and management.

3) *The Act on Salary and Remuneration for Status and Academic Rank of Teachers and Education Personnel:* This act specifies salary, remuneration, and benefit levels for teachers and education personnel commensurate with their status and academic rank.

9.6 The First Thailand Education Congress on the Occasion of World Teachers' Day

In recognition of the importance of the teaching profession, the First Thailand Education Congress was organised during November 1-3, 2005, on the occasion of World Teachers' Day 2005, and in honour of the 50th Birthday Anniversary of HRH Princess Maha Chakri Sirindhorn.

Attended by more than 2,000 teachers and educators, the Congress focused on reforms relating to teachers and education personnel. Eight foreign speakers were invited to present their views on teacher education reform, the role of teacher associations in professional development, increasing educational effectiveness of e-texts, and science education.

At this Congress, HRH Princess Maha Chakri Sirindhorn was proclaimed the 'Light of Education' of Thailand, with the proclamation and enumeration for many contributions Her Royal Highness has made to Thai education.

Also included in the event were presentations on educational provision, international and English Programme schools, as well as discussion sessions regarding standards and ethics, welfare and security, personnel administration, learning innovations, and the current and future status of Thai teachers in a knowledge-based society. The Congress concluded with study visits to learning sources and model schools.

Delegates to the Congress prepared a Declaration focusing on the need for Thai teachers to recognise education as a tool that will develop the quality of life and address the problems of environmental degradation, national disasters and violent conflicts in the world. Therefore, teachers must devote themselves to continuous self-development to improve the quality of students and the society.

It is imperative that all concerned carry out the development of teachers and education personnel to contribute to the success of learning reform and to benefit all stakeholders, especially the targets of these efforts, the learners.





Chapter 10
Participation in Educational Provision

As specified in the 1999 National Education Act, local administration organisations, families, individuals, community organisations, private organisations, professional bodies, religious institutions, enterprises, and other social institutions have the right to provide and support basic education as prescribed in ministerial regulations.

Such providers and supporters of basic education are entitled to receive grants, tax rebates or exemptions for educational expenditures and state support, including academic support and other benefits as provided by the law.

10.1 Educational Provision by Local Administration Organisations

The local administration organisations in Thailand can be divided into 4 main types. As of 24 November 2005, there were 7,855 local administration organisations. Details regarding the types and number of these organisations are shown in the following table.

Table 10.1 Local Administration Organisations

Type of Local Administration Organisation	Number
Provincial Administration Organisations (excluding Bangkok)	75
Municipalities	1,156
Sub-District Administration Organisations	6,622
Special Local Administration Organisations (Bangkok Metropolitan Administration and Pattaya City)	2
Total	7,855

Source: Department of Local Administration, Ministry of Interior

In decentralising 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 centres as well as the procurement of educational materials and supplementary food items, such as milk.

According to statistics of the Department of Local Administration, only 1,782 out of 16,111 child development centres were initially established by local administration organisations. As of April 2006, 14,329 child development centres had been transferred to local administration organisations from other agencies. Of these, 7,521 centres were transferred from the Department of Community Development, 4,157 from the Department of Religious Affairs, and 2,651 from the Office of the Basic Education Commission.

In AY 2006, 704,814 children are being cared for by 16,111 child development centres now under the supervision of local administration organisations in 75 provinces, excluding the Bangkok Metropolitan Administration. In Bangkok, local communities are encouraged to participate in creating pre-school child centres and to provide financial support, supplementary food, and personnel training.

In addition to child development centres, local administration organisations will eventually be responsible for institutions offering education at other levels. However, according to the Office of the Education Council's *Report on Educational Provision by Local Administration Organisations in 2005*, less than 2%, or only 146 of the 7,855 local administration organisations were supervising educational institutions, and only 955 institutions were under local supervision. *(Table 10.2)*

Table 10.2 Number of Educational Institutions under the Supervision of Local Administration Organisations (LAOs)

Type of LAOs	Number of LAOs in charge of Educational Institutions	Educational Institutions under LAO Supervision
Municipalities	144	510
Pattaya City	1	10
BMA	1	435
Total	146	955

Source: Bureau of Policy and Planning, OEC

The capability of local administration organisations to provide different levels of education varies. The majority of schools under local administration supervision are primary level institutions. The total number of students in basic education institutions under the supervision of local administration organisations has increased steadily, from 699,582 students in 2,000 to 748,461 students in 2005. Between 2000 and 2005, the average percentage of students in basic education institutions under local administration organisations is around 6.2%. *(Table 10.3)*

Table 10.3 Number of Students in Basic Education Institutions under the Supervision of Local Administration Organisations

Levels of Education	Academic Years					
	2000	2001	2002	2003	2004	2005
Pre-primary	151,944	144,285	139,555	141,110	139,011	142,264
Primary	494,255	509,777	522,134	526,625	528,602	523,869
Lower Secondary	52,350	54,423	57,925	62,546	70,202	78,529
Upper Secondary	1,033	1,645	2,238	2,230	2,531	3,095
Vocational Certificate	-	-		795	718	704
Total	699,582	710,130	721,852	733,306	741,064	748,461
Percentage of the total number of students throughout the country	5.9	6.1	6.2	6.0	6.1	6.2

Source: Bureau of Policy and Planning, OEC

A 15-year policy has been formulated to prepare local administration organisations to assume responsibility for provision of education. Issues addressed in the policy include: equal opportunity in basic education; administrative systems; teachers and education personnel; and quality and standards commensurate with the readiness and suitability of local administration organisations as well as requirements of the local areas.

Since most local administration organisations have not had experience in the provision of education, the Ministry of Education has set criteria and methods to assess their readiness. In addition, the concurrence of administrators, teachers, educational personnel and boards of the basic education institutions that will be transferred was also included, in January 2006, as a special condition in the Ministerial Rules on the criteria and procedures for assessing such readiness.

10.2 Educational Provision by the Private Sector

The private sector is an important mechanism in the provision of education at all levels and of all types. This topic focuses on the participation of the private sector, including non-governmental organisations, private educational institutions, and enterprises.

10.2.1 Educational Provision by Non-governmental Organisations

Both local and foreign non-governmental organisations make a major contribution to the provision of basic education. For example, several agencies, such as the child development centres 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 programmes, a special school for the hearing-impaired and education sponsorship.

The Duang Prateep Foundation's community kindergarten project was initiated in the Klong Toey slum as a form of refuge from the slum conditions and slum values for young children whose parents had to leave them while working. 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.

10.2.2 Educational Provision by Private Educational Institutions

As revealed in the report prepared by the Office of the Private Education Commission giving statistics of private education for AY 2004, there were 8,078 private educational institutions providing formal, non-formal, special and welfare education in 2004. The number of private educational institutions providing formal basic education increased from 3,258 in 2001 to 3,819 in 2005. *(Table 10.4)*

Table 10.4 Number of Public and Private Educational Institutions Providing Formal Basic Education, Academic Years 2001-2005

Levels of Education	2001		2002		2003		2004		2005	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Pre-primary	42,654	2,596	42,075	2,685	44,804	2,692	44,560	2,838	44,562	2,821
Primary	32,310	1,595	31,426	1,617	31,070	1,619	30,847	1,763	30,736	1,803
Lower Secondary	9,970	584	9,903	587	9,719	594	10,119	652	10,087	922
Upper Secondary	3,217	518	3,218	520	3,218	518	3,105	532	3,130	752
- General Ed.	2,666	171	2,666	171	2,697	167	2,677	154	2,710	372
- Vocational Ed.	551	347	552	349	521	351	428	378	420	380
Total	47,511	3,258	46,579	3,367	45,251	3,567	48,845	3,562	48,796	3,819

Source: Office of the Education Council

**Note: Some educational institutions offer more than one level of education and thus are counted in each relevant level.*

When classified into levels of education, the proportion of private participation is highest at the upper secondary level (vocational stream) and at the primary level. The overall increase in private participation at the basic education level is quite small, from 14% in 2001 to 16% in 2005. *(Table 10.5)*

Table 10.5 Proportion of Public to Private Participation in Basic Education Provision, Academic Years 2001-2005

Levels of Education	Academic Years				
	2001	2002	2003	2004	2005
Primary	86:14	85:15	85:15	84:16	83:17
Lower Secondary	94:6	90:10	90:10	89:11	91:9
Compulsory Education	88:12	87:13	86:14	86:14	86:14
Upper Secondary					
- General	96:4	93:7	92:8	91:9	94:6
- Vocational	71:29	70:30	66:34	62:38	63:37
Overall Basic Education	86:14	85:15	84:16	84:16	84:16

Source: The Office of National Education Council

In AY 2005, 83.8% or 12,462,573 students were in public institutions while approximately 16.2% or 2,409,264 students were in private institutions. The percentage of students that were absorbed by private basic and higher education institutions accounted for only 16.1% and 17.0% respectively. *(Table 10.6)*

Table 10.6 Number and Percentage of Students in Public and Private Schools, Classified by Level of Education, Academic Year 2005

Levels of Education	Number of Students			Percentage	
	Public	Private	Total	Public	Private
Basic Education	10,608,750	2,028,535	12,637,285	83.9	16.1
• Pre-primary	1,946,867	511,923	2,458,790	79.2	20.8
• Primary	4,870,736	968,352	5,839,088	83.4	16.6
• Secondary	3,791,147	548,260	4,339,407	87.4	12.6
- Lower Secondary	2,408,613	225,271	2,633,884	91.4	8.6
- Upper Secondary	1,382,534	322,989	1,705,523	81.1	18.9
General	943,894	63,473	1,007,367	93.7	6.3
Vocational	438,640	259,516	698,156	62.8	37.2
Higher Education	1,853,823	380,729	2,234,552	83.0	17.0
• Diploma	258,869	130,417	389,286	66.5	33.5
• Undergraduate	1,432,453	233,806	1,666,259	86.0	14.0
• Certificate	5,980	310	6,290	95.1	4.9
• Master Degree	146,577	15,624	162,201	90.4	9.6
• Doctorate	9,944	572	10,516	94.6	5.4
Total	12,462,573	2,409,264	14,871,837	83.8	16.2

Source: Thailand Educational Statistics Report, 2005

10.2.3 Educational Provision for Employees by Private Enterprises

Several private enterprises cooperate with educational institutions in providing training opportunities for their students. In addittion, business enterprises are encouraged to provide education for their employees.

The Labour Skills Development Act encourages business enterprises to contribute to the Labour Skills Development Fund and to provide in-house training for their employees.

Similarly, the *Ministerial Rule on Rights of Enterprises in Establishing Learning Centres to Provide Basic Education* was issued in 2004 to encourage enterprises to provide education programmes for their workers. Some rules that are imposed on educational institutions are not enforced for learning centres established by enterprises. For example, rules on the number of buildings, classrooms and student/teacher ratio are not applied, and teaching licenses are not required for instructors.

A number of enterprises provide education for their workers. Some provide formal education at the upper secondary level, while others provide vocational education equivalent to upper secondary level by focusing on work-related curriculum such as repair and maintenance of industrial machinery, welding, retail business, hotel management and food-processing.

