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A plan for improving the curriculum and instruction for the lower secondary schools of Thailand

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A plan for improving the curriculum and instruction for the lower secondary schools of Thailand

Abstract

"Prior to the 20th century, education was for royalty or for monks" (The Office of Prime Minister, 1978:263). Thailand had no formal school system. Education generally was undertaken as a family task. "The first formal schools were opened only about one hundred years ago" (Bennett, 1975 :26). However, as society became more complex, special institutions were developed to promote desired educational activities. Such developments have been gradual, and in large measure in reference to national interests.

A PLAN FOR IMPROVING THE
CURRICULUM AND INSTRUCTION
FOR THE LOWER SECONDARY SCHOOLS
OF THAILAND

A Research Paper

Submitted to

The Department of Curriculum and Instruction

In Partial Fulfillment

of the Requirements for the Degree

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UNIVERSITY OF NORTHERN IOWA

by

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AND INSTRUCTION FOR THE LOWER SECONDARY
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has been approved as meeting the research paper requirement for the
Degree of Master of Arts in Education.

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CHAPTER 1
INTRODUCTION

"Prior to the 20th century, education was for royalty or for monks" (The Office of Prime Minister, 1978:263). Thailand had no formal school system. Education generally was undertaken as a family task. "The first formal schools were opened only about one hundred years ago" (Bennett, 1975:26). However, as society became more complex, special institutions were developed to promote desired educational activities. Such developments have been gradual, and in large measure in reference to national interests.

In 1932 the form of government of Thailand was changed from an absolute monarchy to a constitutional monarchy. This more democratic government realized that education was one of the national undertakings which needed a great deal of reorganization and improvement. Therefore, the national system of education was revised. The Ministry of Education, with responsibilities for providing and maintaining public education throughout the country, has been well aware of the existing situations.

Sinlarat (1973:62) describes the existing problems as follows:

"Thais are influenced by the scientific and the technological advances, and, importantly, the culture and belief of the foreigners, have swept into Thailand with great force. It is clear that the Thai system has been slow to respond. The system of education that they developed, focused almost exclusively on preparing individuals for government service. The system of education fails to meet Thai current needs."

In Thailand, secondary schools are at present concentrated in the central region of the country and in the towns. The elementary level schools are spread evenly throughout the country (Bennett, 1975). At

the present time, there is essentially free public education from first grade through twelfth grade. "In 1960, only four million children were being educated in government schools. Today more than eight million students are enrolled in government primary and secondary schools throughout the country" (The Office of Prime Minister, 1978:263-264). The desire for higher education is increasing. Studying at the institutes at all levels are about 8.09 million students, of which about 7.05 million are in the rural area of Thailand (Secretary of Ministry of Education Department, Division of Planning, 1979). Approximately 90 percent of the students in the rural communities are in the elementary and secondary schools (see Table 1).

The people have realized that the true progress and welfare of a country can best be promoted through its educational system by expanding the secondary schools and introducing significant changes into Thai educational system.

Statement of the Problem

Since the enactment of Thailand's first Compulsory Primary Education Act of 1921, the shortage of secondary schools has been bothersome. This problem has been aggravated by a 1980 recommendation by the Ministry of Education, in response to popular demand, to raise the compulsory education level to the completion of grade twelve.

Table 1

Number of Schools, Teachers and Students in
Rural Schools by School Level

	Schools	Teachers	Students
Elementary Schools	29,574	223,275	5,754,215
Secondary Schools	1,254	37,439	718,645

Source: Secretary of Ministry of Education, Division of
Planning, 1979.

There are many problems facing lower secondary education in Thailand. Two major problems are the curriculum and instructional practices.

1. The Curriculum Problem: The system of education in Thailand is a centralized system. The government provides the curriculum for all schools. This has had the effect of stifling students' feelings of initiative, interest, and responsibility (Hummel, 1977). Moreover, the courses of study as prescribed by the government are fixed and limited. It is important to develop new curricula, both to derive a program better adapted to students' needs, and to secure greater community support of education generally.

2. The Instruction Problem: At the present time, there is little development in the modern ways of teaching in secondary schools of Thailand. The method of teaching is still traditional. Teachers still spend most of the class period talking to the entire class and students carry out the same assignments. There are a few activities and discussions in the method of teaching because it only prepares students to pass the examination by memory and by a fixed curriculum. In other words, the method of teaching relies heavily on the subject-centered more than the child-centered (Nakahora, 1971).

Purpose of the Study

The study attempted to investigate specific elements of American secondary education which have been proved to be effective and use this background to propose some avenues for improving the public lower secondary education in Thailand.

Limitations of the Study

The study is based on the following limitations:

1. The researcher focuses only on public education in Thailand and in the United States.
2. The researcher has not had an opportunity to engage in a dialogue with Thai educators in constructing this paper.
3. This paper is limited to a review of literary sources and direct empirical data was not used in this study.
4. The review of literature is limited to resources from the University of Northern Iowa, the Iowa State University and researcher's personal library.

General Questions To Be Answered

1. Should the Thai centralized educational organization be changed to the decentralized educational system?
2. Should the present secondary school in Thailand be changed to a comprehensive secondary school?
3. Should the Ministry of Education expand the compulsory education level from the seventh grade to the twelfth grade?
4. Should the final examination in the public lower secondary schools of Thailand be replaced by a system of credits?
5. Should the course of study in the lower secondary school of Thailand offer more elective courses for the student to choose?
6. What would be some desirable exploratory alternatives to be included in the curriculum of lower secondary schools in Thailand?

7. What are some methods of instruction found in U.S. schools which would improve the quality of educational programs in the lower secondary schools of Thailand?

Definitions of Terms Used

Absolute Monarchy: The system of government in which there is one ruler (Harsey and Friedman, 1980:431).

Curriculum Development: The deliberate process whereby an individual or a team identifies educational aims and objectives of particular learners, designs an appropriate curriculum (including the choice of content, teaching methods and media, assessment techniques, etc.) implements the curriculum with the learners, and improves it in the light of an evaluation of its effects and effectiveness (Derek, 1982:60).

The Secondary School: The secondary school is hereby defined according to one of the following patterns: (a) A junior high school comprising grades seven, eight and nine, and a senior high school; (b) A combined junior-senior high school comprising grades seven through twelve; (c) A junior high school comprising grades seven and eight and high school comprising grades nine through twelve; or (d) A high school comprising grades nine through twelve (State of Iowa, 1979:17).

The Lower Secondary School: The level of education immediately above elementary education, comprising grades five through seven for all children between the ages of twelve and fourteen (Ministry of Education, 1977).

Summary

During the last century, the educational program in Thailand has evolved from a program restricted almost entirely to royalty, to a system of universal public education. The program of secondary education is undergoing a thorough review at present in response to a recommendation by the Ministry of Education to raise compulsory attendance to the completion of grade twelve. Two areas facing major review are the curriculum and instructional practices. The study attempted to investigate specific elements of American secondary education which have been proved to be effective and use this background to propose some avenues for improving the public lower secondary education in Thailand.

Among the major questions to be addressed were:

1. Should the Thai centralized educational organization be changed to the decentralized educational system?
2. Should the present secondary school in Thailand be changed to a comprehensive secondary school?
3. What are some methods of instruction found in U.S. schools which would improve the quality of educational programs in the lower secondary schools in Thailand?

CHAPTER 2

REVIEW OF THAI EDUCATION

The first and most important step leading to a better understanding of a proposed research of instruction and curriculum development is to consider the background or the evolution of the present program. The informations are translated and compiled from "Aspects and Facets of Thailand" (Buasri, 1981).

Educational Evolution in ThailandThe Old Custom

"Seek knowledge when you are young; seek wealth when you are older." This is an old saying which Thai children, from the olden days of Thai history, have often heard from their parents. It suggests that from very early periods of history the Thais have realized the importance of education. This proverb is reputed to be one of the laws laid down by Pra Ruang, a Thai king who reigned when Sukodhai was the first capital of Thailand in 1257 A.D.

