Chapter 6
Rethinking Thai Secondary Education

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Abstract This chapter presents both the current situation and future perspectives on the Thai secondary education system. As the system has only been fully developed for just over half a century, it is still coping with shortcomings in many respects. As the system embraces quite a variety of schools, from top science schools and international schools in Bangkok and some major cities to small and under-subsidized schools in rural areas, it is quite challenging to transform our wide range of schools into a more equitable and relevant system. With the government's ambitious plan to prepare Thailand to become an innovation-driven economy and a knowledge-based society, it is imperative that secondary education must respond to future needs of the country. The notion of a career-oriented curriculum for employability and entrepreneurship, the area approach for reform particularly in special economic zones, the new competencies required for teachers and administrators, and reinvesting in our secondary schools are some of the key issues discussed in the chapter.

6.1 Background: The Complex Ecology of the Thai Education System

The long-standing efforts to reform the Thai education system have been well-documented beginning with the report of the Committee on Education Reform entitled *Education for Life and Society* in the mid-1970s (Sippanondha et al. 1975; ONEC 1976) to the later report of the committee on Thai education in the age of globalization in the 1990s (Amornwich 1995; Sippanondha 1996). Due to political instability and subsequent discontinuity of the reform movement,[1] there has been a

[1] There were 20 ministers appointed to the Ministry of Education during the 17-year span between 2000 and 2017 (See Appendix I)

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long struggle to reengineer Thai education to become a key instrument for national security, competitiveness, and sustainable development (Commission on Education Reform, National Reform Council 2015).

Furthermore, Thailand is presently facing even more complex social, political, and economic challenges than ever before. The digital economy, a rapidly aging society with low fertility, the inception of AEC at the end of 2015, along with the transportation mega-projects linking China and mainland ASEAN countries considered altogether place Thailand at the brink of transformation from a middle-income country to a more advanced economy. Nearly all agree that quality education is crucial for escaping "the middle-income trap" (Pasuk and Pornthep 2012; Somchai 2012; Warr 2011) and moving to this more advanced economic stage.

The National Reform Council (NRC) together with the National Legislative Assembly (NLA) and the Ministry of Education (MOE) under the government of Prime Minister Prayut Chan-o-cha recognizes the strategic importance of education reform for the future of the country. The prime minister, therefore, established a *Super Board* on education, comprised of key government figures, education ministers, and prominent scholars, to coordinate the reform effort of all parties concerned so as to meet both short-term and long-term human resource needs and the growing knowledge demands of the country. This is probably the period with the highest public expectations for education reform in recent Thai history.

The focus of this chapter is on the need to rethink Thai secondary education. Again, with the new ecology and challenges facing our education system, Thai secondary education is in a critical period for reform not only to meet the needs of millions of students but also the requirements of the country looking forward to become a socially strong and more economically competitive nation in the future. Prior to sharing the blueprint for reform, basic information is provided on the Thai secondary education system, primarily a description of the history of secondary education, the evolution of the secondary school curriculum, and a detailed delineation of the many diverse genres of secondary schools in Thailand.

6.2 Historical Evolution of Secondary Education in Thailand

The historical evolution of Thai secondary education can be best understood by identifying two major phases (Kasama 2006):

6.2.1 Early Exclusive Phase, 1884–1971

Thai secondary education has a long history dating back to 1884 when the first school was opened to the public. Prior to that pupils had studied at the temple with monks and the children of nobles had studied in the palaces. In 1921, the first Compulsory Education Act was promulgated (Manich 1951). During this period,

secondary education was primarily for preparing individuals to work in the government service and to prepare teachers. Both general and vocational education were also offered to the broader public but numbers participating were limited. As of 1960, only 2% of the relevant age group were enrolled in secondary education (Benveniste 2008).

Later in 1971, there were still only around 2000 secondary schools in the Kingdom, many of high quality and good standards, but exclusive, serving the selected few. As of 1971, only 14% of the 13–18 age group was enrolled in secondary education. So the vast majority of the Thai population had only a primary education, and many dropped out after completing only the first phase (grades 1–4) of primary school. With fertility still high at that time, this did provide Thailand with a huge pool of rural "cheap labor" to migrate to Bangkok to work in both the newly developing industrial and service sectors (Textor 1961). The late Nobel laureate in development economics, Sir Arthur Lewis (1954), in a classic article identified this particular development strategy which contributed to Thailand's dynamic economic and industrial growth in the 1980s and early 1990s (Ranis 2004).

6.2.2 Phase II: Move Toward Secondary Education for All, 1972–Present and the Massification of Secondary Education

Though secondary enrollments were stagnant during most of the 1980s, rapid economic growth and the expansion of the Thai economy necessitated improving the educational quality of the workforce for Thailand to sustain its economic success and to become more competitive. In 1980, major educational restructuring took place which moved rural primary schools out of the Ministry of Interior and into the Ministry of Education. This structural change had huge implications for secondary education, making possible in 1987 the creation of "extended primary schools" which added on 3 years of local secondary education to rural primary schools. By 1995, these schools had grown to 6600 representing 22% of primary schools and providing opportunities to continue to secondary school for 21% of primary school graduates.

In 1990, Thailand hosted the landmark international Jomtien conference where the education for all initiative was launched creating further momentum toward achieving a rapid expansion of secondary education. During the late 1980s and early 1990s, Thailand had one of the world's hottest economies both providing financial resources for secondary school expansion but also creating the need for an increasingly qualified and productive labor force (BOI 1992; Pasuk and Baker 1996). In 1996, Thailand launched a special Student Loan Fund (SLF) which was rather exceptional in also providing loans for study at the secondary level in addition to higher education (Somkiat and Areeya 2010). Normally, such loan funds in other countries are limited to higher education. A huge budget of 185 billion baht was allocated to this fund.

With the Asian economic crisis of 1997–1998 (Pasuk and Baker 1998), there was increasing awareness that Thailand was lagging behind major economic competitors such as Malaysia and Vietnam in secondary school enrollments. This crisis actually provided an opportunity and compelling rationale to pursue seriously education reform (Fry 2000). The 1997 Constitution addressed this issue by providing 12 years of free schooling and mandating education reform, resulting in the 1999 National Education Act, requiring for the first time 9 years of compulsory basic education, ensuring that nearly all Thais would have completed at least lower secondary education (grades 7–9) (ONEC 1999, 2002). The Nine-Year Compulsory Education Act was formally approved in 2002. Thailand as part of its national Millennium Development Goals (MDGs) established the target of achieving universal lower secondary education by the year 2006 and universal upper secondary education by the year 2015 (Thailand Social Monitor 2006).

To expand secondary education, the Thai government introduced multiple strategies:

- Creation and expansion of the "extended primary schools" mentioned above provided free of charge.
- Highly exclusive secondary schools were encouraged to open admissions to students of more diverse backgrounds.
- Over 500 new secondary schools were constructed in rural areas where no secondary or extended primary schools had been available previously.
- Schools for the disabled were expanded.
- Government welfare schools serving the disadvantaged were increased.
- Gradually free secondary education was introduced starting with the extended primary schools.
- After the 1999 National Education Act, then all public secondary education was made free.
- Alternative forms of obtaining secondary education were recognized. Examples are nonformal education equivalency courses, Buddhist education, Islamic education, home schools, and various kinds of distance education.