10.2.4 Educational Provision by Families

Family-based early childhood development plays an essential role in education. As mentioned in Chapter 3, 97.7% of the 2,850,937 children in the 0-3 age group and 17.5% of the 2,991,132 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 200 families. Some families educate only their own children, while others form groups and set up learning centres 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.

10.3 Educational Provision by Religious Institutions

The great majority of Thais are Buddhists, while about 4% are Muslims and 1% Christians, Brahmins, Hindus, Sikhs and others. There is absolute religious freedom and all religious institutions are encouraged to participate in educational provision and support.

10.3.1 Educational Provision by Buddhist Religious Institutions

There are more than 30,000 Buddhist temples in Thailand. Studies of Buddhism as well as general education are provided to monks and novices in these temples as well as to laymen.

• *The Study of Buddhism* is divided into the teaching of Dharma and Pali teachings. The teaching of Dharma is provided to the ecclesiastics and also to laymen.

• *General Ecclesiastical Schools*

General ecclesiastical schools provide lower and upper secondary education curricula equivalent to those provided by the Office of Basic Education Commission. Apart from general subjects, the curricula include learning units related to religious practice, Buddhist doctrine and Pali Language.

• *Buddhist Universities*

Currently, there are 2 Buddhist universities situated in Bangkok providing higher education for monks, novices and also laymen.

Undergraduate courses at Mahamakutrajaviddhayalaya University are offered in the faculties of Religion and Philosophy, Humanities, Social Sciences, and Education.

Mahachulalongkornrajaviddhayalaya University provides courses at the bachelor degree level in the faculties of Buddhism, Humanities, Social Sciences, and Education. Master's and doctoral degrees are also provided in the Faculties of Buddhism and Philosophy. Since the year 2000, interested foreigners can also apply for international master degree programmes in Buddhist Studies and Philosophy.

• *Informal Religious Education*

Buddhist Sunday Schools offer instruction to laymen in Buddhism as well as general education. These schools offer religious instruction at the preparatory, basic, intermediate, and advanced levels.

10.3.2 Educational Provision by Islamic Religious Institutions

Islamic religious institutions play a major role in providing formal, non-formal and informal education for Muslim children throughout

the country, especially in the three southern border provinces of Yala, Pattani and Narathiwat.

In 2006, there are 101 Pondok schools or private Islamic boarding schools focusing on the teaching of Islam, and 47 schools that teach Islam as well as general or vocational education. Non-formal education, focusing on vocational training and the teaching of Islam, is also provided in some schools. Muslims of all ages embrace Islamic doctrine as their way of life, and religious education is provided informally from childhood by families and nearby Islamic religious institutions.

10.3.3 Educational Provision by Christian Religious Institutions

Christian denominations play an important role in providing formal, non-formal and informal education to the Christian communities. There are only 2 schools that focus only on the teaching of Christianity; both the Roman Catholic Diocese and Protestant denominations operate general education schools for their followers and others.

In addition, non-formal education is offered for Christians wishing to become ordained, and informal education programmes are offered to other Christians by these religious institutions.

10.3.4 Educational Provision by Sikh Religious Institutions

In 2001, there were around 17 Sikh religious institutions and 25,000 followers, with 2 basic education institutions operated by the Sikh denomination. Instruction in the Sikh religion using Panjabi Language as the medium of instruction is offered through non-formal and informal programmes for Sikhs wishing to become ordained. Informal education programmes focusing on the Sikh doctrine is also available to the general public.

10.3.5 Educational Provision by Brahman-Hindu Religious Institutions

There are approximately 3,000 followers of the Brahman-Hindu religion in Thailand, and one school operated by the Brahman-Hindu Church. Informal education programmes provide instruction in the religion.

Many Brahman-Hindu ceremonies are incorporated in Buddhist observances and in Royal rituals.

10.4 Contribution of Agencies Other than the Ministry of Education

Specialised education, both at basic and higher education levels, is provided by ministries, bureaus, departments, state enterprises and other public agencies in accordance with their needs and expertise, taking into consideration national education policy and standards.

Courses are offered for graduates from primary schools to upper secondary schools, both from general and vocational streams. All responsible agencies have developed their own curricula, which can be classified into 4 groups:

(1) Curricula for the production of professional soldiers and police include the curriculum of Preparatory School for the Armed Forces Academies; curricula of the military, naval, air force academies and police cadets; and curricula for preparing warrant officers for graduates from lower and upper secondary schools.

(2) Curricula for specific technicians include those for training military technicians to work in the Armed Forces, as well as for various agencies such as Irrigation College, Railway Technical School, etc.

(3) Medical science curricula are organised for secondary school graduates, requiring 1-4 years of study in the institutions of the Ministry of Public Health, the Bangkok Metropolitan Administration (BMA) and the Thai Red Cross Society.

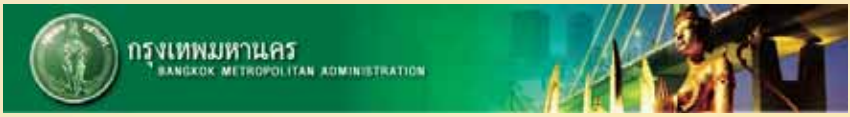
(4) Curricula for other specific purposes are organised for graduates from lower secondary schools, both in general and vocational streams, and general upper secondary schools as required by each institution, such as the Merchant Marine Training Centre, Cooperatives School, Postal School and Civil Aviation Training Centre, etc.

Table 10.7 Agencies Involved in Provision of Specialised Education

Responsible Bodies	Type of Institutions
• Ministry of Agriculture and Cooperatives	• Irrigation College • Veterinary School • Cooperatives School
• Ministry of Transport	• Merchant Marine Training Centre • Railway Technical School • Civil Aviation Training Centre
• Ministry of Information and Communications Technology	• Meteorological School • Postal School
• Ministry of Defence	• Armed Forces Academies Preparatory School • Military, Naval, Air Forces Academies • Medical Colleges • Nursing Colleges • Technical Training School • Survey School
• Royal Thai Police	• Police Cadet Academy • Nursing College • Police School
• Ministry of Public Health	• Nursing Colleges • Public Health Colleges • College of Medical Technology and Public Health
• Ministry of Science and Technology	• Chemical Practice Institute
• Ministry of Justice	• Law Training Institute
• Bangkok Metropolitan Administration	• Medical College • Nursing Colleges
• Thai Red Cross Society	• Nursing College

Source: Education in Thailand 2004

Participation in and support of educational provision will contribute to the success in educational reform in Thailand. In this regard, it is essential for the government to mobilise resources from and provide further support and benefits for all sectors to promote them in providing education at all levels and of all types as stipulated in the National Education Act.



ICL Fund

ADB

THE WORLD BANK

Chapter 11
Resources and Investment for Education

The mobilisation of resources and investment for education, the allocation of budgets, and budget management are necessary mechanisms to consolidate educational reform efforts. To make these mechanisms effective, new laws and regulations as well as new approaches to financial administration must be addressed.

11.1 The Mobilisation of Resources and Investment for Education

Since financial resources for education are derived from both public and private sources, the current state of cost-sharing between participants in educational provision and the society as a whole are categorised as public allocations and contributions from the private sector and society.

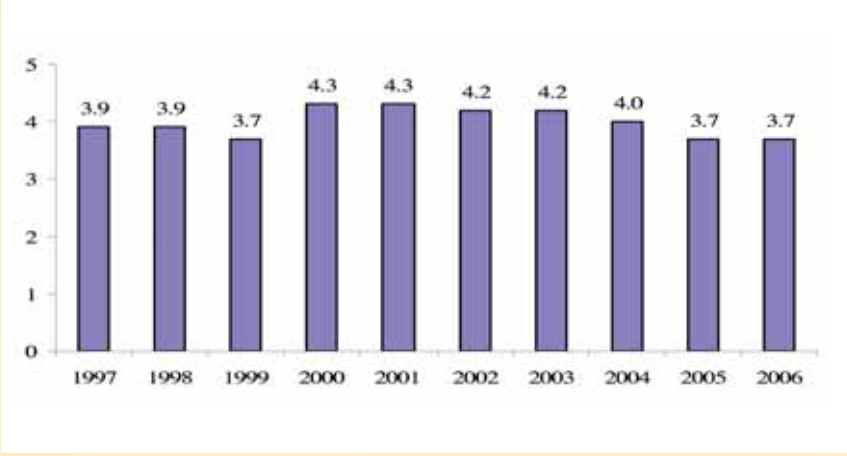
11.1.1 Contributions from Public Sources

Financial support from the government is essential to increased educational access at all levels and of all types. The investment from public sources for education includes the central government budget and/or subsidies for pre-primary to higher education in both public and

private institutions, non-formal education, and scholarships for students, as well as subsidies for educational expenditures of the Bangkok Metropolitan Administration and local administration organisations.

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 to the education sector. As can be seen in the following figure, the share of education as a proportion of the GDP has remained fairly constant, declining only slightly from 3.9% in 1997 to 3.7% in 2006.

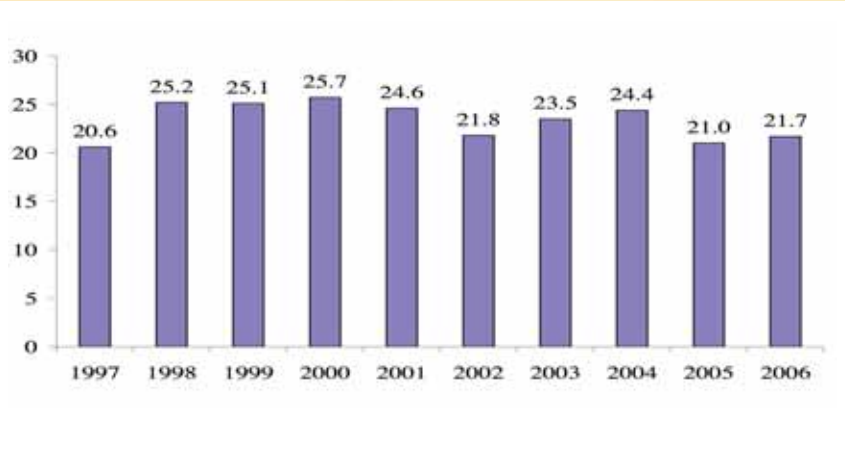
Figure 11.1 Educational Budget as % of GDP, Fiscal Years 1997-2006



Source: Bureau of the Budget

Over the past decade, the education share of the budget was largest in the year 2000 at 25.7% and declined to 21.7% (Bht. 295 million) in 2006. *(Figure 11.2)*

Figure 11.2 Educational Budget as % of National Budget, Fiscal Years 1997-2006



Source: Bureau of the Budget

As shown in Table 11.1, the actual budget allocations for education have increased each year during the Fiscal Years 2004-2006, although the proportion of the total budget has remained nearly constant, at 21.6%, 21% and 21.7%, respectively.