From the middle of the thirteenth century through the first half of the nineteenth century (1257-1851) education in Thailand was a family affair; parents had a primary obligation in educating their children, and were trained in order to carry on the family business, craft, or profession. It was the common practice among people of all trades, such as farmers, goldsmiths, silversmiths, casters, moulders, carpenters and sculptors, as well as among doctors, lawyers, and royal secretaries. If any parents wished their son to go into a profession for which book knowledge was required, they would send him to live with a monk in a wat or temple. The Buddhist monks, as a rule, could read and write, being

expected to translate the Pali Holy Scripture into the vernacular and preach it. From an early period, the monks acted as teachers and the wats served as schools. Religious teachers, therefore, have always been available to some Thai boys, ready to teach them to read and write. Most of these boys became monks later.

The subjects which were taught in wats were reading and writing of Thai and Pali, recitation of the scripture, elementary arithmetic, morality, and manners. In some wats, carpentry and medicine were taught. If a boy was a son of a courtier he would, after having been sufficiently trained, be presented at court by his parents to the king or a prince, or some other important court personage, whom he was to serve and to learn from until qualified to take over his father's position as a royal courtier.

Customs and traditions in those days had a strong influence in confining Thai women to their own homes with practically no outside activities. Therefore, Thai girls had scarcely any opportunity for liberal education. Young women were taught to be very modest, polite, and diligent. Every girl was required to be highly skilled at domestic affairs such as the management of the home, the art of cookery, flower arrangement, and other home activities. The women took keen interest in housekeeping and did not need to earn their living as they were supposed to be looked after by their husbands or fathers. Their experiences were indeed one-sided. There were no questions of privileges and equality with regard to women in the social, economic, and political fields.

Change in Educational System

During the period between the years 1851 and 1868, in the reign of King Rama IV of the present dynasty, the Thai first became acquainted with the western system of education. King Rama IV was so interested in the progress of education achieved by Western nations, he himself started learning English and attempted to establish friendly relations with countries in Europe and America. The result was that Thailand remained independent while at that time several neighboring countries lost their independence. There were some European nations, the colony hunters, in the East at that time. King Rama IV began to learn English from an American missionary. Afterwards, he engaged some Europeans to come and teach his children. Prince Chulalongkorn, his son, who became the fifth reign of the present dynasty, was taught English by Mrs. Leon Owens. At this time, the first government was opened for the purpose of giving instruction in the Thai language, arithmetic, and civil service methods to his sons and male relatives of high government officials.

Soon after that, an English school was opened and later other government schools were started in Bangkok and adjoining districts. The main purpose of all schools was to train young men for government service. This was the first time that the state took measures for the people's education in Thailand.

Foundation of Present Educational System

At the beginning of the new system, the education offered by the schools was not popular with the general public. It was a period of national administrative development under King Chulalongkorn. Many

ministries and government departments were being established and there was a great demand for officials who had adequate training for their responsibilities in administration.

Education at that time was divided into two stages or levels, with three years of education at each level. The subjects taught in schools were reading, writing, arithmetic, bookkeeping, and civil service, as well as English for more advanced students. After passing the final examinations at these new schools, students were all admitted to positions in the Civil Service, and this eventually made the school popular among the people. The number of pupils increased so rapidly, that more government schools were established and private individuals and missionaries were encouraged to found schools throughout the country.

In 1890 the Department of Education came into being to take care of the schools. It was concerned with managing the business of the schools, planning the curriculum and syllabi, and fixing the examination regulations. As the schools were found mostly in the wats and almost all the teachers were monks, in 1892 His Majesty the King declared that the Department of Education and the Department of Religious Affairs be united and made into a Ministry of Education.

Moreover, some educators during this period were sent to Europe, America, India, and Japan to observe the education in these countries. "King's College, a preparatory school run as an English public school, founded in 1897" (Wyatt, 1973:143). It primarily prepared its students for studies abroad with a thoroughly English curriculum and English teachers. Also, the students had the opportunity to compete for the

"King's scholarships" for further studies abroad. This was a preparation for the development of education and the general modernization of the country.

More Advancement in Education

In educating the people for more professional knowledge, the Ministry of Education Provided two branches of study: general academic education and vocational education. Three levels were developed, these were elementary, secondary, and higher. Each level was divided into three grades and one year was to be spent in each grade. The new courses added for secondary and higher levels were geography, grammar, algebra, and general science. The vocational schools offered work training courses, such as agriculture, carpentry, trade and accounting, architecture, engineering, serving, and homemaking.

About 1917, when the new system of education was widely known, King Vajiravudh, who had studied in England for years, recognized that education was the very foundation of good citizenship. His majesty issued a royal command that all children between the ages of seven and fourteen years were to attend school. This royal command was proclaimed and passed as a law in 1921; it was the first Compulsory Primary Education Act (Buasri, 1981:41). Many free government elementary schools were established at this time to provide for the increased number of children of the compulsory education was free and for all children of grades one through seven. It was required that every child either complete the fourth grade or be over fourteen years of age before leaving the school.

Modern Education

In 1932, a revolution resulted in a change in government from an absolute monarchy to a constitutional monarchy. Since 1932, there has been an increasing feeling that the national education system must be revised in an attempt to improve the quality of education.

By the beginning of the 1960s, Thailand had virtually achieved universal compulsory four-year education. However, following the recommendation of the Karachi Plan adapted in 1960, the government committed itself to the expansion of compulsory education from four-year education to seven years of schooling. With a view of achievement to national goals for educational development, the government has built and expanded an increasing number of elementary schools throughout the country (Bennett, 1975).

Educational Organization in Thailand

The present system of education is based upon the older plan, but is more extensive in its scope. The present organization plan is shown in Figure 1 and 2.

There are five levels in the national educational system of Thailand. Following is a brief description of the levels of education, including the types of schools for each level (Department of Educational Techniques, 1981:1-3).

Pre-Primary Education

Pre-primary education is designed for children between four and seven years of age, and it is not compulsory. However, it has become more and more common for the people to send their children to the

Figure 1
National Education Plan
1962 - 1975

Age	Grade		
	University		
19	2nd yr.	Pre-University	
18	1st yr.	2 Years	Vocational
17	M.6	Higher Secondary	
16	M.5	3 Years	Vocational
15	M.4		
14	M.3	Lower Secondary	
13	M.2	3 Years	Compulsory
12	M.1		
11	P.4	Primary	
10	P.3	4 Years	Compulsory
9	P.2		
8	P.1		
7			
6	Kindergarden		
5			

Source: Ministry of Education, Secondary of Education in Thailand, Bangkok: Krungdhep Press, 1977, p. 9.

Figure 2
National Education Plan
1962-1975

Age		
20-25	University or Higher Education	
18-19	Pre-University	Technical Education
15-17	Higher Secondary Education	Higher Vocational Education
12-14	Lower Secondary Education	Lower Vocational Education
8-11	Primary Education	
4-7	Pre-Primary Education	

Source: Ministry of Education, Secondary of Education in Thailand, Bangkok: Krungdhep Press, 1977, p. 9.

nursery and kindergarden schools. Both the government and private groups establish these types of schools.

Elementary Education

Elementary education is compulsory education for all Thai children between seven and fourteen years of age, except the handicapped and those who, for some good reasons, cannot be spared by their families, and those who live more than two kilometers from the nearest school. However, the latest surveys of children undertaken by the Ministry of Education shows that the present elementary school enrollment is 95 percent of the whole population of compulsory school age (Ministry of Education, 1977). The Ministry of Education, striving to bring the compulsory education attendance up to 100 percent, has established a school for the deaf and mute, and has given assistance to an endowed school for the blind. "In 1962 an Elementary Education Act was passed in accordance with the Karachi Asian Ministers of Education Conference extending compulsory education from the four years then in existence to seven years by the early 1980's" (Bennett, 1975:21). Now, the elementary schools are spread evenly throughout the country.

Secondary Education

Secondary education is the next level following elementary education. At present, there are two channels of secondary education, academic and vocational. The students who complete the seventh grade of the elementary level may continue in either an academic or vocational secondary school at the eighth grade. Completion of the academic secondary level requires three years, then the students may go to the

higher secondary education or pre-university education. The vocational secondary education program requires three years for grades eight to ten, plus three years more for the higher courses in grades eleven through thirteen. Those who graduate from the vocational secondary school may continue in the college or university. However, there is a gap between the academic and vocational course.