6.2.3 Improving the Quality and Relevance of Secondary Education

Four approaches were emphasized (Kasama 2006):

6.2.3.1 Transformation of the Secondary School Curriculum

The secondary school curriculum was revised moving away from the exclusive academic focus on preparation for university study to a more basic education for all approach. The curriculum was diversified to enable students to explore and develop

their individualized competencies. The new curriculum also allowed schools to develop their own curriculum as long as their students could meet the eight basic areas of learning achievement. A new comprehensive system of guidance and counseling was introduced into secondary schools to help students adjust to the new curriculum with greater choice. Chulalongkorn University later established a Faculty of Psychology in 1996 that includes an important graduate program in counseling psychology. Section 6.4 of this chapter provides a detailed discussion of the evolution of the secondary school curriculum.

6.2.3.2 Strengthening Vocational Secondary Education

Realizing that many graduates of lower secondary school would not continue on to the academic stream, it was important to introduce in an integrated way different forms of vocational education options. Also various skill-oriented courses were introduced into the lower secondary curriculum. After completing lower secondary education, students can enter either government or private upper secondary vocational schools.

Currently, about 40% of upper secondary students have chosen the vocational option. The current goal is to have better balance between vocational and general secondary education, with at least 50% in the vocational stream. To achieve this target, numerous strategies have been introduced to popularize the vocational school option among the public, namely, to make curricula more competency-based, to provide more opportunities for direct experiential learning with a dual system of training, to subsidize vocational school fees, to have better articulation with technical higher education, and to develop closer linkages with the private sector. Joint programs were also established between secondary and vocational schools to offer vocational training to students in rural areas (see Chap. 7).

6.2.3.3 New University Admissions Policies and Their Relevance to Secondary Schooling

With the great importance attached to the university entrance examination, this exerted undue influence on the teaching and learning practices in secondary schools. Teachers were increasingly preoccupied with preparing their students for the highly competitive exams which contained content beyond the curriculum. This system in turn led students (those with the financial means) to devote more time to coaching schools than their regular curriculum which was viewed as irrelevant to the examination (see Chap. 25).

To solve this problem, there were concerted efforts to modify the admissions system to combine in admissions considerations both the results of standardized examinations and high school performance. This has resulted in a more balanced system with three factors taken into account in university admissions: (1) overall GPA, (2) GPA in relevant subject matter, and (3) national test scores. The system

needs further refinement, but now secondary education and university admissions are more closely aligned.

6.2.3.4 Establishment of a Quality Assurance System

A new quality assurance system was mandated by the 1999 National Education Act (ONEC 1999). In 2000, a new agency (public organization, independent of the Ministry of Education), the Office of National Educational Standards and Quality Assurance (ONESQA) was established to implement the new system, requiring all schools at every level to be systematically assessed every 5 years. ONESQA examined student outcomes, quality of teachers, professional competencies, and the principal's leadership ability. The expected outcome was that these assessments would lead to school improvements. To avoid the threatening "evaluation" approach, a more formative amicable (*kalayanamit*) (กัลยาณมิตร) process was used instead to assist schools in improving their performance (see Chap. 24). In its assessment of secondary education, the World Bank saw the role of ONESQA as primarily procedural (The Thailand Monitor 2006).

6.2.4 Preparing the Future Generation for a Globalizing World

In the early 1990s, there was growing awareness in Thailand of the powerful forces of globalization affecting nations around the world. There were even arguments about which Thai word would be best to use for "globalization" (Chai-Anan 1994, 2002; Sontiyan 1995). The Thai Farmers' Bank demonstrating impressive vision supported the establishment of a Special National Commission on Education in an Era of Globalization (Amornwich 1995; Sippanondha 1996). Thailand's response to the daunting educational challenges of globalization involved the following five key strategies:

6.2.4.1 Development of ICT in Education

Thailand had developed satellite capabilities (starting in 1993) which were then used to promote the latest, up-to-date information and training via distance learning. These projects were developed both by a royal instituted project, the Distance Learning Foundation (DLF) in Hua Hin and the Ministry of Education (Le Fevre 2013). Through such distance learning and innovative programing, both secondary schools and their students could benefit and have access to an enriched curriculum responsive to the powerful forces of globalization. Integral to this process are three elements: (1) satellite and/or Internet access, (2) adequate numbers of computers, and (3) teachers trained to use ICT effectively. Eighty percent of teachers are now computer literate. All schools now have Internet access, and computers are being

secured for those schools still lacking adequate numbers. Through cooperation with both universities and the private sector, needed educational software is being developed and adapted. As part of the Ministry of Education, the Education Technology Center was also established to aid and facilitate continuing development of education technology in schools around the country.

6.2.4.2 Promoting Learning Languages of the World

In a global era and in the new age of the AEC (started at the end of 2015), knowledge of other languages is increasingly important. English as a global language and the lingua franca of the AEC is universally taught starting in the first grade. However, results have not been satisfactory, and there is a national effort to upgrade the quality of English teachers. In a recent ranking, Thailand was the third worst in English in the Asia area (Frederickson 2015). Every Educational Service Area (ESA) has an English language resource and instruction center. There are also efforts to increase opportunities to study Chinese in Thai secondary schools. The Chinese government with its Confucian Institutes is assisting in this effort. In areas close to Thai borders, it is important to offer instruction in languages such as Vietnamese, Burmese, Malay, and Khmer. Dr. Rung Kaewdang, a key architect of the 1999 education reform, feels strongly that in an era of globalization and the AEC, all well-educated Thais should know at least one Western language and one other Asian language as well.

6.2.4.3 Upgrading the Teaching of Science and Technology

In 1972, the Institute for the Promotion of Teaching Science and Technology was established to promote quality curricula and pedagogies in the area of science and technology. A network of science centers has been established across the country. More details on this topic can be found in Chap. 17.

6.2.4.4 Education for the Gifted and the Talented

To meet the needs of these talented students, specialized schools have been established in the areas of science, music, and sports. Exemplary in the science area is the science school, Mahidol Wittayanusorn (MWIT or MWITS) which serves the nation's top students in the area of science and technology. Numerous students from this school have gone to win international prizes in competitions such as the International Scientific Olympiads. High achievers in this area have been identified through various national competitions. Such students are supported through enrichment camps and special scholarships. Thai universities have also provided special mentoring and advanced studies for such top secondary students.

6.2.4.5 One District One Lab School/One Scholarship

This visionary program provides for one outstanding "lab school" meeting national standards in each of Thailand's 878 local administrative districts. Also a scholarship is provided to the top student in each district to pursue undergraduate studies in Thailand or abroad.

6.3 Some Paradoxes in Contemporary Thai Secondary Education

There are several paradoxes related to Thai secondary education. First, the average student-teacher ratio at this level is a reasonable 28.1. However, the average class size is a much higher and a more problematic 43, suggesting the need for a more efficient use of teacher resources than is currently the case.

Second, while in many countries there are serious gender disparities (lack of equitable opportunities for female students), the concern in Thailand is the opposite with fewer male than females completing secondary schooling.

Third, in terms of formal education, compared to many countries at its income level, Thailand has a well-educated teaching force with 87% of secondary teachers holding a bachelor's degree and 11% a master's degree (Benveniste 2008). Yet, its test results both international (PISA and TIMMS) and domestic (O-NET) are far from satisfactory.

Fourth, while Thailand, in terms of percent of government budget spent on education, invests heavily in education, related to international standards, it lags behind in providing support for secondary education. Thus, Thailand is giving more priority to primary and higher education.

Fifth, and the final paradox is that despite the global trend of the privatization of education, the private sector contributes to only 5% of Thailand's spending on secondary education. In the Philippines, by contrast, the private sector contributes 84% of the funding for secondary education (Thailand Social Monitor 2006).