Table 11.1 Budget Allocations for Educational Provision and Reform, Fiscal Years 2004-2006

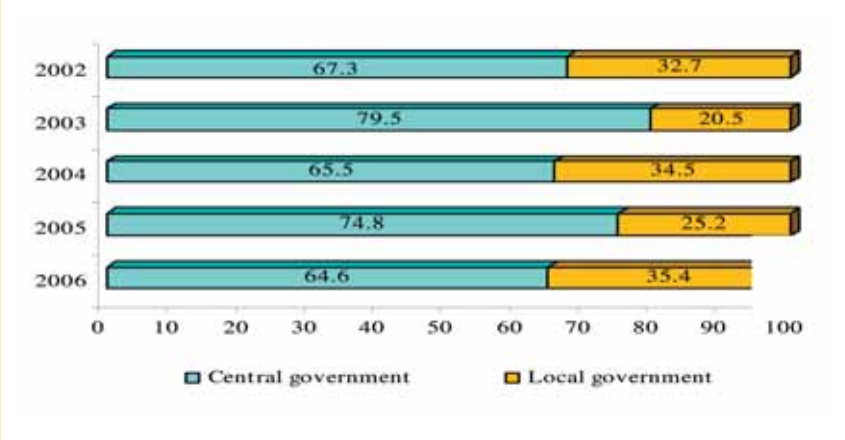
Budget Allocations	Fiscal Years (Unit: Millions of Baht)		
	2004	2005	2006
Basic Education	179,033.4	184,405.3	203,246.2
Higher Education	34,509.9	40,131.8	48,152.3
Unclassified Levels	3,326.9	3,557.6	334.2
Subsidiary Services	29,428.5	30,704.9	33,654.1
Others	4,895.3	3,922.2	9,568.1
Total Budget for Education	251,194.0	262,721.8	294,954.9
Total Budget Allocations	1,163,500.0	1,250,000.0	1,360,000.0
% of Total Budget Allocations	21.6	21.0	21.7

Source: Thailand's Budget in Brief, FY 2005 and, FY 2006

The current reform proposal encourages greater support for education from local resources. However, the major source of local funding for education still comes from the central government. The share of central government subsidies for municipal schools under the responsibility of the Bangkok Metropolitan Administration and Pattaya City has remained nearly twice that of the local budgets.

As shown in figure 11.3, the share of the local organisation budget in Pattaya City increased only slightly, from 32.7% in 2002 to 35.4 % in 2006.

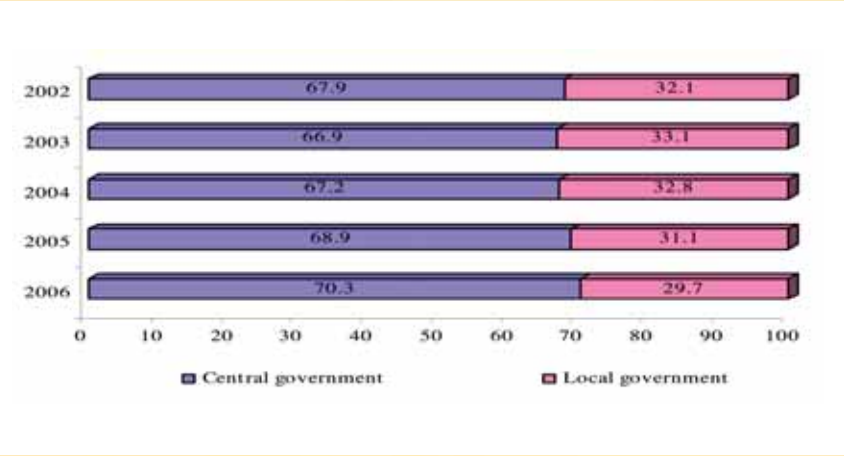
Figure 11.3 Educational Budget Distribution of the Municipality of Pattaya City, Fiscal Years 2002-2006



Source: Education Division, Municipality of Pattaya City

As shown in figure 11.4, the share of local funding for education under the responsibility of the Bangkok Metropolitan Authority has decreased slightly, from 32.1% in 2002 to 29.7% in 2006.

Figure 11.4 Educational Budget Distribution of Department of Education of BMA, Fiscal Years 2002-2006



Source: Department of Education, BMA

Apart from the government budget for educational provision and educational reform through the Ministry of Education, several other government agencies contribute a significant amount for educational purposes. Included among these generous donors is the Government Lottery Office. Between the Fiscal Years 1994 and 2005, the Government Lottery Office donated more than Bht. 670.5 million for educational purposes.

11.1.2 Contributions from Private Sources

Contributions from the private sector and society in this chapter are comprised of non-government sources, private educational institutions and the business sector. Support from international organisations is discussed in Chapter 13.

(1) Non - Government Sources

Resources from non-government sources are irregular and intermittent and include: donations made by individuals and communities, which vary both in cash and in kind; other revenue of educational institutions, for instance, that from academic services, students' products, and property.

(2) Private Educational Institutions

The role of private education in improving educational quality and in reducing the government burden for educational provision is significant. The number of private basic and higher education institutions has gradually increased over the past 5 years. although the percentage of increase is quite small, from 12% in 1999 to 16% in 2004.

It is expected that investment in private education from 2002 to 2012 will amount to Bht. 22.5 billion. Further government support to private institutions is vital to enable this sector to increase its participation in educational provision.

At the basic education level, general subsidies for *per* head expenditures were distributed to both public and private schools. At the higher education level, however, the government subsidies are available only to public degree-granting institutions, and given the escalating financial responsibilities at the basic education level, increased support to higher education is not yet feasible.

Because of the limited government financial support and subsidies, private degree-granting institutions must charge higher tuition fees and are able to absorb only a minor portion of the total number of students in higher education. In this connection, government support should be geared towards encouraging private degree-granting institutions to expand their enrolments, and consequently their share of government support, in response to the escalating demand for higher education from growing numbers of high school graduates and adults with greater educational needs.

Some important action has been taken to mobilise resources contributed by the private sector in line with the National Education Act:

In 2004, two laws were enacted to increase private sector participation in educational provision, one exempting income tax and value-added tax on imported learning materials, and the other, granting property tax exemptions.

To affirm the principle of equal treatment among public and private institutions, a committee comprising representatives of the Education and Finance ministries was established to consider incentive measures to attract greater private sector participation in educational provision.

Such incentives, including increased financial support as well as modification of ministerial rules and regulations, were also proposed to the Council of Ministers.

Additionally, low-interest loans for eventual self-reliance as well as general *per*-head subsidies have also been made available to private educational institutions providing basic education.

It has also been suggested that a law be enacted to authorise state and local administrative organisations to levy educational taxes, as provided for in the National Education Act. Moreover, where the State is authorised to levy inheritance taxes, such a tax is to be used for educational purposes. At this time, however, no concrete action has been taken regarding the levy of educational taxes until there is better understanding regarding the appropriateness of such taxes and how they are to be used.

Relevant laws, regulations, policies and measures were prepared by the State to facilitate private education. As stipulated in the National Education Act, private degree-granting institutions are able to function with autonomy, and to develop their own system of administration and management to ensure flexibility and academic freedom.

In addition, a strategic 5 to 10-year plan has been formulated to provide a framework for the reform, promotion, and development of private education. The Ministry of Education has conducted a pilot project on the administration and management of private educational institutions as legal entities.

(3) The Business Sector

To encourage the business sector to participate in human resource development, the Labour Skills Development Act issued by the Ministry of Labour requires an enterprise to provide financial support and in-house training for up to 50% of its employees. After a related ministerial directive is published in the Royal Gazette, companies with a minimum of 100 employees will be required to contribute 1% of their payroll to the Labour Skills Development Fund.

Employers providing training to staff will be granted tax benefits and expense deductions as well as loans from the Labour Skills

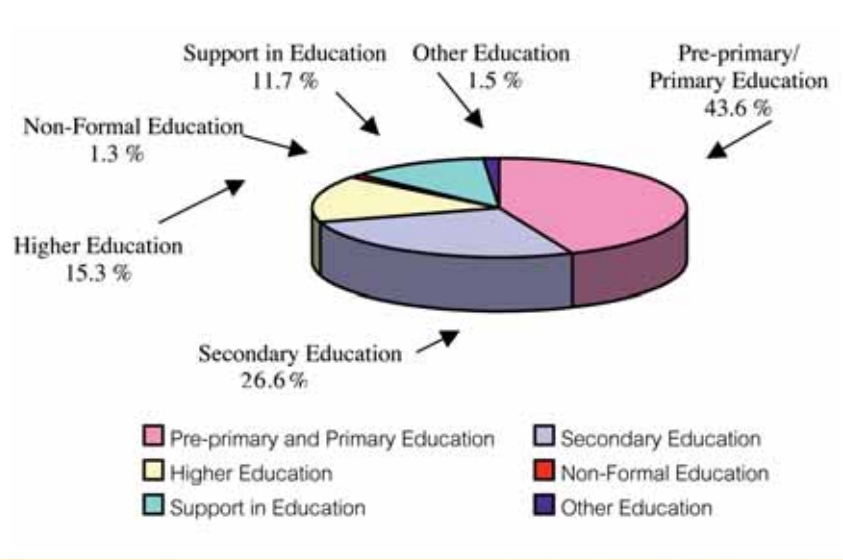
Development Fund to subsidise training or skill testing programmes. Employees involved in farming, fisheries, forestry, animal farming and salt farming will not be included in this scheme.

Discussion of further participation from these contributors, from families providing education for their children in home schools, and from enterprises providing education for their workers was summarised in Chapter 10.

11.2 Allocation of Budget

As shown in figure 11.5, the largest proportion of educational funding in 2006 (43.6%) has been allocated to pre-primary and primary education. Secondary education and higher education received 26.6% and 15.3% respectively, while only 1.3% of the total educational budget was allocated to non-formal education.

Figure 11.5 Percentage Distribution of Educational Budget by Function, Fiscal Year 2006



Source: Bureau of the Budget

In 2003, an educational fund became available for the disabled after the Ministry of Education announced its "2003 Ministerial Regulations on the Educational Fund for the Disabled", while extra educational funds were allocated for gifted students studying in regular schools as well as for socially and culturally-disadvantaged children.

Apart from general *per* head subsidies and support of the Income-Contingent Loan Fund for higher education discussed under Section 4 below, the State is also responsible for the distribution of allocations for operating and capital costs and distribution of loans.

1. Operating and Capital Costs of Educational Institutions:

- *State Educational Institutions Providing Basic Education:*

All the capital costs of state institutions providing basic education are included in the government's budgetary allocations, as are operating costs of school administration, development of teachers and students, and teachers' salaries.

- *Private Educational Institutions Providing Basic Education:*

As part of the general *per* head subsidies for expenditures of private institutions, the government absorbs the salaries of their teachers. However, in contrast to state educational institutions, all capital costs are assumed by the private institutions themselves.

2. *Per* Head Subsidies for Those Receiving Basic Education

Originally, the government's general *per* head subsidies were allotted only at the primary and secondary levels. Starting from 2004, the subsidies were expanded from 12 to 14 years so as to cover pre-primary education as well. Because of limited budgets, however, only 2 of the 3 years of pre-primary education are included in the distribution, and costs of uniforms and other school items are not included in the subsidies.