Higher Secondary Education (Pre-University Education)

After the students complete the three-year academic program, they may choose to study either the Arts course or the Science course of the pre-university level. Either course requires two years of study for the acquisition of adequate basic knowledge for continuance in the college or university. The Arts course emphasizes language arts, social studies, and general science and mathematics; the Science course concentrates on physics, chemistry, biology, and higher mathematics, with less work in language arts. There are certain elective subjects in both courses.

Most of the academic secondary schools are government or private schools which include grades five to twelve. There are few institutions which are exclusively pre-university schools.

College and University Education

College and university is the highest level of education. The passing of entrance examinations is required for admission to a college or university. Graduation requirements are four years for a baccalaureate degree, two years for the master's degree, and two years

teacher colleges in Thailand" (The Office of the Prime Minister, 1978:265).

Philosophy of Education in Thailand

The National Scheme for Education, which came into force in 1960, was the first real attempt in Thailand to clarify the educational objectives and to formulate an educational philosophy. Although many of the objectives were of a long-term nature, and certainly not immediately implementable, they have provided and will provide useful guidelines for past and future national plans (Bennett, 1975).

The basic objectives of the National Scheme for Education can be summarized by Bennett (1975:24) as follows:

- "1. The Thai people shall be educated according to their individual capacities, to become moral and cultural citizens with discipline and responsibility, with good mental and physical health and with a democratic outlook. They should also be given the knowledge and skills necessary to carry out an occupation useful both for themselves and for their nation.
2. Boys and girls should receive full-time education up to the age fifteen.
3. Boys and girls should strive to gain knowledge and experience that will serve a useful purpose in their lives.
4. Education must serve the needs of individuals as well as those of society. It must also be in harmony with the economic and political systems of the country.
5. Four basic types of education should be given to all boys and girls; (a) moral education; (b) physical education; (c) intellectual education; and (d) practical education.
6. The state should educate the population of the country to as great an extent as its economic capacity will allow."

Curriculum and Teaching Methods in the
Secondary School of Thailand

Although some aspects of secondary education in Thailand have been noted earlier, more details are noted here. There are still the organizational patterns and social influences that create problems to cope with to be systematically concerned with innovation. Phillips (1975:356) states:

"Perhaps the most important characteristic of this culture is that it tends to be more Thai than intellectual in the sense that its participants are generally more familiar and culturally acceptable issues of Thai society."

The instruction and curriculum in Thailand can be seen as a synthesis of the following significant influences:

1. The Organizational System: "The system of education in Thailand is a centralized system" (Buasri, 1981:3). Therefore, the government provides the curriculum and the textbooks for all schools public and private. Modifications are made almost every year by the Ministry of Education. According to the complete courses of study in both academic and vocational secondary school, which are shown in Figures 3, 4, 5, 6, 7 and 8, there is little elective in a course of study in the secondary schools. Each student must follow the curriculum as prescribed by the government, especially in the academic courses. Students who take the academic program, which concentrates on general education in order to prepare students for higher education at the college and university level, have little opportunity to elect courses from the vocational area.

2. The Traditional Acceptance of the Views of Hierarchical Superiors and the Religious Influence: Because of these influences, the

Figure 3

Subjects Taught in Academic Secondary Schools

Subjects	No. of Study Hours Per Week		
	1st Year Grade 8	2nd Year Grade 9	3rd Year Grade 10
Social Studies	5	5	5
Thai	5	5	5
English	6	6	6
Mathematics	6	6	6
General Science	3	3	3
Drawing	1	1	1
Embroidery and Shops	2	2	2
Physical Education, Boy Scout or Junior Red Cross activities	2	2	2
Total	30	30	30

Source: Ministry of Education, Secondary Education in Thailand, Bangkok: Krungdhep Press, 1977, p. 20.

Figure 4
Subjects Taught in Pre-University Level
(Grades 11-12)

Subjects	No. of Study Hours Per Week			
	Arts		Science	
	1st Year	2nd Year	1st Year	2nd Year
Compulsory:				
Thai	2	2	2	2
English	10	10	9	9
Social Studies B		5		
Mathematic	5	4	6	6
Physics, Chemistry, Biology			6	9
Other Foreign Lang.	5	4		
Geography-History	3			
Elective:				
Foreign Language I			4	4
Foreign Language II		4		
Art I	3	3	3	3
Art II		3		3
Social Studies A			3	3
Mathematics		4		
General Science I	4	4		
General Science II		4		
Secretarial Course	4	4	4	4
Total Study Hours Per Week Available	35	50	36	46
Total Study Hours Per Week Required of Each Student	30	30	30	30

Source: Ministry of Education, Secondary Education in Thailand, Bangkok: Krungthep Press, 1977, p. 21.

Figure 5
 Subject Taught in Intermediate Vocational Level
 (Grade 8-10)
 For Girls

Subjects	No. of Study Hours Per Week		
	1st Year Grade 8	2nd Year Grade 9	3rd Year Grade 10
Civic Duties and Morals	1	1	1
Thai	2	2	2
English	2	2	2
Mathematics, Commerce and Accounting	2	2	2
Drawing	2	2	2
Physical Training	1	1	1
Dressmaking, Clothes For Ladies and Children	6	6	6
Dressmaking, Clothes For Men	3	3	3
Needlework	6	6	6
Optional Subjects	2	2	2
Flower Arrangement	3	3	3
Total	30	30	30

Source: Ministry of Education, Secondary Education in Thailand, Bangkok: Krungdhep Press, 1977, p. 26.

Figure 6

Subjects Taught in Intermediate Vocational Level
(Grades 8-10)
For Boys
Building Carpentry

Subjects	No. of Study Hours Per Week		
	1st Year Grade 8	2nd Year Grade 9	3rd Year Grade 10
Civic Duties and Morals	1	1	1
Thai	2	2	2
English	2	2	2
Mathematics, Commerce and Accounting	2	2	2
Physical Education	1	1	1
Carpentry	19	17	16
Drawing	3	3	3
Sketching		2	2
Cost Estimation			1
Total	30	30	30

Source: Ministry of Education, Secondary Education in Thailand, Bangkok: Krungdhep Press, 1977, p. 27.

Figure 7
 Subjects Taught in Advanced Vocational Level
 (Grades 11-13)
 For Boys
 Building Carpentry

Subjects	No. of Study Hours Per Week		
	1st Year Grade 11	2nd Year Grade 12	3rd Year Grade 13
Civic Duties and Morals	1	1	1
Thai	2	2	2
English	4	3	3
Mathematics and Accounting	4	3	3
Physical Education	1	1	1
Principles of Construction	2	2	2
Cost Estimation and Business		2	2
Drawing	6	6	6
Practical Work	10	10	10
Total	30	30	30

Source: Ministry of Education, Secondary Education in Thailand, Bangkok: Krungdhep Press, 1977, p. 28.

Figure 8

Subjects Taught in Vocational Teacher Schools
For Boys and Girls

Boys	Girls
Geography, Physical Geography of Thailand Government and Civic Duties Thai Culture and Etiquette Recreation Health and Safety Education Language Arts--Thai & English Mathematics and Accounts Principles of Construction Principles of Carpentry Designing and Drawing Sketching Cost Estimation and Business Building Materials Education Subjects: Education & Psychology Teaching Practice	Same as for Boys As for Boys, plus Drawing Dressmaking Needlework Diet and Crafts As for Boys

Source: Ministry of Education, Secondary Education in Thailand, Bangkok: Krungdhep Press, 1977, p. 31.

Thai educational system does not have a great deal of discipline problems with classrooms, even at the secondary level. The importance of self-discipline in the educational system in Thailand is best described by Tapingkae (1973:21) as follows:

"It is self-discipline and personal control of conduct which are emphasized in all moral training. In Thailand the principles of moral conduct are presented throughout the whole educational program. In the schools there are courses in moral conduct based on Buddhist thought. The books used as texts are carefully prepared. These courses are required in all schools including those maintained by the Christian church. In most areas of Thai conduct one feels that disciplined tone, the personal restraint and the emotional control which stems from this continuing moral emphasis."