6.4 The Evolution of the Secondary School Curriculum

This is also a largely descriptive section providing an overview of the secondary school curriculum and how it has evolved over time. The direction for curriculum development has followed the directives stipulated in various national education plans approved over the decades. Within the last half century, major changes are as follows:

Table 6.1 The structure of lower secondary education in the national curriculum of 1978

	Number of hours of instruction per week					
	Year 1 of lower secondary		Year 2 of lower secondary		Year 3 of lower secondary	
Subject areas	Required	Electives	Required	Electives	Required	Electives
1. Language						
Thai	4	–	4	2	4	4
Foreign language	–	6	–	6	–	8
2. Science – Mathematics						
Science	4	–	4	–	4	–
Mathematics	4	–	4	–	–	6
3. Social studies	5	2	5	2	5	4
4. Personality development						
Physical	3	2	3	2	3	4
Arts	2	2	2	4	–	6
5. Skilling training						
Skill	4	–	4	–	4	–
Career	–	6	–	6	–	6
Total not less than	26	6	26	6	20	12
Tutorial	3		3		3	
Grand total not less than	35		35		35	

6.4.1 National Curriculum in Accordance with the National Education Plan of 1960

The structure of the education system was 4:3:3:2, namely, 4 years of lower primary, 3 years of upper primary, 3 years of lower secondary, and 2 years of upper secondary education. The curriculum focused on four key areas of development: cognition, morality, physical development, and skills. Students were required to study six subject areas: Thai social studies, science, mathematics, physical education, and art education. Upper secondary education adhered to this curriculum structure until 1975. The upper secondary education curriculum was then revised to include required subjects and electives with credits given for each subject (Table 6.1).

6.4.2 National Curriculum in Accordance with the National Education Plan of 1977

In 1977, the structure of the educational system was changed to 6:3:3. The curriculum shifted the focus from acquiring academic knowledge to broader human development with an emphasis on *khit pen* (คิดเป็น) (developing the ability to think), a key concept developed by Dr. Kowit Varapipatana, the founder of Thai nonformal education (Bernard and Armstrong 1979; Sumalee and Mellor 1984). There was also an emphasis on the ability to do things, being able to solve problems, and citizenship under a democratic constitutional monarchy. Learning processes advocated were learner centered, a holistic approach to learning, and integration with provisions for skill training.

The lower secondary curriculum aimed to provide more balanced learning opportunities in both academic and vocational training. Greater concerns were given to responding to the needs, interests, and the aptitudes of the students as well as the diverse needs of local communities.

At the upper secondary level, curriculum revisions were delayed until 1981 as the curriculum had already been revised in 1975. After the 1978, lower secondary curriculum was introduced for a few years; the upper secondary was revised to provide more opportunities for the students to pursue their own interests and aptitudes and to be able to choose between the academic and vocational streams. The students were also able to transfer learning experiences from workplace and resource centers.

The structure of the upper secondary curriculum was designed as follows:

- *Required subjects 24 credits*

  Thai 6 credits.
  Social studies 6 credits.
  Physical education 6 credits.
  Science 6 credits.
  Skill training 12 credits to choose from industrial skills/agriculture skills/home economics/trade and commerce/arts, and crafts/fine arts

- *Electives*

  The students have options to choose from foreign languages, mathematics according to their educational plans, or any other subjects in which they are interested.

6.4.3 National Curriculum of 1980

In 1980 under the leadership of Dr. Sippanondha Ketudat, the Ministry of Education launched an important project to expand secondary education to the rice roots level by transforming primary schools to extended primary schools offering up to the

lower secondary level. This expansion drew new groups of secondary students into the system and called for a more diversified curriculum. In the revision of the 1980 curriculum, all the basic goals and structure of the national curriculum of 1978 remained unchanged. The revisions aimed primarily to improve the responsiveness and the relevancy of the curriculum by strengthening the local components of the curriculum in terms of content, local curricula, learning materials, and learning activities.

6.4.4 National Curriculum in Accordance with the 1999 National Education Act

Two years after the 1999 National Education Act was promulgated, the first National Basic Education Curriculum of 2001 was announced and piloted in numerous schools in 2002 (MOE 2002). The structure of the system continued to be 6:3:3, but the first 9 years were now considered to be compulsory. The major changes were as follows:

- The curriculum was designed as a continuing integral part of 1–12 years of basic education, unlike the previous curricula which were developed independently of each other.
- The curriculum was divided into four levels: Primary 1–3, Primary 4–6, Secondary 1–3, and Secondary 4–6.
- The curriculum no longer prescribed subjects to be taught but set learning standards to be achieved.
- The schools no longer have to follow the prescribed subjects to be taught nor prescribed textbooks to be used, but have the freedom to develop their own school curriculum to meet the core learning standards. The curriculum must be approved by the school boards.
- The standards specify eight areas of learning including:
  - Learning areas to provide the foundation for learning, thinking, and problem solving skills: Thai, math, science, and social studies/religion/culture
  - Learning areas to enhance human development and the foundation for thinking and working: health and physical education, the arts/skill, development and technology/foreign languages
- The curriculum also required that the schools organize learner development activities through counseling and various forms of clubs and projects to enhance personal development according to the interests and the potential of each student (Table 6.2)

Table 6.2 Structure of the National Basic Education Curriculum of 2001

Different Levels	Primary education		Secondary education	
	Lower level	Upper level	Lower level	Upper level
	(Grades 1–3)	(Grades 4–6)	(Grades 7–9)	(Grades 10–12)
	← Compulsory education →			
	← Basic education →			
8 key subject areas				
Thai	●	●	●	●
Mathematics	●	●	●	●
Science	●	●	●	●
Social science, religion, and culture	●	●	●	●
Health and physical education	■	■	■	■
Arts	■	■	■	■
Work-life and technology	■	■	■	■
Foreign language(s)	■	■	■	■
Activities to develop students	▲	▲	▲	▲
Instructional hours	Approximately 800–1000 h per year	Approximately 800–1000 h per year	Approximately 1000–1200 h per year	No less than 1200 h per year

Note: A circle means skills to provide basic foundations for thinking and learning, a square means thinking and working skills contributing to student development, a triangle means learning activities beyond the eight subject areas and for personal development related to individuals' potential

6.4.5 The National Basic Education Curriculum of 2008

Due to confusion created during the initial phase of the 2001 curriculum, particularly in developing local school-based curricula, another revision of the National Basic Education Curriculum occurred in 2008.

The revised curriculum shared all the main features of the 2001 curriculum with major amendments designed to overcome problems encountered during implementation and to give greater emphasis to the development of twenty-first-century skills. Instead of specifying the learning objectives by levels, allowing the schools to decide the year by year goals, the yearly learning objectives were delineated as shown in Table 6.3 below:

Table 6.3 Structure of instructional time, National Basic Education Curriculum of 2008

Basic subject areas and activities	Hours of instruction									
	Primary education						Lower secondary education			Upper secondary education
	G.1	G.2	G.3	G.4	G.5	G.6	G.7	G.8	G.9	Grades 10–12
Subject areas										
Thai language	200	200	200	160	160	160	120	120	120	240
							(3 credits)	(3 credits)	(3 credits)	(6 credits)
Mathematics	200	200	200	160	160	160	120	120	120	240
							(3 credits)	(3 credits)	(3 credits)	(6 credits)
Science	80	80	80	80	80	80	120	120	120	240
							(3 credits)	(3 credits)	(3 credits)	(6 credits)
Social science, religion, and culture	120	120	120	120	120	120	160	160	160	320
-History							(4 credits)	(4 credits)	(4 credits)	(8 credits)
-Religion, morality, and ethics	40	40	40	40	40	40	40	40	40	80
-Citizenship, culture, and life skills							(1 credit)	(1 credit)	(1 credit)	(2 credits)
-Economics										
-Geography	80	80	80	80	80	80	120	120	120	240
							(3credits)	(3 credits)	(3 credits)	(6 credits)
Health and physical education	80	80	80	80	80	80	80	80	80	120
							(2 credits)	(2 credits)	(2 credits)	(3 credits)
Arts	80	80	80	80	80	80	80	80	80	120
							(2 credits)	(2 credits)	(2 credits)	(3 credits)
Work-life and technology	40	40	40	80	80	80	80	80	80	120
							(2 credits)	(2 credits)	(2 credits)	(3 credits)
Foreign language(s)	40	40	40	80	80	80	120	120	120	240
							(3 credits)	(3 credits)	(3 credits)	(6 credits)