Various criteria are applied in distributing the subsidies:

(1) Schools that use English as a medium of instruction and international schools preferring not to receive general subsidies are allowed to collect fees for tuition and basic facilities as well as other expenses deemed appropriate and necessary.

(2) The government provides larger subsidies for disadvantaged students in welfare education schools, students from low-income families, disabled students in schools for the disabled, and students in sports schools.

(3) General *per* head subsidies are distributed differently to state and private institutions. Both receive the same amount of general subsidies for operating costs covering tuition and basic facilities. Additionally, *per* head subsidies to private institutions also include teachers' salaries. State institutions receive, as budget allocations, all of their capital costs as well as teachers' salaries, which are in line with specific salary scales and are higher than some private institutions.

- *Government per Head Subsidies to Public Institutions*

Varying rates of *per* head general subsidies are applied for state school students, depending on the classification of students into 6 groups, the types and levels of education, the different costs in provision of education, and fields of study (in the case of vocational education).

Different rates are also applied for disabled students in schools for the disabled and in inclusive schools for both boarders and day students.

- *Government per Head Subsidies to Private Institutions*

Since government subsidies to private institutions are lower than those provided to state institutions, the government allows private institutions to charge "additional fees for improving the quality of education", to cover costs relating to student lunches, school supplies, laundry, transportation, snacks/milk and annual checkups. However, the rates charged must not exceed those specified by the Office of the Private Education Commission.

3. The Educational Loan Fund

The Office of the Educational Loan Fund has been responsible for educational loans since 1996, assisting needy students wishing to continue their upper-secondary education through the undergraduate level in both general and vocational education. This includes learners in non-formal education who wish to further their studies from lower secondary level in the types of education specified by the Ministry of Education.

Under the Educational Loan Fund, the Ministry of Finance is responsible for loans allocation while the Krung Thai Bank takes charge of debt repayment from learners following their graduation. The amount and proportion of loans distributed during 1996 to 2003, as classified by levels of education, are presented in Table 11.2.

Table 11.2 Distribution of Loans from 1996-2003, Classified by Level of Education (as of January, 31, 2004)

Unit: million baht

Levels of Education	Amount of Loans	Number of Borrowers
General Upper Secondary	20,255.08	2,149,517
Vocational Upper Secondary	24,640.44	1,417,254
Technical Vocational Education	39,417.92	1,390,631
Lower-than-Degree	2,010.61	66,303
Bachelor's Degree	132,649.6	2,705,120
Others	1,752.85	31,445
Total	221,226.48	7,760,270

Source: Office of the Educational Loan Fund

The Educational Loan Fund is to be gradually dissolved, although those borrowing from the Fund prior to 2006 will be allowed to continue borrowing until they complete their education or leave the educational system.

4. Reform of the Higher Education Financing Arrangements: Establishment of the ICL Fund

The financing arrangement system in Thai higher education has focused on supply-side budgeting with minimal cost-sharing from university students themselves, a system that has impeded quality improvement through market competition. It has also generated unjust, unfair and inefficient mobilisation and allocation of resources, since those who do not have access to public higher education have to bear the costs of its provision to the few, who enjoy its benefits both during and after graduation.

The Income-Contingent Loan was established out of a growing concern over unjust and inefficient utilisation and allocation of resources for higher education and the increase of outstanding debts from the Education Loan Fund over the past several years.

The ICL scheme has been adapted from the Australian model to suit economic and social conditions in Thailand. It is anticipated that the scheme will stimulate competition among public and private higher education institutions, and that it will encourage them to improve educational quality and offer a greater variety of subjects.

The ICL Fund was approved by the Council of Ministers in August 2005 with an initial allocation of Bht. 4,803,268,200 for 2006. In implementing the ICL Fund, the Revenue Department will also work closely with relevant educational institutions and agencies, including the Government Pension Fund, the Social Security Office and the Higher Education Financing System Reform Project Management Office.

It is expected that the ICL scheme will enable the government to utilise resources more effectively, collect repayment of higher education loans more efficiently, provide greater access, and eliminate the financial barriers to higher education.

5. Low-Interest Loans for Private Educational Institutions

Low-interest loans for eventual self-reliance are distributed to private educational institutions at both basic and higher education levels:

A. Private Educational Institutions Providing Compulsory and Basic Education

The Office of the Private Education Commission supervises two revolving funds for the development of private institutions providing compulsory and basic education. Both funds offer loans for the construction of new school buildings or the renovation of old ones.

A Revolving Fund for private institutions administered by Islamic groups in the south offers interest-free loans, while a Revolving Fund for other private institutions offers loans at 4%-interest.

B. Private Degree-Granting Institutions

Loans at 4% interest are provided to private degree-granting institutions by the Office of the Higher Education Commission through two revolving funds: one for construction of new school buildings or the renovation of old ones, as well as the purchase of school equipment; and another, to support faculty for graduate study abroad in selected fields.

6. Other Financial Assistance

Other initiatives include: the One District-One Scholarship Project; and a Bicycle-Lending Project.

(1) *The One District - One Scholarship Project:* The project was initiated in 2004 by the Ministry of Education, in collaboration with the Government Lottery Office, the Ministry of Interior, the Office of the Civil Service Commission, and the Ministry of Foreign Affairs. The costs of the project are being supported by the Government Lottery Office and a budget of Bht. 4.7 billion has been allocated between 2004 and 2010.

The project provides 926 secondary students (1 student from each of the 926 districts nationwide) with an opportunity to undertake bachelor's degree study in Thailand and abroad. Applicants for the scholarship are needy students whose family income does not exceed 100,000 baht per year. Recipients are required to have a minimum GPA of 3.0 and to pass the selection process.

In 2004, the project awarded a total of 921 fellowships from a pool of 5,298 applicants from 76 provinces. Of those, 191 students enrolled at higher education institutions in-country, while the others went abroad to study in France, Japan, China, the Netherlands, Germany, Italy, Switzerland, Belgium, India, Austria, Spain, Russia, Malaysia, Denmark, Sweden and Egypt.

The second round of the project is being implemented in 2006, with a total of 915 fellowships awarded to needy students nationwide. An orientation programme for the recipients will be organised to prepare these students socially and academically, especially in foreign language skills, to ensure that they will be ready to cope in a new study environment. For this new group of scholarship recipients, those studying in Thailand

began their studies in June 2006; those planning to study abroad will depart during October and November 2006.

(2) *The Bicycle-Lending Project:* In 2003, the Ministry of Education, in cooperation with the Ministry of Industry, began a project in which Bht. 400.7 million was allocated for the purchase of 375,900 bicycles for loan to students in grades 10-12.

Any student living in a remote area where the journey to school is more than 3 kilometres, in a family whose annual income does not exceed Bht. 100,000, is able to borrow a bicycle from this project and return it after completion of secondary school.

Students who borrow the bicycles are trained to maintain and return them to the project in good condition. The first phase of the project could not meet the enormous demand for bicycles. Consequently, the Government Lottery Office allocated another Bht. 220 million in 2004 for the purchase of 200,000 more bicycles.

11.3 Budget Management

The National Education Act requires that there be a system for effective budget management and oversight. Relevant units of the Ministry of Education and the Budget Bureau have implemented a performance-based budget management project to develop appropriate systems. Under this pilot project, 37 basic education schools in 9 provinces have been experimenting with a system for auditing, monitoring and evaluation to ensure efficiency and effectiveness in the utilisation of budgetary allocations.

At the higher education level, the Office of the Higher Education Commission appointed a sub-committee consisting of representatives from the Office, the Budget Bureau, and the Department of the Comptroller General, along with accounting and computer systems specialists to supervise a pilot project to develop an effective higher education accounting system relating to budget, materials, finances, and fund accounts through a 3-dimensional cost-accounting model.

The software has been specially designed for this accounting model in which costs are reflected in 3 dimensions, planning, organisational, and funding.

- In the *planning dimension*, costs are calculated in line with the budget plan of the Department of the Comptroller General.

- In the *organisational dimension*, costs are calculated in terms of organisational structures, such as faculties and departments.

- In the *funding dimension*, costs are calculated in terms of the objectives, such as teaching-learning provision, student development activities, research, academic services to the community, administration and management, and quality assurance systems and mechanisms.

It is expected that after piloting and refining the system, universities will be able to apply it to calculate their actual operating costs for educational provision.

Apart from participation by all stakeholders, effective mobilisation of resources and investment for education, allocation of budgets, and budget management are essential to the success of educational reform. Greater efforts are needed to implement the reform proposals for the new system of resources and investment for education. Additional government support is greatly needed to enable private educational institutions to overcome the cost constraints at the both basic and higher education levels.

Chapter 12
Special Support in Areas of Particular Need

In supervising educational provision, the Ministry of Education must establish rapport with the society as a whole. To assist those affected by the catastrophic impact of the Tsunami on the western coastal provinces in southern Thailand and the political unrest in the three border provinces of Pattani, Yala, and Narathiwat, the Ministry has had to undertake special efforts and to work closely with the communities in the affected areas.

12.1 Rehabilitation of Schools, Students and Teachers Affected by the Tsunami in Southern Thailand

The Tsunami catastrophe that devastated several countries in Southeast Asia, including Thailand, on December 26, 2004, brought about an unprecedented outpouring of world-wide assistance and support. Financial aid and in-kind contributions from individuals as well as public and private organisations from both foreign and domestic sources helped alleviate the suffering caused by the deaths, injuries, and loss of property. Although short-term emergency assistance was provided from the outset, long-term measures to rehabilitate those affected are still needed.

The number of students and teachers under the supervision of various agencies who were affected by the Tsunami catastrophe is shown in the following table:

Table 12.1 Students and Teachers Affected by the Tsunami Catastrophe

Affected Groups	Results of Lost				
	Dead	Missing	Injured	Orphaned	Affected
Students	237	128	167	1,340	29,656
Teachers/Education Personnel	13	1	7	-	198

Source: The Office of Basic Education Commission, MOE

The Thai Government, through the Ministry of Education, provided assistance to the students, teachers and schools affected through a number of measures:

1. *Financial Assistance:* 59 schools in Thailand were affected by the Tsunami catastrophe. Of these, 5 schools were completely demolished, 9 severely damaged, 17 partly damaged, with 28 schools suffering some structural damage. The financial support given to these schools amounted to Bht. 681.8 million, with Bht. 373.2 million coming from government allocations to Ministry agencies, and Bht. 308.6 million from private donations.

In one project by private donors, the American Chamber of Commerce, through contributions from the American business community in Thailand and from compatriots in the United States, provided funds to several affected schools to hire urgently needed teachers.

Approximately Bht. 357.6 million of the government budget was given to students, and Bht. 1.9 million to teachers through the Ministry resources. Different rates of financial assistance for teachers and students were allocated. For example, the family of a student who perished received Bht. 10,000. A student who lost one or both parents received Bht. 25,000 for each loss. Students whose homes were completely or partly destroyed or whose parents were injured, crippled, or unable to work because of the incident, received Bht. 15,000 for each calamity. Teachers whose homes were partly or completely destroyed received Bht. 5,000-30,000.