Bennett (1975:25) comments that "because of the desire for qualifications and the hierarchial social structure, education at the secondary level is very much a question of learning certain facts in a pre-ordained sequence." The teacher is copied and the textbooks are memorized. Despite this, and despite the fact that questions to the teachers are not encouraged, there is a great deal of respect between teacher and pupil. Whereas, Western society encourages intellectual freedom of the individual in society and in the physical world, in Thailand it is an internal freedom that is encouraged.

3. The National Examination: The national examination also plays an important part in the method of teaching. Students who study in the public school must pass the final examination in order to continue their education in a higher class the next year (Sinlarat, 1973). However, as a rule, if anyone fails in his examination twice in the same class, he must be retired from that school. Therefore, preparation for these examinations does little if anything to help students to gain personal knowledge or to search individually for answers to problems. It only

prepares them to pass the examination by memory and by a fixed curriculum because the courses of study as prescribed by the government are fixed and limited. The instructors and students have a fixed time schedule and must follow them and attempt to complete all the course design for one year. Because of the length of the course of study, most teachers concentrate on the material necessary for the students to pass the examinations (Sinlarat, 1973). Skinner and Kirsch (1975) comment that it is very difficult to change the regularities that exist in school to convince teachers that different methods of teaching are necessary or possible.

4. **Materials of Teaching are Lacking:** Teachers lack a supply of commercial instruction materials as well as a lack of teacher-made materials (Ministry of Education, 1977). Wyatt (1975) describes that projectors, encyclopedias, recordings, films, slides and filmstrips are seldom available, especially in the rural schools. Therefore, schools in Thailand use Thai language for instruction. However, these are very much lacking in software such as films, slide/sound and programmed instruction in the Thai language. There are chalkboards in every school. Low-cost materials are provided to teachers in rural schools, but not every teacher knows the techniques of producing and using them. The lack of instructional materials tends to force pupils to learn by rote rather than understanding. Since electrical power is unavailable in some parts of the rural areas, teachers need media which can be effectively used for instruction without power sources.

Although the summary of Thailand's educational philosophy has been noted, Bennett (1975:24-25) summarizes that:

"Obviously, there is usually considerable divergence between stated objectives and the actual situation, and it must be admitted that the Thai secondary educational system is no exception to this general rule. There is an instance on continuous expansion of the educational system, particularly at the secondary level while at the same time sufficient attention is paid to the effects such policies will have on the relevance of lower-level education or primary education."

In the second half of the 20th century, the rapid political, social and economic changes which have taken place in Thailand have brought an importance to education as a path to advancement (The Office of the Prime Minister, 1978). For example: in village affairs where farmers are coming into contact with new technology, most of it is written and requires a technical sophistication beyond the ken of traditional schools. The efforts to adapt the educational system to the development needs of the country are essential.

The following statement presents a contemporary position held by many educators regarding the curriculum and teaching methods in the United States that should be applied and adapted to the new secondary educational development in Thailand. Douglass (1964:235) states:

"In the United States democratic and developmental methods are employed to much greater extent than in other countries. . . young Americans seem to have more initiative and imagination than do young people of other countries of a corresponding age. This is usually attributed to the types of experiences they have had in the American elementary and secondary schools."

Summary

The present structure and operation of schools in Thailand has improved during the past century and the curriculum has undergone a number of changes. Before the 20th century, education was for royalty or for monks. Princes had to be literate to govern their provinces and monks had to know how to read and write. The first school was a temple or wat.

Profoundly important to the modernization of Thai education was the introduction of modern education during the reign of King Chulalongkorn (King Rama V, 1868-1910). Democratic practices of the Western world began to influence Thai educational systems which are greatly different from that of the Buddhist monastery education of a few decades later.

Education in Thailand is being adjusted in every way by the Thai government. The present structure of the Thai educational system is divided into five levels of education: pre-primary education, elementary education, lower secondary education, higher secondary education, and college and university education. The curriculum in the secondary school itself has been influenced by the added emphasis given to such subjects as mathematics, science, language arts, and social studies in an academic secondary program, with minor attention to vocational education. The other secondary schools emphasize vocational education, with relatively little attention to academic education. However, it must be recognized that much of the teaching is still of a traditional nature with students largely reciting to the teacher from single textbook assignments.

CHAPTER 3

RELATED RESEARCH AND LITERATURE

As a part of the process of studying the research and literature and collecting information regarding curriculum and instructional development in Thailand, American educational textbooks and materials at the University of Northern Iowa were studied.

American secondary education is quite unlike schools for adolescents in Thailand. The Thailand educational programs are primarily intended to prepare students for the university or for a vocation. Steeves and English (1978:186) state:

"The American secondary school developed during the latter part of the nineteenth century and throughout the present century, it became a uniquely comprehensive institution. Its student body is heterogeneous rather than selective. It exists to serve all youth and not those chosen for a particular concept of what secondary school should be. This is quite unlike schools for adolescents in other nations which are primarily single purpose and selective, and which prepare students for the university or for vocation. The single purpose pattern of secondary education has never appealed to the mass of Americans."

"By legislation, the citizens of the United States have made universal education available to all youth through the high school years, and in many states they have made attendance compulsory to eighteen years of age" (Wiles and Patterson, 1959:2).

Goals of American Secondary Education

The goals were prepared by a National Commission on the Reform of Secondary Education established by The Charles F. Kettering Foundation, 1973 as follows:

Content Goals

Achievement of Communication Skills

Achievement of Computation Skills

Attainment of Proficiency in Critical and Objective Thinking

Acquisition of Occupational Competence

Clear Perception of Nature and Environment

Development of Economic Understanding

Acceptance of Responsibility for Citizenship

Process Goals:

Knowledge of Self

Appreciation of Others

Ability to Adjust to Change

Respect for Law and Authority

Clarification of Values

Appreciation of the Achievements of Man

Steve and Englis.. (1978) comment on these goals that they are broader than the transmittal of subject matter are accepted by the American people. Consequently, the total curriculum of the school is now perceived to include structures for guidance and counseling, support for student organizations, processes for individualized instruction, and such developments as various plans for integrated course offerings, independent study, modular scheduling, and team teaching, etc. All of these resulted from the acceptance of goals for secondary education set beyond the content of formal courses of study. Obviously, American educators described curriculum in this way "The evolution of curriculum theory has taken us from a notion of curriculum as 'courses of study,'

as academic subject-matter, toward curriculum as 'learning environment'" (Fantini, 1983:310). Hence, when the term curriculum includes all of the planned experiences of the learners under the school's guidance, curriculum and instruction cannot be regarded as separate entities (Hass, 1983).

Organization of U.S. Public Secondary Education

American secondary education is applied to the junior and senior high school years, elementary education means grades kindergarden through four, five, or six. "The four year high school constituted secondary education between 1850 and 1920, usually within a unified school system of 8-4 (Douglass, 1945:5). "After 1920 a variety of patterns began to prevail, sparked by the push for the junior high school" (Conant, 1960:11). The fact about U.S. secondary education is described by Steeves and English (1978:24) that:

"The dominant pattern for school system organization in the United States was once the 8-4 plan, modified to 6-3-3 with the advent of the junior high school, it is now moving towards the 4-4-4 or 5-3-4 plans. This means that whereas secondary education once included only the ninth through twelve grades, it is now including grades five through twelve with the contemporary movement towards the middle school."

This means that presently the secondary education in the United States is including younger students than before. Some secondary educators also believed that secondary education could become more socially relevant to a greater audience of learners if the secondary system could be freed from both the limitations of the elementary curriculum, and the structures of the college and university expectations (Ayers, 1967). Steeves and English (1983:11) describe the reasons of the emergence of middle school as follows:

"Because of the failure of many junior high schools to perform the exploratory and transitional functions originally envisioned for these grade levels, a new type of intermediate unit emerged in the 1950's. Termed the 'middle school' and organized as grades five through eight, six through eight, or seven through eight, the middle school seems certainly destined to be classified as part of secondary education."