(continued)

Table 6.3 (continued)

Basic subject areas and activities	Hours of instruction									
	Primary education						Lower secondary education			Upper secondary education
	G.1	G.2	G.3	G.4	G.5	G.6	G.7	G.8	G.9	Grades 10–12
Total instructional hours (basic education)	840	840	840	840	840	840	880 (22credits)	880 (22 credits)	880 (22credits)	1640 (41 credits)
Activities to develop learners	120	120	120	120	120	120	120	120	120	360
Subjects and activities that schools would like to offer dependent on their readiness and emphases	No less than 40 h						No less than 200 h			No less than 1600 h
Total instructional hours	No less than 1000 h per year						No less than 1000 h per year			For the total 3 years no less than 3600 h

Source: Structure of Instructional Hours Adjusted by Order No. 683/2552 of OBEC, issued on May 13, 2009 and order No. 110/2555 issued on March 25, 2012

6.4.6 Boy and Girl Scout Activities

In the area of learner development and cocurricular activities, it is important to mention Boy and Girl Scout activities. This initiative began in the reign of King Rama VI who introduced Boy Scout activities from England in 1911 and these have become an integral part of both elementary and secondary education ever since (Vella and Vella 1978). Boy Scouts (*Luk Sua*) (ลูกเสือ) and Girl Scouts (*Net Naree*) (เนตรนารี) were quite popular and successful for so many decades as the outdoor and hands-on nature of the activities were so suitable with the nature of Thai youngsters.

Since 1985, scouting has become a compulsory subject in elementary and secondary schools. Temporarily scout activities become less useful and enjoyable for students and less significant for school administrators as compared to other core subjects needed for academic achievement. Currently, scouting (unlike in the USA and Japan) is a formal part of the curriculum, part of the area of learner development. It starts in grade 1, and for grades 1–3, the term is *Luk Sua Samrong* (ลูกเสือสำรอง) (Cub Scout). Then in grades 4–6, they are called *Luk Sua Saman* (ลูกเสือสามัญ) (Boy Scout). For lower secondary, they are called *Luk Sua Saman Runmai* (ลูกเสือสามัญรุ่นใหญ่) (Senior Scout), and for upper secondary, the term is *Luk Sua Wisaman* (ลูกเสือ

วิสามัญ) (Special Boy Scout). For female students, it would be Girl Scout, Senior Girl Scout, with similar terminology. The scout segment of the curriculum is only 1 h and graded pass/no pass. It can be any day of the week, but normally is the last hour of instruction on Wednesdays and on that day both students and teachers wear scout uniforms. The primary goal of the scouting activity is moral education, to build character and community so that students can work well in groups with solidarity, harmony, and social responsibility. Those activities have been utilized to strengthen the national integration of Thai people (Murata, 2017 March 2, personal communication; Rosarin, 2017 February 18, personal communication).

The Ministry of Education at present is seriously considering a plan to revive the scout activity to its original tradition. Currently, the government is placing great emphasis on values and the character development of our new generation. Therefore, the future outlook of revitalizing scouting programs in secondary schools is quite promising.

6.5 Genres of Secondary Education in Thailand

This section of the chapter describes in detail the different types of secondary schools which exist in Thailand. Secondary education is extremely diverse, and there are many different genres of secondary schools. In terms of structure, there is lower secondary (grades 7–9) and upper secondary (grades 10–12). Many schools offer both lower and secondary education, but many, particularly in remote rural areas, offer only lower secondary. The normal age group for secondary education is ages 13–15 for lower secondary, and ages 16–18 for upper secondary.

In the early 1970s, the well-known British economist of education, Mark Blaug (1972) guided a major empirical study of the returns to investments in Thai education financed by the Ford Foundation. The two key Thai agencies participating in the study were the National Educational Commission (NEC) and the National Institute of Development Administration (NIDA). The project reflected a new movement to encourage more data-driven decision making. As an important part of the study, with respect to secondary education, Blaug used a key variable, whether a Thai secondary school was public or private. Unfortunately, this binary Western way of thinking greatly oversimplified the situation of Thai secondary education. Actually there are many high-quality private schools, but also many low-quality private schools. The same is true for public schools. Thus, this distinction was rather meaningless in the Thai context. It should also be noted that private schools may be either nonprofit or for profit.

In the early 1970s, Fry (1976, 1980) in his research on education and occupational attainment in Thailand, did extensive emic analysis (Pike 1993) to try to ascertain the major genres of Thai secondary education. Based on his research the following major genres of Thai secondary education emerged:

6.5.1 *Rongrian Mi Chue* (โรงเรียนมีชื่อ) *(Famous Prestigious "Name" Schools)*

This concept relates to John Meyer's viewing schools as having a social charter (1969). When asked, many educated Thais could easily identify these schools, some of which were public and some private, most located in the primate city of Bangkok. Among such famous prestigious schools are the following in no particular rank order (Table 6.4):

There is extreme competition to get into these top prestigious high schools, which involve both meritocratic but can also involve other ascriptive criteria for admission. There is the emic concept of *pae chia* (แป๊ะเจี๊ยะ) ("tea money"). This is a kind of financial donation to a school for the "library," "computer labs," or other facilities or activities which can be used to help secure admission for the children of elite wealthy families who can afford the *pae chia* payment. Also teachers at the

Table 6.4 List of many of the famous prestigious "name" schools

Name	Type
Assumption College	Private
Bangkok Christian College	Private
Mahidol Wittayanusorn School (MWIT or MWITS)	Public
Triam Udom School	Public
Chitlada	Private, Palace school
Vajiravudh School	Private, named after King Rama VI, boarding school for boys
Sathit Chula	Public demonstration school of Chulalongkorn University
Sathit Kasetsart	Public demonstration school of Kasetsart University
Sathit (Srinakharinwirot, Pathumwan)	Public demonstration school of Srinakharinwirot University
Sathit (Srinakarinwirot, Prasarnmit)	Public demonstration school of Srinakharinwirot University
Sathit Chiang Mai	Public demonstration school of Chiang Mai University
Satriwithaya	Public, for girls only
Suankularb	Public
Debsirin School	Public for boys
Prince Royal College (Chiang Mai)	Private
Dara Academy (Chiang Mai)	Private
Mater Dei	Private for girls
St. Gabriel's	Private
Wattana Wittaya Academy	Private for girls

College here refers to secondary schools, not universities or post-secondary institutions

school may be given a quota of places that they may use to give to their friends or gain influence (the exchange theory of Blau (1964) and Lave and March (1993). After becoming Minister of Education in 2006, Dr. Wichit Srisa-an tried to eliminate the *pae chia* system, but that proved difficult, given that it is such a long-standing tradition. While Westerners may criticize the *pae chia* system as a form of educational corruption, it is actually similar to big donors in the USA giving to prestigious universities to facilitate admission of their children. It should be noted that the Thai name schools, particularly the private ones, can be rather expensive. Relevant to this category of school, there is a directory available of Thailand's top public and private schools (Top 100 Best, etc. 2016).