Further financial assistance from the agencies of the Ministry of Education as well as through the Ministry of Social Development and Human Security, Ministry of Culture, Ministry of Transportation, Ministry of Defence, and Ministry of Interior are being allocated from the government budget.

2. *In-kind contributions:* Domestic and foreign public agencies, private organisations, and individuals provided substantial in-kind contributions to those affected by the tragedy.

Such support included the creation of databases, establishment of rehabilitation coordination centres, and provision of labour and materials for repair of school buildings, learning centres, homes, motorcycles, and boats, as well as donations of survival kits, clothing, school uniforms, learning materials, and other needed items.

For example, a new school building was constructed and learning materials were provided for Ban Muang Kindergarten in Phang Nga. This assistance was rendered by the Rosenheim University of Applied Sciences and the people of Rosenheim, Germany, in cooperation with King Mongkut's Institute of Technology North Bangkok and Office of the Education Council.

3. *Long-term Measures:* Included in the long-term measures organised by the Ministry are the establishment of additional welfare schools and childcare centres, a rehabilitation plan for students and educational institutions, and the provision of scholarships through completion of the bachelor's degree for orphaned students.

12.2 Educational Provision in the Southern Border Provinces

The way of life, language and culture in the provinces of Pattani, Yala, and Narathiwat are unique in that 80 percent of the population is Muslim. In these provinces, education is provided by religious as well as educational institutions.

The challenge for the education system is to find means of enabling the people of the South to continue to impart their culture, language, and religious traditions to the younger generation while at the same time preparing the young to become productive and educated adults in the greater Thai society. Another imperative is to ensure that educational policies and programmes support and promote the cultural and religious diversity of the region.

During the past several years, political unrest in these provinces has had an unfortunate impact on educational provision. Schools in some communities have had to close temporarily, teacher shortages have arisen as vacant positions cannot be filled with qualified personnel, and learning has been affected. The Ministry of Education has worked to overcome the problems through a number of projects and policy approaches.

Around 66.56% of the school-age population (3-21 years), or 437,042 students, in the border provinces are enrolled in 1,202 educational institutions providing *formal education services*, as shown below.

Table 12.2 Percentage of Enrolment in the 3 Border Provinces

Provinces	School-age Population in Formal Education Institutions					
	3-5	6-11	12-14	15-17	18-21	Average
Yala	68.22	97.79	94.38	64.73	40.52	76.74
Pattani	63.84	94.88	81.52	48.51	21.16	66.66
Narathiwat	66.29	101.14	64.11	37.25	3.22	59.78
Total	65.91	98.03	78.11	48.31	18.55	66.56

Source: Ministry of Education

Non-formal education services, which provide general, vocational, and non-formal education, are provided by several agencies including Pondok schools, Office of Non-formal Education Commission and Office of Vocational Education Commission.

The Ministry of Education supports the teaching of Islam and general education subjects by registering Pondok schools, providing teaching manuals and learning guides, and formulating a basic education curriculum that integrates Islam and general education. In 2006, 47 schools are teaching both Islam and general education subjects, and 101 Pondok schools, or private Islamic boarding schools, teach Islam only.

Support is also given to Muslim teachers in the three southernmost provinces wishing to upgrade their qualifications through transfer of learning outcome and validation of experience. In addition, the Office of the Private Education Commission also offers interest-free loans for construction of new school buildings or the renovation of old ones through a Revolving Fund for the Development of Private Educational Institutions providing compulsory and basic education.

Because of the disturbances in these provinces, the Ministry has also worked to improve the welfare and security of teachers by providing additional monthly compensation, life insurance and security measures, as well as establishing an assistance fund for teachers and education personnel affected by the unrest and providing scholarships for their children.

In addition, the Ministry has sought to expand educational access and quality in these provinces by: increasing the number of scholarships and special education centres; hiring more teachers; repairing 925 schools and learning centres; establishing and upgrading higher education institutions (Narathiwat Rajanakarin University, Community Colleges in Pattani and Yala, Pattani Fishery College, and giving university status to the Pattani Campus of Prince of Songkla University); and providing vocational education to enhance career development in the fields of rubber and polymer technology.

With the complex political and social conflicts occurring in several parts of the world, all countries, including Thailand, recognise the important role that education plays in solving these conflicts and in assisting those who are economically and socially disadvantaged.

Chapter 13
International Education and International Cooperation in Education

During the last decades, international education has become a growing business as a result of the globalisation and liberalisation process that has caused freer flow of cross-border education. Consequently, agencies involved in the provision of education must improve quality to compete in the international arena. At the same time, international cooperation in education is essential to educational development in all countries.

13.1 International Education

Thailand's liberalisation of trade in educational services within the framework of the World Trade Organisation and free trade agreements will inevitably result in increased expansion of education services between Thailand and her partner countries as she embarks upon developing bilateral and multilateral free trade agreements.

It is expected that Thailand will benefit from cooperation with foreign higher education institutions in areas that respond to the country's needs, especially in science and technology. However, to respond well to the challenges brought about by liberalisation of trade in educational services, Thai higher education institutions must upgrade the quality of their own teaching and learning to meet international standards if they are to remain competitive with educational services offered by foreign providers.

To strengthen the capacity of Thai higher education institutions and to prepare them to respond well to the liberalisation of trade in educational services, the Office of the Higher Education Commission has commissioned research and set up a committee to identify strategies, formulate positions, and measures to respond to this phenomenon.

As a result of the increasing demand by individuals in many countries to become globally competent, international education opportunities have expanded and developed rapidly. The consumer culture, increased financial resources, and the demand for the best education has resulted in greater student mobility and transferability of qualifications, as well as establishment of campuses and branches of foreign universities in many countries.

Thousands of Thai students study abroad, especially at the university level. At the same time, Thailand also welcomes foreign students, and offers strong support for foreign universities wishing to establish campuses and branches in Thailand.

1) International Schools

International schools providing basic education in Thailand are under the supervision of the Office of Private Education Commission. Policies, rules, regulations, and standards for the establishment of international schools or colleges are set by the Ministry of Education in accordance with a Council of Ministers Resolution.

Some of the main education systems offered at international schools in Thailand are: the American school system; The Advanced Placement Programme; the British National Curriculum; the International General Certificate of Secondary Education; and the International Baccalaureate.

In 2006, there are 106 international schools providing basic education in Thailand, 76 of which are located in Bangkok and the rest located in other provinces. Approximately 71% of these schools are members of the International School Association of Thailand. The quality of education offered in member schools of this organisation has been recognised by accreditation bodies, such as the Western Association of Schools and Colleges, the New England Association of Schools and Colleges and the Council of International Schools.

2) International Programmes

According to the Office of the Higher Education Commission, public and private universities in Thailand currently offer 588 fields of study in 727 international programmes that use English as the medium of instruction. Both foreign and Thai students are able to take courses for credit from such programmes. Table 13.1 provides the number and education level of international programmes offered.

Table 13.1 International Schools/Programmes and Proportion of Foreign and Thai Students

	2004	2005	2006
Number of International Schools Providing Basic Education			
• Bangkok	66	71	76
• Other provinces	25	30	30
Total	91	101	106
Proportion of Students			
Foreign: Thai	0.2:99.8	NA	NA
Number of Tertiary Level International Programmes			
• Undergraduate	220	259	178
• Master degree	224	287	290
• Doctoral	125	182	241
• Graduate diploma	-	-	9
• Certificate	-	-	9
Total	569	727	727
Proportion of Students			
Foreign: Thai	NA	NA	2:98

Source: International School Association of Thailand, Office of the Higher Education Commission, Office of the Private Education Commission and Department of Export Promotion

3) Foreign Students in Thai Higher Education Institutions

Excluding the Asian Institute of Technology, in AY 2004, there were 4,334 foreign among the 231,842 students enrolled in 55 higher education institutions under the supervision of the Office of the Higher Education Commission.

The institutions having the highest number of foreign students were Assumption University (1,772), Mahidol University (308), Thammasat University (296), Webster University (Thailand) (185), Stamford International University (168), Kasetsart University (160), Mission College (159), Chulalongkorn University (153), Chiangmai University (152) and Bangkok University (139). The remaining 842 foreign students were studying in 45 other institutions.

When classified by source of educational expenses, it was found that most foreign students bear their own costs. *(Table 13.2)*

Table 13.2 Number of Foreign Students in Higher Education Institutions*, Classified by Source of Educational Expenses, Academic Years 2002-2004

Source of Funds for Educational Expenses	Number of Foreign Students		
	AY 2002	AY 2003	AY 2004
Personal Funds	759	2,816	3,073
Scholarships from Foreign Agencies	202	446	290
Exchange Students	221	303	412
Scholarships from Thai Government	89	297	132
Private Scholarships	276	109	156
Unidentified	1,792	199	271
Total	3,339	4,170	4,334

** Only institutions supervised by the Office of the Higher Education Commission*

Source: Office of the Higher Education Commission

Among 255 fields of study offered in 55 universities surveyed, the top ten fields among foreign students are Business Administration, Marketing, Business English, General Management, International Business Management, International Business, Information Technology, Thai Studies, Finance and Banking and Hotel Management. The number of students enrolled in these fields amounted to 1,413 (32.55%), while 2,921 students (67.45%) were enrolled in the 245 other fields.

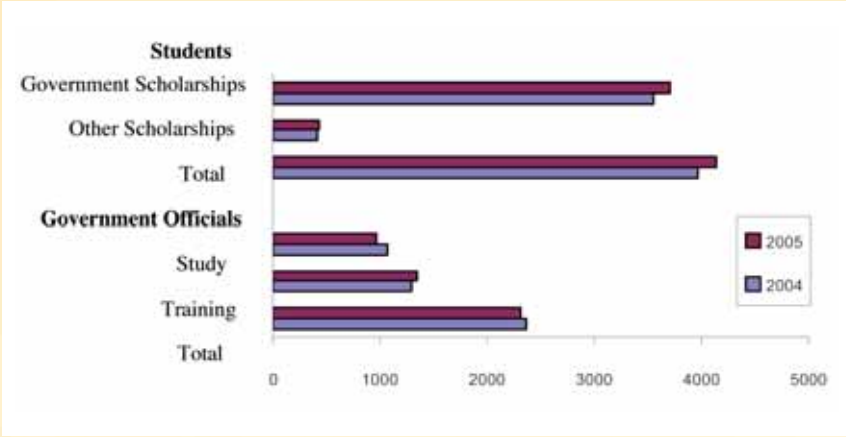
Of the 4,334 foreign students, 3,282 (75.73%) were Chinese, Burmese, American, Vietnamese, Lao, Indian, Japanese, Cambodian, Taiwanese and Korean, while 1,052 students (24.27%) were of other nationalities.

13.2 Overseas Study and Training

The number of government scholarship recipients and other students going overseas to study under the supervision of the Office of the Civil Service Commission increased from 3,962 (3,551 and 411) in 2004 to 4,145 (3,708 and 437) in 2005.