The Control of U.S. Public Secondary Education

The basic responsibility for the control of public secondary education is in the hands of the states. States have, by public law and special charters, created district governing boards called school boards or school trustees that are responsible for operating the public schools in their district. In most districts, elementary and secondary schools are under the control of the same school boards, but some states still have separate secondary school units (Tyler, 1981). In 1976-1977 there were 16,271 public school districts in the United States, operating 25,378 secondary schools (Digest, 1980).

The number of schools in a district seems to determine the extent of school board involvement in the direct management of secondary schools. The school boards in smaller districts are more likely to be involved in setting curricular offerings and in staff selection. The very large city school systems tend to be more isolated from lay involvement in school building level decisions. The public school organization in the United States is hierarchial. School boards select superintendents, who then select their own staffs, subject to school board approval. School principals are supervised by the superintendents and have supervisory responsibility over their staffs and the teachers in the school (Tyler, 1981). Abramowitz (1980) points out, however,

that it is a mistake to view school decision making as strictly monolithic, since at least in the realm of instructional procedures and curriculum development, teachers have a high degree of participation. Rule making by the principal usually relates to non-instructional activities and the activities of students. Steeves and English (1978:3) emphasize that:

"The outlook for the secondary school structure in America is not bleak. The high school has weathered all challenges during its hundred year history. It has met the demands of each new generation as they were posed. For the most part, secondary school programs and services have developed in an orderly fashion, with periods of relative tranquility interposed between periods of rapid growth and/or shifts of emphasis."

People from other countries sometimes find it difficult to understand how a major nation can operate successfully without national curriculum specifications. The secondary school curriculum in the United States, having resulted from relatively less influence at the national level, presents tremendous challenges and opportunities. The frustrating aspect of local control of schools is that persons who would improve the curriculum have to develop imaginative ways to persuade students, teachers, administrators, boards of control, and the public there to accept different programs (Trump and Miller, 1979).

Change and Innovation in U.S. Middle School
Instruction and Curriculum

"As one observes the way in which children grow and develop, the accelerated rate of the physical maturation, particularly in the years from 11 to 14, is evident" (Georgiady and Romano, 1983:421). The middle school of the 1980s has emerged from the junior high school. When the middle school first began in 1910, the goals of the middle school today

were exactly the goals espoused for the junior high school (Wiles and Bondi, 1981). Recently, the goals of the middle school were described by Alexander (1983:487) as follows:

"1) To provide a good program of schooling for children passing from childhood to adolescence; 2) to offer a significant alternative to past organizations that too frequently crystallized as hard-to-change, at times incompatible, elementary and secondary units; 3) to facilitate the continuous progress of learners from school entrance in early childhood to school exit in adolescence."

Therefore, the task of the middle school is to be an educational unit with a philosophy, structure, and program which will realistically and appropriately deal with 11 to 14 year olds as they are and behave (Georgiady and Romano, 1983).

The following are major innovations of the method of instruction in the middle school during the 1950s and 1960s based on Allan C. Orinstein's research (1982):

Team Teaching: Trump and Miller (1979:410) described team teaching as follows:

"The term 'team teaching' applies to an arrangement in which two or more teachers and their assistants, taking advantage of their respective competencies, plan, instruct, and evaluate in one or more subject areas a group of elementary or secondary students equivalent in size to two or more conventional classes, using a variety of technical aids to teaching and learning through large-group instruction, small-group discussion, and independent study."

Orinstein (1982:27) describes team teaching in this way:

"An arrangement where two or more teachers combine their abilities and interests to complement each other, and assume joint responsibility in teaching students. Title such as 'team leader' and 'senior teacher' are used to designate teachers who have responsibility for leadership in the teams."

The purpose of team teaching is to capitalize on the strengths of teachers, utilizing their varying expertise in different ways. Teams

are organized within subject areas and cross subject fields (Oliva, 1983).

Individualized Instruction: "New content, materials, and activities have been introduced to provide a one-to-one teacher-student relationship. Most of the individualized programs provide for a curriculum stated in behavioral objectives which proficiency levels, and prescribed materials and learning tasks for each student" (Orinstein, 1982). Wiles and Bondi (1981:136) add that "instruction must begin after the pupil's needs, strengths, and weaknesses have been assessed."

Educational Television: "It was designed to enable master teachers to reach students, and to reduce some of the inequalities of education resources and to make available instruction in specialized subjects in rural and small schools" (Orinstein, 1982). Gertrude (1968:23) lists factors involved in television teaching as the following:

1. Television teaching provides little or no opportunity for questions or discussion. All explanation, therefore, must be clear and complete. The experienced classroom teacher will be able to anticipate many students' questions and provide answers to them.
2. The television teacher must be alert to current happening in order to capitalize that all teachers do so, but it is especially important to the television teacher since he may be speaking to a cross section of the viewing public.
3. Thorough preparation and careful timing are essential in television teaching. Good timing is made possible by adequate preparation.
4. Students in television classes should be encouraged to communicate with one another since an exchange of ideas among students may be an important source of growth."

According to a 1979 report of a large-scale survey conducted by the Corporation for Public Broadcasting, television is now being widely used in the classroom for instructional purposes (Dirr and Pedone, 1979).

Programmed Instruction: Derived from B.F. Skinner's principles of operant conditioning, the learner is required to make a response by answering a statement. By a feedback system, the learner is informed if he or she is told why. If correct, the response is reinforced (Orinstein, 1982). Wiles and Bondi (1981) describe the materials that must be built on a rational step-by-step development basis, usually presented in the form of workbook or for use in a teaching machine designed for independent study and learning. In other words, this method of teaching emphasizes subject matter development.

Computer-Assisted Instruction: Orinstein (1982:27) describes this method of teaching as follows:

"A system which is capable of presenting individualized material with feedback and correction simultaneously to hundreds or thousands of students, depending on the number of terminals available. Probably the most sophisticated system permits the students to conduct a dialogue with and ask questions of the computer."

Computer-assisted instruction is an innovation. More widely in use is that of teaching students to program a computer and then requiring them to solve problems with it. In most cases, these are utilized in mathematics instruction or social science simulation (Orinstein, 1982).

Furthermore, the following are representative innovations of the period between the 1950s and 1970s based on Orinstein's research (1982).

Differentiated Staffing: Surveys of teachers revealed that the concepts of differentiated staffing were generally popular at the secondary level than the elementary level (English and Sharpes, 1971). Oliva (1982:304) defined differentiated staffing as follows:

"Team teaching offered a creative answer to utilizing limited faculty and resources more effectively. More elaborate

school-wide staffing patterns were developed incorporating the principle of differentiated assignment."

Orinstein (1982:27-28) describes differentiated staffing in this way: "it is a staffing plan that takes into consideration increasing teaching specialization and rewards teachers for a combination of experience, education, and teaching, and research ability." English and Sharpes (1971) also noted that for the first time it became possible to conceptualize the curricula function within the secondary school as a bona fide full time responsibility without a teaching function.

Flexible Schedules: Manlove and Beggs III (1965:22-23) describe the concept of flexible scheduling as follows:

"...the flexible schedule is an organization for instruction which:

1. calls for classes of varying size within and between courses. (Students sometimes may meet in large assembly classes, and at other times in small inquiry classes. In addition, part of the day will be spent in individual or independent study.)
2. provides for instructional groups which meet at varying frequencies for varying lengths. (Some classes may meet every day of the week, others will not. Some instructional sessions will be for a short duration, others for an extended period of time.)
3. makes team teaching possible in any content area or for any group of students in the school.
4. requires countless professional decisions by teachers about students, content, and teaching methods."

Steeves and English (1978:34) comment that "flexible scheduling continues to be a controversial innovation, largely because of its inclusion of pupil independent study and allowing choice of unscheduled time."

Simulation or Gaming: "an experience used to create a problematic situation, usually logical or reality-oriented, involving students in role playing and/or decision making" (Orinstein, 1982:28).