6.5.2 *Rongrian Farang (*โรงเรียนฝรั่ง*) (Western Schools)*

This category overlaps some with the initial category. These are schools, many with long traditions, which were usually established by Western missionaries. Among the most famous of such schools are the Catholic schools, Assumption, and Mater Dei. They are private schools. They generally have highly loyal alumni who have been quite successful.

6.5.3 *Rongrian Wat (*โรงเรียนวัด*) (Temple Schools)*

These schools are common throughout Thailand, particularly in rural areas. After Thailand shifted to a secular school system with the reforms of King Chulalongkorn the Great in the late 1800s, many abbots at Buddhist temples around the country donated temple land for the construction of public schools. Schools on temple grounds came to be known as *rongrian wat* (temple schools). Schools located at famous urban temples such as Wat Bovorniwes, where King Rama IX was ordained, are actually quite prestigious.

6.5.4 *Rongrian Sathit (*โรงเรียนสาธิต*) Demonstration Schools)*

These are schools connected to faculties of education at major universities. Over time, their reputation as high-quality schools has continued to grow (Jitsiree 2015). A number of them are also going international with scholarships, for example, for students from neighboring Laos.

6.5.5 Magnet Schools for the Gifted

The major example of this genre is the Mahidol Wittayanusorn School (MWIT or MWITS) located on the Salaya campus of Mahidol University. It attracts Thailand's most talented students in the areas of mathematics and science. Its students have done well in international Olympiads competing for medals in subjects such as physics, biology, chemistry, and mathematics.

6.5.6 Royal Schools

These are prestigious schools associated with the royal family and palace. The most famous of these is Chitlada, located on the palace grounds and directed by HRH Princess Maha Chakri Sirindhorn. Other famous royal schools are Prince Royal College (Chiang Mai), Vajiravudh College, with a strong emphasis on sports and music, and Rajinibon and Rajinilang schools in the central old part of Bangkok.

6.5.7 Religious Schools

An example of this kind of school is the Islamic College of Thailand (a public school), located in Thonburi, across the river from Bangkok. This school has an impressive campus and many of its famous alumni have given generously to the school. The school's curriculum includes the creative integration of Islamic, Buddhist, and secular studies. Since there is no separation of "church and state" in Thailand, the government can financially support religious schools (see Chap. 3).

6.5.8 BMA Schools

These are schools run by the Bangkok Metropolitan Administration (BMA). Because of so many prominent businesses being located in Bangkok, the BMA has an excellent tax base to provide substantial budgetary resources to support its schools. These are public schools, which often have excellent facilities such as computer or science laboratories and air-conditioned classrooms and libraries. These various genres of schools can overlap. Figure 6.1 shows a school, located in Nakhon Pathom (province west of Bangkok) which is both a temple and BMA school. Interestingly, the school's administrators are three women, showing their prominent role in Thai education. In the image, the vision of the school is presented.

Fig. 6.1 Rongrian Wat Muang (Muang Temple School, also a BMA school) (Photo courtesy of School Director Penpa Chomdech)

6.5.9 Schools Under the Department of Local Administration (DOLA), Ministry of Interior (MOI)

Though rural primary schools (*rongrian prachaban*) (โรงเรียนประชาบาล) were transferred from the MOI to the MOE in 1980 today there are still numerous schools under the MOI. Up-country, there are also many municipal schools, and they are under the supervision of the Bureau of Local Educational Cooperation and Development: Municipal Schools and Pattaya City Schools, DOLA, MOI.

6.5.10 Special Innovative Alternative Schools (See Chap. 26)

These are special schools run by dynamic social entrepreneurs who would like to foster innovative alternative schooling. Two of the most famous schools of this type are the Bamboo School (see Fig. 6.2) run by Mechai Viravaidya, one of Thailand's leading social entrepreneurs known as the Condom King, and Rung Aroon School in Thonburi founded by the architect, Prapapat Niyom. Mechai's innovative Bamboo School is located in the remote northeastern province of Buri Ram which borders Cambodia. Students, for example, play a major role in selecting their teachers and administrators. There is no tuition, and there is an emphasis on the school serving the surrounding community. The Rung Aroon School, located in Thonburi, emphasizes holistic education and cooperative learning in a stimulating attractive environment, based on Buddhist principles. Many visitors to the school comment that it looks like a resort.

6.5.11 Local Government Schools

Each province will normally have a large provincial school (*rongrian pracham changwat*) (โรงเรียนประจำจังหวัด), which is large and normally well-funded. Another important genre is *rongrian cayai ogat* (โรงเรียนขยายโอกาส) (opportunity expanding schools or "extended primary schools") (see Fig. 6.2). These schools, mainly located in remote rural areas, were originally only primary schools offering grades 1–6.

Fig. 6.2 Mechai's innovative Bamboo School in Buri Ram (Photo courtesy of Mechai Viravaidya and PDA)

Fig. 6.3 Extended primary school (opportunity expanding school) in Seka District, Bueng Kan Province, in the remote northeast (part of the Princess' project to assist remote disadvantaged areas) (Photograph provided by Dr. Rosarin Apahung)

After primary education was transferred to the Ministry of Education in 1980 with the passage of the National Primary Education Act, this opened the doors for the establishment of these opportunity expanding schools. These schools expanded their curriculum to include 3 years of lower secondary school (grades 7–9) to facilitate children in remote rural areas having better access to secondary education close to home. Within an 8-year period, these schools increased to 6600 or 22% of all primary schools and were able to offer opportunities to 21% of students at the 3-year lower secondary education level (Kasama 2006). The basic problem with such schools is find adequate numbers of teachers who are qualified to teach specialized subject areas such as math, science, and English (Fig. 6.3).

6.5.12 Special Schools to Serve Disadvantaged Children Without Access to Regular Public Schooling (See Chap. 12)

There are three major types of these schools. Some are supported by charities and foundations. An example would be the Bangkok School for the Blind established in 1939 by the American, Miss Genevieve Caulfield. Its funding is from the Foundation for the Blind in Thailand and it is considered a nonprofit private school. Others are supported by regular government budgets, and special education was a priority articulated in the 1999 National Education Act (ONEC 1999). As of 2006, there were 43 specialized schools run by the government to serve over 15,000 disabled students. At that time, there were also over 1500 integrated schools bringing in over 150,000 disabled students into mainstream education. Other schools serving the disadvantaged have been established by diverse NGOs in Thailand, both national and international. International NGOs have been active in establishing these kinds of schools in refugee camps.

6.5.13 Welfare Schools

These are special government schools which provide fully subsidized education to a wide range of marginalized children such as those with HIV, street children, and others facing difficult circumstances. As of 2006, there were 45 such schools serving over 40,000 students.

6.5.14 Nonformal Education Secondary Equivalency Courses

While not formally "schools," these special programs are extremely important in providing citizens an opportunity for a second chance to complete secondary education. As of 2006, there were over 500,000 learners in such programs with diverse curricula, delivery systems, and mechanisms for building on the life and work experiences of learners (see Chap. 8).

6.5.15 One District One Lab School/One Scholarship Initiative

This major initiative of the MOE was to have one high-quality school in all 921 districts of Thailand and to provide one scholarship for a talented student from each district to pursue university studies in Thailand or abroad. This was an extremely ambitious program to reduce regional disparities and those between urban and rural areas. This visionary ideal was, however, difficult to implement in practice.

6.5.16 Bilingual Schools

With the growing force of globalization and the inception of the AEC at the end of 2015, these schools are growing in popularity. There are two basic types, English Programs (EP) which offer 18 or more hours of instruction in English and Mini-English Programs (MEP), which offer 15 h or less. They are basically English-across-the curriculum programs where in the EP programs all subjects are normally taught in English except Thai and social science courses related to Thai history and culture. It is thought that the graduates of these programs will be better prepared to have the critical skills needed to meet the workforce challenges of the twenty-first century. Table 6.5 presents data on the number and location of these schools in Thailand, indicating that there are now an impressive total of 821 bilingual schools in Thailand. That there are 70 bilingual schools in the remote northeast confirms Keyes (2014) argument about the increasing cosmopolitan nature of this region.