The number of government officials going overseas to study decreased from 1,069 in 2004 to 961 in 2005 while those participating in training programmes increased from 1,295 to 1,348 in 2005. *(Figure 13.1)*

Figure 13.1 Proportion of Students and Government Officials Studying Abroad under the Supervision of the OCSC, Academic Years 2004 and 2005



Source: Education and Training Abroad Service, OCSC

Among those awarded government scholarships to study overseas, 48.16% were studying at the doctorate degree level, 12.45% at the master's degree, 27.03% in undergraduate programmes, and 0.27% at the secondary level. Students studying foreign languages and participating in training activities accounted for 11.96% and 0.14%.

The top ten fields of study are: computer science, medicine, product development, physics, biology, mathematics, economics, chemistry, arts, and food science and technology.

In recent years, the Office of the Civil Service Commission initiated a scholarship scheme exclusively for Thai students with physical disabilities such as hearing deficiencies, visual impairment and mobility problems.

Intended to motivate the physically disabled to realise their full potential, this scheme awards scholarships to those wishing to study overseas from undergraduate to doctoral level. After graduation, the recipients of the scholarships are expected to take a leading role in helping other physically disabled students in Thailand.

13.3 International Cooperation in Education

To enhance the development of education in the country, Thailand has made use of foreign loans or international funds such as those from the World Bank, Asian Development Bank, the Japanese Overseas Economic Cooperation Fund and countries such as Australia, the United Kingdom, France, Germany, Japan and the United States of America.

Thailand also cooperates bilaterally and multilaterally with various foreign, regional, and international organisations focusing on educational improvement, some of which are presented below.

1) International/Regional Organisations

- The United Nations Education, Scientific and Cultural Organisation (UNESCO)

Thailand has been a member of UNESCO since 1949. In the following year, the Thai National Commission for UNESCO, chaired by the Minister of Education, was established to serve as the national liaison.

Consisting of 5 committees corresponding to the fields of UNESCO's focuses in education, science, culture, social sciences and communication, the Thai National Commission for UNESCO operates through its Secretariat Office, attached to the Bureau of International Cooperation in the Ministry of Education.

Since 1961, Thailand has hosted the UNESCO Regional Office of Asia and the Pacific. This Office represents 47 Member States and facilitates the dissemination and sharing of information and knowledge throughout the region.

From the outset, Thailand has been an active member of UNESCO, hosting and participating in a number of significant events. The 1990 World Conference on Education for All, which took place in Jomtien, Thailand, still serves as a major reference point to educators worldwide. A decade later, progress towards those goals was reviewed at the Regional Conference entitled "2000 Education for All Assessment" in Bangkok.

In March 2005, HRH Princess Maha Chakri Sirindhorn was appointed as UNESCO Goodwill Ambassador for the contributions of Her Royal Highness to expanding educational opportunities to people in remote areas.

Inaddition, UNESCO has recognised a number of other Thais for their contributions:

• *King Mongkut (Rama IV)* is commemorated for his achievements as a historian, a Buddhist scholar, and as patron of historical research;

• *Kularp Saipradit* has been honored as one of the country's great thinkers, as an advocate of peace, human rights, and democracy, as a pioneer of Thailand's 'new journalism', and as an avant-garde writer in modern Thai literature;

• The UNESCO Human Rights Education Prize was awarded to *Professor Vitit Muntrarbhorn* of Chulalongkorn University; and

• A research fellowship in Life Sciences was awarded to *Ms. Ketsiri Kuaseng* of Walailak University.

Five cultural and natural sites in Thailand have been registered as UNESCO World Heritage sites. These are Sukhothai and its Associated Historic Towns, Ayuttaya Historical Park, Thung Yai-Huai Kha Khaeng Wildlife Sanctuary, Ban Chiang Archaeological Sites, and most recently the Dong Phayayen-Khao Yai Forest. The King Ram Khamhaeng Inscription of 1292 A.D. was added to the UNESCO Memory of the World in 2004.

Between 6 and 9 December 2006, UNESCO will organise the 10th UNESCO-APEID International Conference "Learning Together for Tomorrow: Education for Sustainable Development" in Bangkok, Thailand, to promote the United Nations Decade for Sustainable Development from 2005-2014 and to strengthen UNESCO's role as the lead agency.

- International Association for the Evaluation of Educational Achievement (IEA)

Thailand has been a member of the International Association for the Evaluation of Educational Achievement since 1970. This association has initiated several research studies in science and mathematics. The Office of the Education Council serves as the participating centre and representative at the IEA General Assembly, while different research institutions have participated in various important international research projects.

Thailand is participating in current studies through the Institute for the Promotion of Teaching Science and Technology. These studies include the 'Second Information on Technology in Education Study' (SITES) 2006, the 'Trends in Mathematics and Science Study' (TIMSS) 2007, and the 'Teacher Education and Development Study - Mathematics' (TEDS-M 2009).

The SITES-2006 examines the impact on student knowledge and skills of using ICT in teaching science and mathematics, as well as the factors affecting the use of ICT in teaching-learning; the TIMSS-2007 aims to evaluate student achievement in science and mathematics. For both projects, data will be collected from students at Grade 8. The TEDS-M 2009 will explore whether and how much teacher preparation, policies, programmes and practices across the world contribute to the capability to teach mathematics and science in elementary and lower secondary schools.

- Asia-Pacific Economic Cooperation (APEC)

The Thai Government actively participates in the work of APEC through representation in the APEC Human Resource Development Working Group and the Education Network. There are two centres under the APEC umbrella located in Bangkok, the APEC Study Centre, attached to Thammasat University, and the APEC Centre for Technology Foresight, hosted by the National Science and Technology Development Agency.

- The Asian Institute of Technology (AIT)

Based in Thailand, with a branch in Vietnam, the Asian Institute of Technology is an autonomous graduate institution offering programmes in science and engineering, development, and management, with the goal of addressing the needs of the region and contributing to its sustainable economic growth.

Since its inception in 1959, the AIT has received generous support from the Thai Government, both in terms of land donation and financial assistance. Between 1970 and 2005, nearly Bht. 2 billion was granted to cooperative programmes between the government and the Institute. Approximately 23% of the financial assistance, or Bht. 450 million, was contributed as scholarships during the period. The present cooperative programmes comprise the following components:

(1) Scholarships

- His Majesty the King's Scholarships are full scholarships for master's degree programmes granted to qualified candidates from Thailand and other Asian countries. 453 scholarships were awarded through December 2005.

- Her Majesty the Queen's Scholarships are provided to qualified students interested in the environment and related fields. 87 scholarships were award under this programme through December 2005.

(2) General support

A budget has been allocated for FY 2006 that covers operational support for the year, campus maintenance, support for Thai student fellowships, for joint research between the Institute and Thai universities, and for information technology training for government executives.

To date, there have been 13,841 graduates from 74 countries, 3,500 (25%) of whom are Thai. Approximately 38% of Thais graduating from the AIT are now working in government organisations and state enterprises. In 2005, there were 2,016 students from 51 countries, including 526 Thais comprising 26% of the student body.

- The ASEAN Committee on Education

The ASEAN Committee on Education met for the first time in 2001. An annual project of this Committee in which Thailand has actively participated since its inception is the ASEAN Secondary Student Exchange Project.

- The Southeast Asian Ministers of Education Organisation (SEAMEO)

Thailand's Ministry of Education has cooperated closely with SEAMEO since its inception in 1965. The Bureau of International Cooperation acts as the liaison centre for SEAMEO activities in Thailand. Currently, Thailand hosts the Secretariat as well as 3 SEAMEO regional centres: the Regional Centre for Higher Education and Development (RIHED); the Regional Centre for Tropical Medicine and Public Health Network (TROPMED); and the Regional Centre for Archaeology and Fine Arts (SPAFA).

SEAMEO undertakes programmes and projects responding to needs in education, science and culture of 11 member countries through 15 specialist units, including the Thailand-based regional centres.

Among its current projects, for instance, SEAMEO is coordinating with a number of schools in Thailand in implementing the SEAMEO-UN 'Habitat Cooperation on Promoting Values-Based Water and Sanitation Education in Southeast Asian Schools'. In addition, the issues of nutrition, food supply, and food quality in schools are also being addressed in several other projects.

Two other projects relating to education are being implemented by the office of the Regional TROPMED network: 1) A project to improve the mental health condition of school children and communities in Phang Nga affected by the 2004 tsunami; and 2) A project to apply and develop ICT and other multimedia technologies in HIV/AIDs preventive education.

In recent years, the SEAMEO Community Involvement Project, through the SEAMEO Secretariat, adopted primary schools in Thailand to help in the improvement of facilities and in upgrading teachers' competencies.

- ASEAN University Network (AUN)

The AUN is comprised of seventeen leading universities in ASEAN member countries. The first AUN Educational Forum was inaugurated in Thailand in May 1998. The Thai Government has made annual contributions amounting to USD$180,000 for the period 2000-2005. In addition, Chulalongkorn University hosts the permanent office of the AUN Secretariat, coordinating with 17 leading universities in all 10 member countries of ASEAN.

The main objective of the AUN is to strengthen the existing network of cooperation among leading universities in ASEAN by promoting cooperation and solidarity among scholars and academicians, developing academic and professional human resources, and promoting information dissemination among the ASEAN academic community. The network has generated academic collaboration in identified priority areas among ASEAN institutions and individuals.

- University Mobility in Asia and the Pacific (UMAP)

Founded in 1993 as a voluntary association of government and non-government representatives of the higher education (university) sector in the region, UMAP aims to achieve enhanced international understanding through increased mobility of university students and staff. Undergraduate and postgraduate students can undertake a period of formal study of 1 or 2 semesters, and transfer credits earned while on exchange back to their home universities utilising the UMAP Credit Transfer Scheme. In 2005, 19 countries and territories the in Asia-Pacific region were members of UMAP, with 360 participating universities acting as home and host institutions.

As one of the founding members of UMAP, Thailand has been actively involved in the student and staff exchange programme since 1995. Thailand also plays an important role in the administration of the UMAP organisation, and has been designated to host the UMAP International Secretariat between 2006 and 2011.

It is expected that the UMAP scheme will help strengthen ties among Asia-Pacific countries/territories and bring about cooperation in promoting better understanding of the culture, economics, and social systems in the region.

2) International Cooperation and Exchange Programmes

- Cooperation with UNICEF: Child-Friendly Schools Project

The Office of the Basic Education Commission, in collaboration with a number of organisations has, since 1999, implemented the Child-Friendly Schools Project, a UNICEF-supported project to promote a quality learning environment by encouraging student participation in various school activities to ensure hands-on learning experiences. The approach brings together students, teachers, parents or guardians, and communities to jointly develop a common vision, strategies and implementation plan. The school's academic benchmarks and the child's academic and behavioural progress are shared with stakeholder groups.

Activities in the Child-Friendly Schools focus on issues relating to children's rights, schools' internal assessment, the development of a child as an individual, active learning, child-centred learning, hygiene and nutrition,

and development of life skills. The project schools in Thailand are quite successful, with continuous teacher training, development of personnel and materials, financial support, exchange of information as well as with study visits in Thailand and in other countries. Consequently, these schools are being used as learning sources and training venues for personnel working in the project in other countries in Asia. Approximately 70% of the project schools in Thailand located in rural areas in the North and Northeastern regions where there are a large number of disadvantaged children.