Unruh and Alexander (1970:180) describe simulation and gaming as follows:

"Academic games and simulation have only recently been introduced as an innovation in secondary schools....The purpose of simulation differs markedly from the traditional purpose of the use of media to transmit content (knowledge, skills, facts, ideas) from a teacher to a student....Simulation games provide a much different model of learning. In the game the student can practice with the components of life itself and apply information to decision making toward reaching his goal. Information becomes more relevant to the student when he sees the sense of it in application to a complex and real-life situation where inter-related actions must be considered."

Nongraded Programs: Wiles and Bondi (1981:405) define nongraded programs as "grade levels are abandoned, and students move upward in continuous progress, associating in every subject field with those who are at approximately the same point of development." Haden and King (1974:30) describe nongraded program in this way:

"Nongrading is a philosophy of teaching and learning which recognizes that children learn at different rates and in different ways and allows them to progress as individuals rather than classes."

According to The Educational Research Service conducted a survey, published in 1969, of 154 middle schools in districts enrolling 12,000 or more students (see Table 2), there is increased interest in experimentation and innovation concerning use of nongrading, programmed instruction, television teaching, and instructional ideas (Howard and Stoumbis, 1970).

Farris and Adams (1983:466) state:

"Middle schools attempt to foster the continued development skills and to introduce more of the world of knowledge through an emphasis on exploratory experiences in the curriculum."

Table 2

Instructional Organization and Practice,
154 Middle Schools

	Number (and Percent) of Schools by Grade Level*			
	Grade 5 (20 Schools)	Grade 6 (146 Schools)	Grade 7 (154 Schools)	Grade 8 (148 Schools)
Organization:				
Self-Contained Classrooms	10 (50.0%)	31 (21.2%)	3 (1.9%)	3 (1.0%)
Partial Departmentalization	7 (35.0%)	74 (50.7%)	55 (35.7%)	36 (24.4%)
Total Departmentalization	3 (15.0%)	35 (24.0%)	91 (59.1%)	105 (70.9%)
No Reply	-----	6 (4.1%)	5 (3.3%)	4 (2.7%)
Practices:				
Subject-Area Teams	4 (20.0%)	45 (30.8%)	51 (33.1%)	52 (35.1%)
Interdisciplinary Teams	2 (10.0%)	19 (13.0%)	29 (18.8%)	25 (16.9%)
Small-Group Instruction	7 (35.0%)	55 (37.7%)	63 (40.9%)	66 (44.6%)
Large-Group Instruction	4 (20.0%)	35 (24.0%)	45 (29.2%)	47 (31.8%)
Flexible Scheduling	5 (25.0%)	39 (26.7%)	44 (28.6%)	43 (29.1%)
Closed-Circuit TV	1 (5.0%)	22 (15.1%)	24 (15.6%)	25 (16.9%)
Independent Study	3 (15.0%)	30 (20.5%)	39 (25.3%)	40 (27.0%)
Individualized Instruction	4 (20.0%)	39 (26.7%)	47 (30.5%)	48 (32.4%)
Tutorial Programs	3 (15.0%)	32 (21.9%)	33 (21.4%)	31 (20.9%)

Source: Howard, W. Alvin, and Stoumbis, C. George. The Junior High and Middle School: Issues and Practices. Scranton: Intext Educational Publishers, 1970, p. 260.

*Percentages are based on the total number of middle schools in the survey, which include each of the grades. The number of schools with each grade is shown in the column heading.

Table 3 shows the subject matter areas in both elective and required courses reported in a 1969 Educational Research Service inquiry of 154 middle schools. Subject-matter areas of language arts, social studies, mathematics, and science are usually required. Efforts are made to provide an exploratory program with a wide variety of offerings. Foreign language, typing, industrial arts, homemaking, drama, fine arts, and music are quite common on the elective courses (Howard and Stoumbis, 1970). The following are also some major areas of curriculum offering in the middle school which are affected by the movement to break away from traditional disciplines to more interdisciplinary and multidisciplinary approaches based on Orinstein (1982):

Career Education: Today nearly one-half of secondary school students enroll in vocational courses (Trump and Miller, 1979:22). The characteristics of these career programs is the extension of career guidance activities, the involvement of community groups and the increased provision of career information, and occupational training, especially in the high school (Orinstein, 1982).

Environmental Education: Wiles and Bondi (1981:104-105) describe:

"Environmental studies are outdoor education experiences that allow students to move out of the school setting to study nature. Environmental studies that include a study of the air, waterways, conservation, pollution, and other ecologically related subjects help middle school students understand how to use the natural resources without destroying them."

Drug Abuse Education: Critical social problems related to drug abuse and drug addition among many children from all parts of the United States. Today there are coordinated programs with former drug abusers

Table 3

Special Subjects Taught, 154 Middle Schools

Special Subjects	Number (and Percent) of School by Grade Level							
	Grade 5 (20 Schools)		Grade 6 (146 Schools)		Grade 7 (154 Schools)		Grade 8 (148 Schools)	
	Elec.	Req.	Elec.	Req.	Elec.	Req.	Elec.	Req.
Typing	---	---	4(2.7)	11 (7.5)	11 (7.1)	13 (8.4)	19(12.8)	11 (7.4)
Art	---	17(85.0)	8(5.5)	123(84.5)	41(26.6)	103(66.9)	89(60.1)	48(32.4)
Music	2(10.0)	19(95.0)	12(8.2)	124(84.9)	54(35.1)	99(64.3)	84(63.5)	51(34.5)
Industrial Arts	1 (5.0)	4(20.0)	2(1.4)	46(31.5)	31(20.1)	86(55.8)	59(39.9)	76(51.4)
Home Economics	1 (5.0)	4(20.0)	2(1.4)	48(32.9)	30(19.5)	85(55.2)	56(37.8)	76(51.4)
Spanish	---	---	5(3.4)	30(20.5)	32(20.8)	13 (8.4)	45(30.4)	11 (7.4)
French	1 (5.0)	1 (5.0)	11(7.5)	2 (1.4)	35(22.7)	7 (4.5)	45(30.4)	1 (0.7)
Spanish or French	1 (5.0)	1 (5.0)	1(0.7)	17(11.6)	9 (5.8)	12 (7.8)	15(10.1)	6 (4.1)
Other Language	---	---	3(2.1)	2 (1.4)	13 (8.4)	4 (2.6)	29(19.6)	2 (1.4)

Source: Howard, W. Alvin, and Stoumbis, C. George. The Junior High and Middle School: Issues and Practices. Intext Educational Publishers, 1970, p. 261.

and community health groups, extensive counseling and even school-community therapy programs as well (Orinstein, 1982).

Sex Education: Lavering (1983:182) shows that "In 1982, the number of American teenage pregnancies has steadily increased. Over one million 15-19 year-olds became pregnant in addition to the 30,000 pregnancies among girls younger than 15." Furthermore, Wiles and Bondi (1981) describe the existing situation that the divorce rate in America is approaching 50 percent, highest in the world and only 16 percent of American families have the mother at home and the father working. These concerns have encouraged many educators and citizens groups to support sex education program in the schools.

Law Education: Partly, as a result of the importance of law in modern society, and partly in order to motivate students and enhance interdiscipline in the classrooms (Orinstein, 1982), as well as because of alarming increases in youth crime (Wiles and Bondi, 1981), several states have mandated law education through legislation.

Consumer Education: Orinstein (1982:31) describes consumer education as follows:

"Most school districts have provided some form of consumer education as part of their social studies curriculum, but consumer education has been expanding and now frequently is offered as a subject in its own right or as an important component in career education or economic or as preparation for required state examinations. Given serious national problems regarding energy costs and general inflation, trend toward expanded emphasis on consumer education is likely to continue in the future."

Change and Innovation in U.S. High School
Instruction and Curriculum

"To meet the needs of middle adolescents, most American educators advocated the comprehensive high school during the 1950s and 1960s"

(Bryan, 1983:476). Wiles and Patterson (1959:5-6) state:

"The secondary school should be a comprehensive school. If a major task of the public school system in America is to develop the basic value of a free society, and mutual respect for the range of persons and groups within our diverse culture, students must have an opportunity to live and work together. The comprehensive secondary school is an essential element in the development of a common viewpoint sufficiently strong to hold our nation together."