Table 6.5 Number of bilingual English programs by type and region

Government schools	English programs (EP)	Mini-English programs (MEP)
Primary	24	102
Secondary	105	92
North	9	25
Northeast (Isan)	25	45
Central	76	82
South	19	42
Private schools		
General	168	
Vocational	7	
Total	433	388

6.5.17 International Schools

Established in the 1950s, there were the original "Big Three" international schools, namely, the International School of Bangkok (ISB), established in 1951, Ruamrudee International School (RIS), and Bangkok Patana School (BPS), both established 6 years later. These schools were exclusively for the children of expatriates and Thai nationals were not allowed to attend. With the accelerating forces of globalization and the Thai government's decision in 1990 to allow Thai nationals to attend such schools, they have expanded dramatically in recent decades. There are now 176 international schools in Thailand and they continue to grow rapidly in number (see Chap. 11).

6.5.18 Home Schools

Provision was made for home schooling in the 1999 National Education Act. In recent years, the number of home schools has been steadily increasing. Actually, the late prominent educator, Dr. Sippanondha Ketudat, was largely home schooled and went on to get a doctorate in nuclear physics at Harvard (Sippanon and Textor 1990). Much more recently, Dr. Pichamon Yeophantong (2012) received her doctorate in Australia at the young age of 23, after having been home schooled. She is now teaching at an Australian university.

6.6 Current Situation and Internal Pressure Toward Reform

Thailand has dramatically improved its education system in terms of equal access to compulsory education and also some improvements in education quality as reflected by average PISA scores in 2015 which are also higher than expected as compared to

Table 6.6 Asian countries average reading performance in PISA and national wealth (per capita GDP)

Country	Science	Reading	Mathematics	Average	Ranking	GDP per capita
OECD Average	493	493	490	492		
Singapore	556	535	532	541	1	$87,100
Japan	538	516	555	536	2	$38,900
Chinese Taipei	532	497	542	524	3	$47,800
Macao(China)	529	509	544	527	4	$96,100
Vietnam	525	487	495	502	5	$6400
Hong Kong	523	527	548	533	6	$58,100
B-S-J-G (China)	518	494	531	514	7	$15,400
Korea	516	517	524	519	8	$37,900
Thailand	421	409	415	415	9	$16,800
Indonesia	403	397	386	395	10	$11,700

Source: OECD (2015) PISA results by country; The United States 2017. *The World Factbook*

Table 6.7 Average academic performance in PISA and national wealth (per capita GDP)

Country	Science	Reading	Mathematics	Average	Ranking	GDP per capita
OECD Average	493	493	490	492		
Costa Rica	420	427	400	416	1	$16,100
Mexico	416	423	408	416	2	$18,900
Thailand	421	409	415	415	3	$16,800
Colombia	416	425	390	410	4	$14,200
Jordan	409	408	380	399	5	$11,100
Indonesia	403	397	386	395	6	$11,700
Brazil	401	407	377	395	7	$15,200
Peru	397	398	387	394	8	$13,000
Lebanon	386	347	396	376	9	$18,500
Tunisia	386	361	367	371	10	$11,700

Source: OECD (2015). PISA results by country; The United States (2017). *The World Factbook*

countries with the same or comparable levels of GDP per capita (Benveniste 2008) (Table 6.6). Thailand's PISA scores, for example, are higher than seven countries and roughly equal to two countries with similar or higher incomes per capita (see Table 6.7). Table 6.6 shows Thailand's performance compared to other Asian countries. Vietnam is the real outlier in this table with its performance far exceeding what might be expected, given its level of economic development (Fry and Huong 2011; Pfeiffer 2016).

However, the latest PISA results are still far from satisfactory with Thailand ranking 54th out of 72 participating nations. The issue of quality is still one of the persistent problems of Thai education along with the problem of children dropping out of school, the widening gap of quality between rural and urban schools, and the shortage of quality teachers in core subjects (Commission on Education Reform, National Reform Council 2015) (see Chap. 14). Another hard fact of the present

Table 6.8 Student retention rates, grades 1–12, academic year 2002–2013

Grade	Year	Students	Retention rate
1	2002	1,089,166	100
3	2004	1,008,420	92.6
6	2007	999,241	91.7
7	2008	970,327	89.1
9	2010	900,199	82.7
10	2011	795,956	73.1
12	2013	686,228	62.6

Source: Office of the Education Council (2014)

system is that approximately 70% of Thai students enter the world of work unskilled with over 40% finishing only grade 9 or lower (Quality Learning Foundation 2014). Table 6.8 indicates that only 55% of students starting primary school eventually complete upper secondary school. That ratio needs to improve with fewer students dropping out of the system resulting in greater numbers of students completing upper secondary education.

These are just a few key empirical indicators showing the critical necessity for reforming the system. For secondary education in particular, with approximately 2500 schools ranging from top-class international schools in metropolitan Bangkok packed with thousands of students, many from well-to-do families, to the smallest secondary school of the country with only 28 students situated in a remote rural area in the poor northeastern region (Office of the Education Council 2014; Association of Secondary School Administrators 2015), the key challenges are not only those issues discussed above but also the fundamental rethinking of the system so as to improve quality, relevance, equity, and access.

6.7 Global Forces as an Additional Stimulus for Reform

The Thailand Research Fund (TRF) has started the project INTREND (Innovation and Trends in Educational Movements) to review education reform movements in countries across every continent. In 2014, the project produced the following conclusions regarding major changes needed in school systems around the world (Chulakorn et al. 2015), some of which have influenced rethinking the Thai education system as well:

6.7.1 Toward New Skills and Learning Environments

The widespread trend around the world has moved toward the new *open classroom* where the objective is to help students learn key twenty-first-*century skills* more effectively. The notions of the "7Cs" (Critical Thinking, Creativity, Collaboration,

Communication, Computing, Cross-cultural Understanding, and Career Skills) and the "2Ls" (Learning Skills and Leadership) are now well-established in current thinking informing the Thai education reform movement. Such notions also include the proposition that a new learning environment must be built in our schools and classrooms to accommodate new pedagogical approaches such as research-based learning (RBL), problem-based learning (PBL), work-integrated learning (WIL), and service learning, for example. The emphasis is placed on not only *skills to compete* but also the *skills to live* as well so that our new generations can cope with an increasingly complex globalizing world.

6.7.2 Providing Meaningful Learning Through Content Revival

The new content condensed from a comprehensive review uncovers three major areas for reform. First, the new content should direct more attention to *meaningful learning* for our students. Some of such enhanced learning content exemplified in curriculum reform in many countries includes future studies and scenario planning (USA), alternative energy (many European countries), and disaster education (Japan, Indonesia) as examples. The second area of emphasis focuses on *life skills* content such as sex education, media education, civic education, and conflict resolution. Even conventional subjects such as history are under critical review in countries like Japan and Hong Kong so as to lay a strong foundation for their respective future citizens. The third and final area that needs significant reform is the *career-oriented curriculum* in order to prepare our youth more effectively for the future world of work. *Learning how to learn* on one's own is increasingly important in an information era and a knowledge economy. A number of initiatives have been identified as good practices that could be realistically utilized in Thai schools, especially at the secondary level. Concrete examples are the *career academy* curriculum in many states in the United States; the simplified and practical subjects in economics and investment in many countries; the *studio classroom* for creative subjects like design and innovation in a number of advanced, industrialized countries; and *farm-based learning* in some of the less developed countries. These are some of the new initiatives clearly articulated in the current reform plan for Thai education.