- Bilateral Collaboration in Basic Education

To improve the quality of teaching and learning, the Office of the Basic Education Commission implemented several projects. These include a 3-year Framework (2003-2006) for Collaboration with the British Council, focusing on the following priority areas: 1) school leadership development; 2) all aspects of quality improvement in English language teaching; 3) the use of ICT for effective teaching, learning, professional development, and educational networking; 4) creative student-centred learning; 5) professional networking among educational policymakers, administrators and practitioners in and between Thailand and the UK; and 6) school linkages (electronic and person-to-person) involving students, teachers and leaders/administrators in and between both countries.

- Student Exchange Programmmes in Basic Education

To encourage understanding of other cultures through first-hand experience, the Ministry of Education promotes student exchange programmes in cooperation with many foreign governments and international agencies. The major programmes include Rotary, AFS, and Thailand Fellowships, Scholarships and Junior Scholarships.

- International and Bilateral Cooperation in Higher Education

To enhance the capacity of Thai higher education and to develop Thai human resources, the Office of the Higher Education Commission has been proactive in cooperating both multilaterally and bilaterally with several partners including Australian Study Centre, European Study Centre, APEC Study Centres, countries of Greater Mekong Subregion, UNCTAD, and etc.

- Student and Staff Exchange Programmmes in Higher Education

The Office of the Higher Education Commission provides financial support for the exchange of students and staff with foreign countries in Asia and other parts of the world. Participants in the exchange programmes are encouraged to take courses in institutions abroad and to transfer credits back to Thailand; foreign partners are also urged to do the same, *i.e.* accept credits transferred from higher education institutions in Thailand.

The objectives of the exchange programmes are to expose Thai students and staff to the outside world in order to improve their competency and world view, and ultimately, to improve the quality of Thai higher education to ensure that qualifications earned from Thai institutions are recognised and accepted at an international level. In cooperation with partners in Australia and Canada, the 'Thai University Administrators Shadowing Programme' enables Thai university administrators to be mentored and gain direct experience in managing higher education institutions.

- Exchanges with Countries in the Greater Mekong Sub-region

Exchanges of students and staff between Thailand and neighbouring countries in the Greater Mekong Sub-region (GMS) were initiated in 1999 to encourage mobility and the facilitation of credit transfer among higher education institutions. It is felt that the exchange programmes facilitate closer academic cooperation among institutions of higher learning, students, and academicians in the GMS and allow opportunities to learn from one another and to strengthen people-to-people contacts.

The Office of the Higher Education Commission provides grants to students and staff in Cambodia, Laos, Myanmar, Vietnam and Yunan Province of China to participate in the programme. In 2005, 93 grants were awarded to 17 Thai students and 28 faculty members for exchanges in 5 GMS countries. So far, 11 students and 37 faculty members from institutions of higher learning in these member countries have attended higher education institutions in Thailand.

13.4 International Cooperation for Educational Reform

To enhance international cooperation for educational reform, the Office of the Education Council and several international organisations have concluded mutual agreements on education policy development. Examples of Thailand's cooperation with international and regional organisations can be seen as follow :

1) The Thailand-U.S. Education Policy Roundtable

Cited as a policy forum for scholars in both countries to pursue better understanding and cooperation in improving educational quality through comparative research and training, the Roundtable was created in October 1998, following a private royal visit to the University of Pennsylvania.

The Third Thailand-U.S. Education Policy Roundtable was organised between 7 and 8 November 2005 in Bangkok, Thailand on the Auspicious Occasion of the 50th Birthday Anniversary of H.R.H. Princess Maha Chakri Sirindhorn.

This bilateral partnership has provided an excellent opportunity for educational policymakers, academics, and researchers to exchange information on policy research on science education as well as current developments, perspectives, strategies, and lessons learnt from higher education in both countries.

The Roundtable discussions identified issues of mutual interest and concern, and agreed to further explore 6 new research areas:

(1) the new higher education financing system for Thailand;

(2) models of private participation in educational provision;

(3) development of leadership in higher education;

(4) strategic network in developing faculty staff and education personnel in higher education institutions;

(5) development and promotion of those with special talents in science and technology; and

(6) the integration of implicit and explicit knowledge to reform learning.

A Thai Steering Committee operates under the leadership of Professor Dr. Sipanondha Ketudat, the Former Minister of Education, while Professor Dr. Susan Fuhrman, the Dean of Graduate School of Education, University of Pennsylvania, heads the U.S. counterparts.

2) Eight-Nation Education Research Project: Teacher Supply, Quality and Retention

Thailand is a member of the Eight-Nation Education Research Programme, which was organised to undertake joint educational research in various areas of mutual interest. The Office of the Education Council is responsible for the joint research on "Teacher Supply, Quality and Retention", in cooperation with the People's Republic of China, Japan, the Republic of Korea, Singapore, the United States of America and Hong Kong. A meeting of the research group was organised in Bangkok during 20-25 November 2005 to discuss the progress of the work. Each country researcher presented his interim report of findings relating to quality standards and qualifications of teachers, and set objectives and approaches for continued research into the quality of the teaching job, and policy proposals regarding the supply and retention of high-quality teachers.

3) Seminars and Exhibitions on Thai Education in Neighbouring Countries

The Office of the Higher Education Commission has, since 1999, organised annual seminars and exhibitions on Thai Education in the Greater Mekong Sub-region to strengthen cooperation between universities in Thailand and neigbouring countries, especially the People's Republic of China. Through these meetings, academicians, students and the public have gained a better understanding of Thai higher education, leading to the creation of linkages and collaboration projects with Thai universities.

Apart from the above-mentioned bilateral and multilateral cooperation, other partners including Fulbright, Peace Corps, and cooperation with individual countries have supported Thai education for decades.

Through international cooperation and exchange in education and for educational reform efforts, it is expected that all concerned will be dedicated to the important issues of equity and quality in education, reform of learning and lifelong learning so as to improve overall achievements in education.

References

Bangkok Guidebook, *Children's Discovery Museum*, available at http://www.bangkokguidebook.com/museums/discovery_ museum.php.

Bangkok Post, *The Prospect of Autonomy Has Many State Universities Uneasy*, available at http://www.bangkokpost.net/education/site2002/cvap3002.htm.

Bangkok Post, *Thailand Cyber University to Open University Fair to Demo e-Learning*, available at http://www.bangkokpost.net/280905_Database/28Sep2005_data04.php.

BMA, *Social Welfare Development Projects*, available at http://www.bma.go.th/bmaeng/body_project5.html.

Border Patrol Police Bureau. *Fifty Years under the Royal Patronage*. Bangkok: Chulalongkorn University Publishing, 2003.

Bureau of the Budget. *Thailand's Budget in Brief Fiscal Year 2005*. Bangkok: P.A. Living Company Limited, 2004.

Bureau of the Budget. *Thailand's Budget in Brief Fiscal Year 2006*. Bangkok: P.A. Living Company Limited, 2005.

Children's Discovery Museum, available at http://www.bkkchildrenmuseum.com/English.

Children's Discovery Museum, available at http://www.thaistudents.com/guidebook/childrensmuseum.html.

Duang Prateep Foundation, *Duang Prateep Foundation: Origins and Projects*, available at http://web.sfc.keio.ac.jp/~thiesmey/duangprateep.html and http://www.scottmurray.com/duang_prateep_foundation.htm.

Golden Jubilee Network, *Detailed Biography of Her Royal Highness Princess Maha Chakri Sirindhorn*, available at http://kanchanapisek.or.th/biography/sirindhorn/part5.htm#Education.

Government House, *Approval of the "Training of Teachers with Special Talents in Science and Technology Project"*, available at http://www.thaigov.go.th/news/cab/48/cab19apr48.htm.

Government House, *Establishment of the Institute for Development of Teachers, Faculty Staff and Education Personnel*, available at http://www.thaigov.go.th/news/cab/48/cab18jan48-1.htm.

Government House, *Government Policy on Education*, available at http://www.thaigov.go.th/general/policy/thaksin/pt-11.htm.

Government House, *Government Prepares to Develop Thai Children as Potential Resources of the Country*, available at http://www.thaigov.go.th/news/press/48/May48/pr12may48-04.htm.

Government House, *Report of the Ministry of Education on the Progress of the Lab School Project*, available at http://www.thaigov.go.th/news/cab/48/cab07jun48.htm.

Government House, *Report of the Ministry of Education on the Progress of Educational Development in Three Southernmost Provinces*, available at http://www.thaigov.go.th/news/cab/48/cab18jan48-1.htm.

Government House, *Summary of the Ministerial Resolution on the Approval of the Draft Royal Decree on the Establishment of the National Institute of Educational Testing Service (28 June 2005)*, available at http://www.thaigov.go.th/cab/48/cab28jun48.htm.

Government House, *Summary of the Ministerial Resolution on the Approval of the Central Admission System and the Draft Royal Decree on the Establishment of the National Institute of Educational Testing Service (6 September 2003)*, available at http://www.thaigov.go.th/news/cab/46/cab09sep46.doc.

Government House, *Summary of the Ministerial Resolution on the Establishment of the ICL Fund and the Grant Fund*, available at http://db.onec.go.th/cabinet/index1.php?opinion_id=918.

Government Lottery Office, *Summary of Donation from the Government Lottery Office (Fiscal Years 1994-2005)*, available at http://www.glo.or.th/detail.php?link=donation.

Government Public Relations Department, *Developing Thai Children through Brain-Based Learning*, available at http://thailand.prd.go.th/the_pm_view.php?id=736.

King Mongkut' s Institute of Technology North Bangkok, *Interior Design Project for Children's Discovery Museum*, available at http://library.kmitnb.ac.th/projects/ind/FDT/fdt0185e.html.

Krissanapong Kirtikara, *Thai Public University System in Transition: Some Issues on Management and Financing*, available at www.kmutt.ac.th/pi/fileKK/ Issues%20on%20Management%20&%20Financing.pdf.

Mae Fah Luang Foundation, *Royal Initiative in Educational Development, The Border Patrol Police School Project*, available at http://www. maefahluang.org/maefahluang/royal_patron/education.asp.

Ministry of Education, *2005 Annual Report of the Institute for Development of Teachers, Faculty Staff and Educational Personnel*, available at http://www.moe.go.th/idea/doc/report 2548.doc.

Ministry of Education. *Sharing Experiences of EFA in Thailand*. (copy).

Ministry of Education, *The Whole System of English Language Teaching and Learning to be Reviewed by the MOE*, available at http://www.moe.go.th/webpr/kasama/news/m120148/edu1.html.

Nation, *Five Universities to Offer Courses Electronically*, available at http://www.nationmultimedia.com/2005/08/01/byteline/index.php?news=byteline_18212807.html.

Nation, *New University Admission System to Go Ahead as Planned*, August 28, 2005, available at http://www.nationmultimedia.com/search/page.arcview.php?clid=3&id=120203&usrsess=.