Presently, the American high school, public or private, is seen as a comprehensive institution by its constituents, doing all that is possible to meet the needs of a relatively heterogeneous student body (Steeves and English, 1978). According to the National Center for Educational Statistics reported in 1978, an enrollment of more than 17 million students, with 12.7 million of them in public high school, comparing in 1963 only four million students were enrolled in vocational courses (Miller and Lee, 1982).

Sand (1970:125) has tried to compare a program and instructional practices of high school 1970 and high school 1980 as follows:

High School 1970	High School 1980
<u>Program</u>	
1. Primary emphasis on academic scholarship	1. A curriculum relevant to all students
2. Involvement of only academic scholars and teachers	2. Involvement of all levels of decision makers in schools
3. Child, society-centered curriculum	3. The total curriculum, the humanistic curriculum
4. Selling teacher-free pre-packaged programs	4. Truly experimental programs, pharmacies of tested educational alternatives
5. Tinkering with the means of education	5. Focus on ends, aims, objectives, the philosopher returns to the center of the stage

- | | |
|--|---|
| 6. Focus on the gifted and/or the deprived student | 6. Focus on all students as individuals |
| 7. One course at a time | 7. Comprehensive school improvement program |
| 8. Elementary and secondary reform | 8. Higher education is also undergoing change |

Teaching

- | | |
|-----------------------------|--|
| 1. Memory | 1. Inquiry |
| 2. Spiritless climate | 2. Zest for learning |
| 3. The group | 3. The individual |
| 4. Teaching as telling | 4. Teaching as guiding |
| 5. Scheduled classes | 5. Appointments and independent learning |
| 6. Self-contained classroom | 6. Community-contained classroom |

Therefore, the American high school is leading to provide needed learning opportunities for all middle adolescents. Continuity of learning and the great variety of individual differences in learners suggest the need for early adolescents and because some middle adolescents will be advanced in their development socially, emotionally, or cognitive, the number of programs offered has increased from fewer than twenty to more than 400 (Miller and Lee, 1982). Continuity of learning and the great variety of individual differences in learners has been focused on for early adolescents or the middle school students, and because some middle adolescents will be advanced in their development socially, emotionally, or cognitively, the objectives of middle adolescents are stated by Bryan (1983:478) as follows:

1. Helping learners in career development, whether through vocational guidance, vocational education, or additional academic development.
2. Offering learners many opportunities to grow in citizenship skills, understanding, and responsibilities.
3. Aiding students to grow in self direction in study and learning.
4. Assisting learners in many ways toward self-realization and identity.

5. Encouraging the development and practice of critical thinking.
6. Assisting learners in preparing for the transition to the world of work, to community participation, and to the world of the future."

According to the survey of attitude toward education among adolescents, Charles (1973) concludes that the junior and senior high school students questioned were strongly of the opinion that more time should be spent in independent study, relatively less in the classroom. Their response indicated 56 percent in favor to 18 percent opposed. Therefore, in order to better provide for the needs of students and attainment of objectives at this level, the following innovations are being proposed and tried (Bryan, 1983:478-479):

In alphabetical order:

"avoiding sex bias
 curricula
 career education
 club activities as part of school day
 community involvement programs
 continuous learner progress
 education for parenthood
 flexible scheduling
 intergenerational learning
 individualized instruction
 interdisciplinary curricula
 mini-courses and short-term electives
 modular scheduling
 nongrade curricula
 practical instruction for all students
 programs approach
 student rights respected
 teacher as counselor
 team teaching
 vocational education vs. training"

Summary

The American secondary education is designed for youth of all abilities and include younger students than ever before. With the contemporary movement towards the middle school, it is reasonable to include grades five through twelve in a definition of American secondary schools. The U.S. educational organization is a decentralized system in which the basic responsibility is in the hands of the States and local district school trends. Therefore, the public secondary school organization is hierachial.

The middle school has emerged from the junior high school to be an educational unit with a philosophy, structure, and program which will realistically deal with 11 to 14 year-olds. the middle school, through a new program and organization, provides for much needed innovations in curriculum and instruction. The major innovations of the method of instruction in the middle school are team teaching, individualized instruction, educational television, computer-assisted instruction, differentiated staffing, flexible schedules, simulation or gaming, and nongraded programs. Moreover, efforts are also made to provide a personal development and exploratory program with a wide variety of offerings such as career education, environmental education, drug abuse education, sex education, law education, and consumer education.

CHAPTER 4

RECOMMENDED PLANS FOR THE PUBLIC LOWER
SECONDARY SCHOOL OF THAILAND

A great deal of work is needed in Thailand to provide a truly progressive education for people of a democratic system. The purpose of secondary school education must help students to promote the individual's unique abilities and to participate fully and effectively in a democratic society (Wiles and Patterson, 1959).

The researcher suggests some questions concerning existing educational problems that should be considered in order to develop the curriculum and the instructional practices in lower secondary education of Thailand. These questions are derived from the present educational system in the American secondary school that has proved to be effective.

1. Should the Thai centralized educational organization be changed to the decentralized educational system?

Hummell (1977:26) states:

"An educational reform does not achieve its purpose unless it is an agreement with the general policy of the country. There would be no sense, for example, in trying to individualize education at the secondary level while trying to maintain rigid structures in the territory sector."

Therefore, when carrying out an educational innovation, it is necessary to realize that it can never continue to be isolate action unless there is participation by all those concerned. The curriculum development will have a better chance for success if parents, administrators, and local lay people participate actively in corporate planning (Tyler, 1981). Gilchrist (1970:351) focuses on the importance of the classroom teacher in the curriculum planning. He states that:

"The classroom teacher has to be involved in curriculum development. True, he has to work with the people who do not teach classes, and with the college professors, the state department leaders, and others. But we cannot get along without teachers in planning the curriculum--not if we want to plan it in terms of children's growth and development, and have it tailor-made for the needs of individuals. Therefore, I believe that each teacher has to be engaged in an appraisal program."

The process of innovation is complex because it takes place at several levels. A reform in education is generally decided on by a political authority and, in many cases, by a central body, but it does not become a reality until it reaches the classroom (Hummel, 1977). For this reason, the implementation of an innovation in education is connected with all the problems concerning the centralization and decentralization of political power.

2. Should the present secondary school of Thailand be changed to a comprehensive secondary school?

Hummel (1977:185-186) states:

"The development of science and technology will continue to make professional qualifications absolute more and more quickly. It will become the normal thing to change careers during a life time. The distinction between general and vocational education will gradually disappear, since the ability to adjust to change will become more important than the possession of specific knowledge or know-how."

Therefore, the traditional methods for coping with new ideas and technologies are inadequate. At the same time, techniques developed in the West, and applied as a whole are often proven ineffective without severe and sometimes limiting adaptation (The Office of Prime Minister, 1977). The purpose of a comprehensive secondary school would enable each learner to develop to the greatest potential for his or her own

success and happiness and to make a maximum contribution to the society of which he or she is a part (Bryan, 1983).

"In a comprehensive secondary school, if there is sufficient flexibility to allow the student to choose with guidance from the total offering, the student has a wide range of courses from which to select those which will be most desirable for him" (Wiles and Patterson, 1959:6). Moreover, Wiles and Patterson (1959:9-12) also suggest the secondary school program as follows:

"The program for each individual must contain general education and specialized education. General education is essential to equip students for the common responsibilities of free citizenship. Specialized education is equally essential to promote the development of individual abilities and responsibilities. . . One-third to one-half of each students' program should be devoted to general education. . . One-half to two-thirds of each students' program should be used to develop his talents and to further his personal goals within the framework that the community is willing and able to support."

In planning and revising curricula in secondary school of Thailand, it seems to be more effective if the academic secondary schools should offer more elective vocational subjects from various fields in order to close the gap existing between academic and vocational preparation by establishing a new type of school. Meanwhile, the vocational secondary schools should replace some vocational subjects with academic subjects.