6.7.3 New Management System to Promote Diversity and Innovation and to Be More Responsive to Local Needs

The last area for reform calls for *education decentralization* which has been successfully implemented in many democratic countries. It has been evident in Thai education that the root cause of most of the persistent problems in our education

system lies with our century-long overly centralized education bureaucracy (see Chap. 20). It is also noted that with the special emphasis on *Education for Life and Career*, the new reform can only be made possible by a new management approach involving a radical move for government reform and downsizing along with a strong move toward *area-based education (ABE)* more responsive to local contexts, needs, and demands (Chuachan and Aroonsi 2013). It is also noted that the new decentralization plan and area-based reform call for both adequate *area-based information systems* and *multiparty local participation* to sustain the long-term success of the plan.

At the macro level, the plan also includes a major reform in the education budgeting system that should pave the way for area-based financial allocations and more autonomy at the school level in terms of decision-making about resource utilization. More details are provided on the ABE innovation and its current piloting in Sect. 6.9.2 below.

6.8 New Paradigm for Rethinking Thai Education

As the Thai education system needs a dramatic reform so as to cope with many of the serious problems within the system as well as to respond effectively and creatively to the new learning needs of the coming generations, it is obvious that the system not only needs major structural reforms but also requires a new paradigm of thinking in providing a more responsive secondary education for Thai youth seeking a better and more productive working life after completing their formal schooling (see Chap. 19). The new education paradigm for the future of Thailand includes:

- The notion of lifelong learning for the whole population for continuous self-improvement of both the new workforce and those already in various production and service sectors. This notion also embraces the provision of lifelong learning for the aging population to prolong their productive life as Thailand is rapidly moving toward becoming an aging society.
- The notion of life, working, and citizenship skills as the key emphasis of new learning, an important notion that must be realized for the students in order to prepare them for the world of work and the more complex lifestyles of modern society.
- The notion of area-based approach in education provision to respond to the specific socioeconomic needs of each area of the country, including the emerging "Special Economic Zones" following the government's mega-projects linking transportation systems among the continental ASEAN countries and with China and India.
- The notion of a changing role of the government from *provider* to *regulator* to support decentralization as a key instrument for reform and for the *downsizing* of the central agencies.

- The notion of *multiplayer system* to promote participation from all parties concerned, especially those from private *real production sectors* and local administrative bodies to help realize the new concept of *Learning for Life and Career* in schools.
- The use of *demand-side financing* as a key leverage for quality improvement and healthy competition within the system and also a key strategy for promoting effectiveness, efficiency, and transparency of the system.
- The development of new learning assessments to help students' individual improvements throughout their school life alongside the new assessment competencies needed for strengthening the teaching profession.
- Promotion of media-based learning as an integral part of the new curricular system and perhaps the most powerful part of the new learning system that better fits the lifestyles of the new more tech-savvy generation.

The new paradigm reflects not only the new way of thinking in solving so many persistent problems in Thai education but also provides a special opportunity for the whole system of learning to adjust itself to meet the rapidly changing needs and challenges the country is facing. In the more competitive and yet cooperative world, it is hoped that the Thai education system can respond to the demands of the new context and becomes the key engine driving the nation to a bright and sustainable future.

6.9 Current Movements Toward Reform

As the government recently announced the "Thailand 4.0" as a blueprint for future economic development of the country, the secondary education system has been a priority target for major reform by the Ministry of Education. The main objective is to redesign secondary education so that more students turn to the vocational or career-oriented track to meet the challenges of the new economic reform plan (see Chap. 7). As the country critically needs more highly skilled workers as well as entrepreneurs to realize the ambition of becoming an innovation-driven economy, the following are some of the key initiatives to meet such needs:

6.9.1 Education for Skill Development and Employability

The issue of employability and skill development was a common issue stressed at the 5th ASEM Meeting in Latvia in April 2015. It seems that every country is facing a common problem of its education system falling behind the rapid change and development in the production sectors and their respective labor markets. For secondary education in particular, this notion also received serious consideration from education leaders around the world as youth in most modern societies tend to enter

the job market inadequately prepared for the world of work (*ASEM Secretary Report* 2015).

In the case of Thailand, the effort to transform some of the secondary schools into prevocational schools has already started in selected industrial provinces, whereas a majority of students exit schools at grade 9 to become cheap, unskilled labor. The so-called *comprehensive school* and *dual curriculum* have provided students with the opportunity to explore more career choices and learn more specific vocational skills demanded by the modern labor market. The pilot project has provided satisfactory results as reflected in the increasing number of students participating as well as the feedback from the private sectors involved. The *career academy* project initiated by the Quality Learning Foundation (QLF) modeled after those in the United Kingdom and the United States is another interesting alternative for upper secondary school students. The project is currently being piloted in eight provinces of the country.

There are, however, some shortcomings such as the lack of effective career counseling and inadequate incentives for many other industrial sectors to participate fully in this joint effort to motivate lower secondary school students to turn to the vocational track. There is also the lack of systemically planned career paths as another key incentive for vocational students (Ministry of Education 2015a, b). The MOE and other concerned agencies will definitely pursue these initiatives further and expect the future graduates from secondary schools, both at compulsory grade 9 and grade 12, to be better equipped with the knowledge, skills, characteristics, and confidence for successfully entering the modern rapidly changing labor market.

Furthermore, with regard to the notion of lifelong learning, the idea of employability and skill development also embraces the new target which is the current 35–40 million individuals currently in the workforce already employed in various sectors, including approximately 11 million in the agricultural sector, 12 million in the industrial sector, and 7 million in the public sector (The Federation of Thai Industries 2014). At the moment, the NRC places lifelong learning and continuous skill development for the current workforce as a very high priority on its education reform agenda. This effort has important implications for secondary education as well. Critical to genuine secondary education reform is not only equipping students with working skills but also learning skills and aspirations to make lifelong learning a meaningful and living reality for our workforce (Commission on Education Reform, National Reform Council 2015).

6.9.2 Toward an Area-Based, Multi-actor System of Education

The new education paradigm *Education for Life and the World of Work* jointly pushed by the MOE, the NRC, and the NLA has led to an even more challenging new concept of education management and provision. The *area-based education* (ABE) approach is now seen as another key element of the reform agenda in

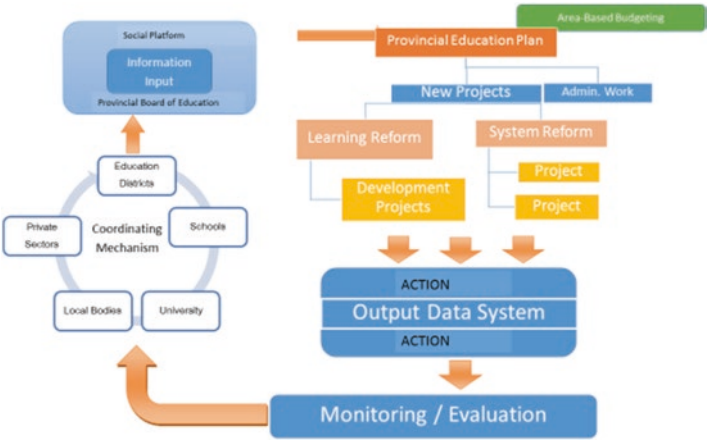

Fig. 6.4 The area-based education management model (*Source*: Silaporn 2014)

providing education that is responsive to the diversity of the socioeconomic demands of specific diverse areas of the country, including the *special economic zones* identified by the government following its mega-projects in the next 4–5 years linking the transportation systems of all continental ASEAN and Asian countries including India and China (Office of the Prime Minister 2015). Chiang Mai is to become a new regional trade center connecting China and ASEAN countries, while Yala, Patani, and Narathiwat, the three southernmost border provinces, can potentially become a logistic hub expanding trade markets between Thailand and the ASEAN Muslim countries, namely, Malaysia, Indonesia, and Brunei Darussalam. Given this new regional context, the innovation of area-based education is a timely response in providing the Thai workforce with necessary skills required by the needs for a country aspiring to be a dynamic competitive trading nation in ASEAN and the world community (Chuachan and Aroonsi 2013; MOE 2016; National Reform Council 2015a, b) (Fig. 6.4).