National Institute for Brain-based Learning, *Project on Development of BBL Models in Early Childhood Development Centres in the Communities and Project on Development of BBL Model Schools*, available at http://www. nbl.or.th/th/trivia/r&d3.html.

National Institute of Educational Testing Service, *O-NET and A-NET*, available at http://www.ntthailand.com/web/index.php.

NECTEC, *Internet User Profile of Thailand 2005*, available at http://www.nectec.or.th/pld/internetuser/Internet%20User%20Profile%202005.pdf.

NECTEC, *Thailand ICT Indicators 2005*, available at www.nectec.or.th/pub/book/ict-indicators-2005.pdf.

OBEC. *Financial Assistance for Students, Teachers and Schools Affected by the Tsunami in Southern Thailand.* (copy)

OBEC. *Educational Provision for the Disabled Students in Special Schools (Academic Years 2000-2004)*, available at http://special.obec.go.th/ doc/student_dis.doc.

OBEC. *Educational Provision in Three Southernmost Provinces.* (copy)

OBEC. *Small-Sized Schools*, available at http://smallschool.obec.go.th/intro.php.

OBEC. *The Bicycle-Lending Project.* (copy)

OBEC, *Types and Number of Disadvantaged Students in Welfare Schools (Academic Year 2004)*, available at http://special.obec.go.th/special_it/totel47_52ss/ss47_52not.htm.

OEC. *Education in Thailand 2004*. Bangkok: Amarin Printing and Publishing, 2004.

OEC. *National Education Standards*. Bangkok: VTC Communication Ltd. Partnership, 2005.

OEC. *Draft Policy and Plan for Early Childhood Development (2006-2015)*. (copy).

OEC. *Report on the Monitoring and Evaluation of Educational Reform*. (copy).

OEC. *Report on the Provision of Education by Local Administration Organisations*. (copy).

OEC. *Thailand Education Statistics Reports*, 2000-2004.

OEC. *Transition from a University under the Bureaucratic System to an Autonomous University: Reflections on Concepts and Experience of King Mongkut's University of Technology Thonburi*. Bangkok: 21 Century Co., Ltd., 2004. (The online version is available at http://www.onec.go.th/publication/47032/index_47032.htm.)

Office of the Minister of Education, *Expo for Communicative English Language Learning: ExCEL*, available at http:// www.moe.go.th/websm/news_dec05/news_dec0520.htm.

OHEC, *New Entrance University System*, available at http://www.inter.mua.go.th/info/new.html.

OHEC, *Study of Foreign Students in Higher Education Institutions under the Supervision of the OHEC*. Bangkok: Bangkok Block, 2005.

OHEC. *Thailand Cyber University*, available at http://www.thaicyberu.go.th/OfficialTCU/main/main.asp.

Office of Knowledge Management and Development, available at http://www.okmd.or.th/en/.

ONESQA, *Progress in External Quality Assessment of Basic Education Institutions (as of March 2005)*, available at http://www.onesqa.or.th/th/eduassess/index.php?System ModuleKey=96.

ONESQA, *Progress in External Quality Assessment of Vocational Education Institutions (as of February 2006)*, available at http://www.onesqa.or.th/th/profile10/index.php?SystemMenuID=1&SystemModuleKey=100.

ONESQA, *Progress in External Quality Assessment of Higher Education Institutions (as of February 2006)*, available at http://www.onesqa.or.th/th/profile10/index.php?SystemMenuID=1&SystemModuleKey=102.

ONFEC, *Non-formal Education*, available at http://www.nfe.go.th/en.htm.

Piyabutr Cholvijarn. *The Government's View on the Private Sector's Role in Provision of Vocational Education and Guidelines in Supporting Its Role.* (Power Point Presentation Presented on 10 October, 2005 at the Convention Hall, Charoensri Grand Hotel, Udornthani), available at http://www.fpvs.or.th/ doc2547/piyabut/ piyabut.ppt.

Royal Thai Embassy, Washington, D.C., *The Princess Mother of Thailand*, available at http://www.thaiembdc.org/monarchy/srinagarinda/ 100y.html.

Teachers' Council of Thailand. *Education Professional Standards*, Bangkok: Kurusapa Ladprao Publishing, 2005.

UNESCO, *The EFA 2000 Assessment Country Reports (Thailand)*, available at http://www2.unesco.org/wef/countryreports/thailand/ rapport_2_1.html.

UNESCO, Bangkok. *Early Childhood Care and Education (Country Specific Information: Thailand)*, available at http://www. unescobkk.org/index.php?id=188.

UNESCO, Bangkok. *IT for Rural Schools*, available at http://www. unescobkk.org/index.php?id=1984.

Vanchai Sirichana, *Thai University Reforms*, available at http://www. asiaweek.com/asiaweek/magazine/2000/0804/letters.html.

Appendices

THAILAND PROFILE 2005/2006

Area	:	513,115 sq.km.
Capital	:	Bangkok
Climate	:	Monsoon with average temperature
	:	between 23.7° C and 32.5° C.
Population	:	65.2 million
Labour force	:	36.7 million
Population growth	:	0.4 %
People	:	The majority are Thai. The rest includes ethnic Chinese, Malays, Lao, Vietnamese, Indians, and others.
Literacy Rate	:	96 %
Life expectancy	:	Male 65.2 (2004)
	:	Female 73.4 (2004)
Religion	:	Buddhism, the national religion, is the professed faith of 95% of the population, but there is absolute religious freedom.
Language	:	Thai is the national and official language. Dialects are spoken in rural areas. Other languages are Chinese, Malay and English.
Constitution	:	Constitutional Monarchy
Currency	:	baht (1 US$ = 37.66 baht, as of Sept. 2006)
GDP (current price)	:	7,101.8 billion baht (as of Dec. 2005)
GDP growth	:	4.2-4.9 % (2006, NESDB)
Per Capita GNP	:	99,399 million baht (2004)
Government expenditure	:	1,360,000 million baht
as % of GDP	:	17.3 %
Inflation	:	4.5-4.6 % (2006, NESDB)
Unemployment rate	:	1.2 %

THAILAND'S EDUCATIONAL PROFILE IN FIGURES

A. School-Age Population (thousand persons)

Age Group	2002	2003	2004	2005
Pre-primary 3-5	2,961	2,987	2,991	1,803
Primary 6-11	5,820	5,808	5,801	5,839
Secondary 12-17	5,723	5,737	5,772	4,346
- Lower Secondary 12-14	2,881	2,914	2,931	2,633
- Upper Secondary 15-17	2,842	2,823	2,841	1,713
Higher 18-21	4,220	4,077	3,939	2,038
Total 3-21	18,724	18,609	18,503	14,028

B. Educational Attainment of Thai Population

Age	1999	2000	2001	2002	2003[1]
15 and over	7.1	7.2	7.2	7.6	7.8
15-21	9.4	9.5	9.5	9.7	9.8
15-59	7.7	7.8	7.8	7.8	7.9
60 and over	3.5	3.6	3.6	3.8	3.9

C. Student Enrolment in Formal Education (thousand persons)

	2001	2002	2003	2004	2005
Pre-primary	2,706.4	2,682.8	2,539.2	2,466.7	2,460.5
Primary	6,056.4	6,096.7	6,065.5	5,967.8	5,839.6
Secondary	4,060.6	4,076.0	4,130.5	4,284.6	4,340.3
• Lower secondary	2,338.7	2,368.5	2,464.4	2,634.0	2,633.9
• Upper secondary	1,721.9	1,707.5	1,666.1	1,650.6	1,706.4
- General	1,129.5	1,101.4	1,059.8	1,038.6	1,008.2
- Vocational	592.4	606.1	606.3	612.0	698.2
Higher[2]	1,133.3	1,156.7	1,462.4	2,993.5	2,238.3
Total	13,956.7	14,012.2	14,197.6	15,712.6	14,878.7

D. Enrolment Ratio

	2001	2002	2003	2004	2005
Pre-primary	93.1	90.6	87.7	82.5	64.2
Primary	103.8	104.8	104.4	102.9	98.5
Secondary	70.6	71.2	71.7	74.2	68.8
• Lower secondary	82.2	82.2	84.6	89.9	82.9
• Upper secondary	59.3	60.1	58.5	58.1	54.5
- General	38.9	38.8	37.5	36.6	32.3
- Vocational	20.4	21.3	21.0	21.5	22.2
Higher[2]	26.1	42.9	29.5	32.8	48.3

[1] *Estimated figures*
[2] *Excluding students in open universities*

THAILAND'S EDUCATIONAL PROFILE IN FIGURES

E. Transition Rate	2001	2002	2003	2004	2005
Lower secondary	92.7	89.8	92.5	97.2	93.2
Upper secondary	80.2	88.2	82.0	81.0	87.2
• General	51.3	53.5	50.3	48.7	48.4
• Vocational	28.0	34.7	31.7	32.4	38.8
Higher[3]	80.2	83.1	80.8	61.5	NA
• Diploma	43.4	43.6	40.1	34.4	NA
• Undergraduate	36.8	39.5	40.7	27.2	NA

F. Student - Teacher Ratio	2002	2003
Pre-primary	1:20	1:20
Primary	1:19	1:19
Lower secondary	1:21	1:21
General upper secondary	1:21	1:21
Vocational upper secondary	1:31	1:31

G. Retention Rate	2001	2002	2003	2004	2005
Primary	87.5	88.4	89.5	90.1	90.3
Lower secondary	92.3	91.5	91.1	93.8	91.8
Upper secondary	83.0	80.9	80.9	78.4	80.4
- General	87.7	86.6	85.7	87.0	84.1
- Vocational	75.1	71.3	72.2	65.1	74.4

H. Number of Educational Institutions (2004)	Total	Public	Private
Whole Kingdom[4]	52,414	48,795	3,819
Pre-primary	47,410	44,576	2,834
Primary	32,643	30,880	1,763
Lower secondary	10,775	10,123	652
Upper secondary (General)	2,833	2,679	154
Upper secondary (Vocational)	806	428	378
Below Bachelor Degree	853	507	346
Bachelor Degree	201	144	57
Postgraduate Degree	89	50	39

I. Educational Budget	2002	2003	2004	2005	2006
Amount (Billion Baht)	222.9	235.1	251.2	262.7	294.9
% of GDP	4.2	4.2	4.0	3.7	3.7
% of National Budget	21.8	23.5	24.4	21.0	21.7

[3] *Excluding new entrants in open universities.*

[4] *These figures are higher than actual numbers of institutions because some institutions may provide more than one level of education.*

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Dr. Chumpol Thiengtham	Advisor
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Please visit the following web sites:

Ministry of Education

- http://www.moe.go.th

Office of the Education Council

- http://www.onec.go.th
- http://www.worldedreform.com
- http://www.edthai.com
- http://www.thaiedgov.org
- http://www.thailearn.org
- http://www.thaiteacher.org
- http://www.thaikids.org
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- http://www.onesqa.or.th
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- http://www.obec.go.th

Office of the Higher Education Commission

- http://www.mua.go.th

Office of the Vocational Education Commission

- http://www.vec.go.th