Currently, there are 14 provinces participating in the ABE project co-funded by the Thailand Research Fund (TRF) and the Quality Learning Foundation (QLF). In these provinces, there are some key tasks currently being undertaken such as the formation of provincial *boards of education*, a still informal body comprised of all parties concerned to supervise educational policy and planning in each province and the development of provincial education databases to support area-based education and human resource development planning (Chuachan and Aroonsi 2013; Thailand Research Fund 2015). The NRC is planning to propose a new law to the government and the NLA to recognize these provincial bodies legally so that they will become a key factor contributing to education reform in the future (National Reform Council 2015a, b). On March 21, 2016, the government, using Article 44, introduced a new decentralization policy shifting the focus of local decentralization to be the province, not the ESA (see Chaps. 4 and 27) (MOE 2016).

6.9.3 Autonomy, Accountability, and Changing Government Roles

To promote learning innovation at the school level as well as the responsiveness of education to local needs, it is imperative that our schools must have more autonomy in curriculum implementation, personnel recruitment, and resource utilization. The MOE at the moment is piloting with 300 schools in 20 education districts in the project *Autonomous Schools for Learning Reform* as a pathway toward unlocking the administrative constraints to stimulate new alternatives in these schools that directly affect student learning in a short run and could be scaled up to thousands of other schools in the long run (Steering Committee on the Project Autonomous School for Learning Reform, Ministry of Education 2015a, b). At present, school administration, by law, has only limited decision making power regarding both instructional personnel and resource management. With the new paradigm *education for life and career* along with the pilot project of the ministry mentioned above, it is expected that the project will come up with a set of critical recommendations to promote such autonomy at the school level.

At the same time, the new mechanism for assuring good governance and accountability must be set out alongside the increase in school autonomy. The strengthening of the role of school boards, the strategy to promote community involvement, and the school's *report card* are among the measures being thought out in the education reform plan of the NRC (Commission on Education Reform, National Reform Council 2015. The new incentives scheme for rewarding good practice in school governance is another strategy under consideration by both the NRC and the MOE.

Lastly, all these current movements toward increasing school autonomy and accountability call for a drastic change and transformation of the roles of the MOE from *provider* to *regulator*, a new emphasis that will put central agencies in more regulative and supportive roles in promoting *quality education for all*. The NRC and NLA are working together with the MOE in revising the National Education Act 1999 to put greater emphasis on school autonomy and accountability. The NRC in particular, in its education reform plan, also includes the notion of autonomy and accountability as another critical strategy for improving the quality of education, especially at the basic education level (Commission on Education Reform, National Reform Council 2015).

6.9.4 New Competencies of Teachers and Administrators

The more diverse learning environment along with the increasing autonomy and accountability at the local school level also require a new set of competencies for both teachers and administrators. In the area of curriculum and instruction alone, there is a critical movement at the international level calling for pedagogical reform to respond to the new learning styles in the digital age (*ASEM Secretary Report*

2015). The reform movements across the globe together point out a real need for radical reform in the teaching profession, from new alternatives in teacher training and recruitment to teacher performance assessment. In the case of Thailand, the MOE together with the related commissions of NRC and NLA, all agree that the systematic reform of the teaching profession is the most important key to success in providing better education for the new generation of students (see Chap. 18).

More specifically, in the *Blueprint for Reform* of the Commission on Education Reform of the NRC, in congruence with the MOE policy, it covers some of the major reform issues in the teaching profession including:

- Moving the teacher training system toward a more competency-based curriculum based on a new set of capabilities required by both the new mode of learning as well as the new management autonomy at the school level.
- Changing professional development of in-service teachers toward the *coaching* mode in place of the conventional *training* mode, a change based on research evidence which has demonstrated that teacher coaching is a much more effective means for teacher learning.
- Strengthening education faculties to meet new demands. At the moment, there are more than 50 colleges of education across the country. The effort will call for a realistic profiling of all those colleges in order to identify centers of excellence in teacher education in each subject or area of study, a necessary step to reinvest wisely in our colleges of education.
- Improving work conditions of all teachers, especially reducing the non-teaching activities that take away teacher-student contact time inside and outside the classroom. Some of these efforts have already been achieved by the MOE, notably the new regulation to reduce non-teaching activity time to less than 10% of the total time of instruction per academic year, a considerable improvement based on prior surveys which found that some of our teachers spend as much as 42% of their time on non-teaching activities. This may partially account for the paradox of large class sizes mentioned earlier.
- Revising the criteria for teacher's career paths and academic promotion, an effort that has also been succeeded by MOE through the Committee on Teachers and Education Personnel. The new criteria will be more focused on student learning improvement as the key criteria for teacher promotion.

There are also some key projects already started to accommodate such reform efforts, i.e., the project *Kuruthayat* (ครุทายาท) *(Teachers' Successors)* aiming to produce some 68,000 teachers in a new mode of training for the next 15 years, the multilateral cooperative project with international universities to produce some 14,000 new doctorates in various disciplines, 10% of which will be in the areas of education in order to strengthen the long-term capability of the colleges of education, and the capacity-building project for the *"New University*, namely, the 38 Rajabhat and 9 Rajamangkala Universities cluster, including the capacity to become regional hubs for in-service teacher professional development (Office of Higher Education Commission 2015).

6.9.5 *Reinvesting in Secondary Education*

Many of the abovementioned projects or reform issues imply a serious reinvestment in our secondary education system. By international standards, Thailand lags behind in providing resources for secondary education (Benveniste 2008). The scope of the new investments may range from the production of high-quality teachers in STEM education (Science, Technology, Engineering, and Mathematics) to new ICT infrastructure to enhance learning and to the setting up of provincial centers for teacher professional development. The new investments will likely include expenditures required to support the *dual curriculum* to prepare secondary students more effectively for the world of work. These new investments have already been identified as part of the reform plan presented to the NRC (Commission on Education Reform, National Reform Council 2015) and are expected to receive full support as the country faces a serious shortage of skilled workers to facilitate economic recovery.

6.10 Conclusion: Sustaining Long-Term Reform Effort Is the Key

Lastly, many reform efforts, plans, and measures identified and described throughout this chapter will require *political and policy continuity* as the most necessary condition in order to become reality. There were too many lessons learned in the past about how political instability or political interference had hurt or twisted the reform process. This is the main reason behind the proposition by the Commission on Education Reform to the NRC that a *Super Board* be established to sustain long-term reform without any unproductive political influence. Although such a national coordinating body, chaired by the prime minister, will have executive power to make decisions regarding strategic use of resources to support the reform plans, the ultimate power of this national board will come from two of its important strategic arms, one is the Education System Research Institute and the other is the National and Provincial Education Assemblies, both of which have been included in the proposal to the NRC alongside the setting up of the *Super Board* or officially the National Commission on Education and Human Development (Commission on Education Reform, National Reform Council 2015). It is hoped that with such a design of a national inter-ministry, inter-sectoral coordinating body, the upcoming reform effort will be a self-correcting, self-adapting process based on both research evidence and full participation from all key stakeholders.

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