3. Should the Ministry of Education expand the compulsory education level from the seventh grade to the twelfth grade?

The reason is probably best described by Thomas M. Donald (1981:10) as follows:

"The problems of the 1980s are no more difficult than those of the 1780s or the 1880s. The problem of plenty has now become the problem of scarcity. The conquering of the wilderness is now the preservation of the environment. But the ethos has

not changed. Life is still sacred. Freedom is still value. Opportunity is still possible. Education is still necessary."

In a developing country such as Thailand, where socio-economic status is very closely related to the number of certificates and diplomas an individual might have, the pressures for the lower level of education only act as steps for a small minority to climb the educational ladder are almost impossible to counter. There is likely to be a chance of these tendencies being reversed while the main function of the educational system remains that clarifying people for future economic and social benefits. Wiles and Patterson (1959:2) describe that "schools do not exist to classify people or to eliminate the unit. Instead, each person is a resource of his or her nation, and it is the school's function to develop that human resource as far as possible in the time available for schooling."

Moreover, further educational expansion is really justified only if it helps individuals to play a productive and useful role in society and to lead more fulfilling lives, not because of the certificates they have gained, but because of what they have learned (Bernett, 1975).

4. Should the national final examinations in the public secondary schools of Thailand be replaced by a system of credits?

Systems of credits, in accordance with the student receives a certain number of unit for an educational objective achieved of each student until he or she has a sufficient number of credits to obtain the diploma he wants, are in use in the American secondary school at the present. Hummel (1977:41) supports this system as follows:

"In the system of credits, a student is not forced to repeat all the courses in a grade if he has failed once or twice. After a failure, the student is not always obliged to repeat

the same course, he can choose another course which is consistent with his scholastic profile."

Therefore, in this way, the Thai secondary school student who fails in his examination twice, will not be forced to retire from the school and he will have an opportunity to continue his education.

5. Should the course of study in the lower secondary school of Thailand be offered more elective courses for the student to choose?

A report of Education Development Center (1975:30) defines the secondary school student as the period of adolescence as the following:

"Adolescence is a distinct stage in the process of human growth. While there is no agreement among psychologists as to a single definitive theory of adolescence, there is general consensus that a number of things happen in the development of teenagers that have a significant influence on what they are interested in learning. To the extent that educational programs recognize and are designed to facilitate these aspects of adolescent interest and development, they are likely to be that much more effective."

Choices among the various offerings of the curriculum should be made jointly by the student, parents, and staff members of the school in terms of the student's needs, aptitude and level of achievement (Wiles and Patterson, 1959). Furthermore, Hummell (1977) adds more reason that with regard to the democratization of education, there should continue to add an increasingly wide choice of options to the common core in the secondary school.

Wiles and Patterson (1959:6-7) state:

"No longer can it be assumed that all youth can profit by the same program of mathematics, foreign language, science, social studies and English. If the capacities of all youth are to be developed. . . each youth should develop increased understanding of self and his responsibilities in society, commitment to democratic values, economic understanding, political acumen, and ability to think."

According to the American secondary programs, there are a great variety of programs concerned with the needs of early adolescents and middle adolescents that should be possibly offered to the secondary school programs in Thailand.

6. What would be some desirable exploratory alternatives to be included in the curriculum of lower secondary schools in Thailand?

Career Education: "Exploring the world of work and increasing occupational awareness can provide students with a base of information to make future educational and career decisions" (Wiles and Bondi, 1981:105). According to the statistics, the unemployment rate in Thailand is approximately 9 percent in 1977, comparing with only about 4 percent in 1972 (United Nations, 1981:93). With the present situation, career education is an essential part of every curriculum area of lower secondary schools in Thailand, because career education provides work experience that can help young people with meaningful activities and enable them to make positive contributions to society and to a particular job. Career education can help young people find a better life (Trump and Miller, 1979:281).

Sex Education: "In the 30 years after World War II, the population jumped from an estimated 17.5 million to nearly 45 million people in 1979, making Thailand one of the world's 20 most populous nations" (The Office of the Prime Minister, 1978:260). Sex education programs should be offered to educate the Thai adolescents with comprehensive explanations and prescriptions about dating, marriage, parenthood, health problems, and particularly family planning.

Consumer Education: Given problems that are increasing in Thailand regarding inflation rate is increasing to 11 percent in 1978 and consumer price index, which has been remarkably steading during the past ten years or so, jumped by as much as 8 percent in 1978 (United Nations, 1981:726). More attention should be given to the development of economic and consumer awareness. All Thai children need to know how to purchase and use goods and services intelligently, understanding both the values received by the consumer and the economic consequences of their acts.

Law Education: As a result of the importance of law in the society and partly to motivate students and enhance interdisciplinary studies in the classroom, secondary schools should develop a variety of courses and mini-courses dealing with law and its impact on society (Orinstein, 1982). Law education may be included in the lower secondary school program of Thailand.

Providing Programs for Special Needs: A truly comprehensive secondary school would provide needed learning opportunity for all adolescents, including the slow learner and the gifted (Bryan, 1983). Therefore, lower secondary school curriculum in Thailand should also provide a special program designed to meet the needs of the exceptional children.

Environmental Education: "The secondary school must provide a wide range of experience through class and non-class activities" (Wiles and Patterson, 1959:7). Environmental studies is an outdoor education that may be added in the Thai lower secondary school program in order to

increase opportunities which encourage students to move out of the school setting and study the natural environment.

7. What are some methods of instruction found in U.S. schools which would improve the quality of educational programs in the lower secondary school in Thailand?

In order to attain the objectives of Thai philosophy that also emphasize individual capacities, it is essential to define Hummel's statement (1977:42) as follows:

"Education can be individualized to such a point that not only are there no more traditional classes and 'level' but even the schedules and curricula are no longer fixed. They are adjusted to the rate of progress of the pupils, who are free to organize their studies as they see fit. This work is done mainly in groups of various size, where pupils of different ages also mingle together."

Nongrading should be used in the lower secondary school of Thailand because this process will be applicable to the program of each student and to each separate subject area, placing a realistic evaluation on each student's progress on an individual basis. "It will be necessary in some cases to move students forward or back until an achievement level has been found in which they will feel comfortable" (Wolfe, 1962:15).

Independent study is also recommended, particularly in the high school level because "its purpose is to give each student the opportunity to develop unique talents and interest in the highest possible degree" (Trump and Miller, 1979:346). American secondary schools have experienced varying degrees of success with independent study. In some cases it became apparent that not all students are capable of self-directed learning. Plans for large-group instruction,

small-group discussion, and independent study call for special facilities and resources (Oliva, 1982). Therefore, differentiated staffing and team teaching can be effective methods of lower secondary school in Thailand because "team teaching offers a creative answer to utilizing limited faculty and resources more effectively" (Oliva, 1982:307).

Teachers working in interdisciplinary groups must have an option beyond the fixed schedule. The flexible schedule is strongly recommended for the lower secondary school in Thailand. Oliva (1982:310) states the reason for enhancing the flexible schedule as follows:

"It is difficult to find a logical reason why all subjects must be taught for the same period of time. Some disciplines are by their nature more difficult than others and require more time for mastery. Some courses are most effectively taught when accompanied by a laboratory that requires extra time. Some subject matter is simply not as relevant as other subject matter and, therefore, should be accorded less time... Variation should be possible for lecture, mediated instruction, laboratories, seminar, field trips, independent study, and other modes."

Simulation or gaming is a method of instruction that provides the student with an opportunity to learn by doing and emphasizes the maximum of self-discovery through his or her ability (Wiles and Bondi, 1981). It is a useful method for students to create a problematic situation that can help them to develop reasoning skills which will be helpful throughout their adult life (Orinstein, 1982). Therefore, simulation or gaming should also be considered as a part of improving instruction and curriculum in the public lower secondary school of Thailand.

Summary

Efforts were made to provide answers to some questions concerning existing educational problems in lower secondary education of Thailand. These answers, derived from a survey of related research, concerned the present educational system in the American secondary school that has proved to be effective.

Among the major answers to be addressed were:

1. The Thai centralized educational organization should be changed to the decentralized educational system because the curriculum development and the methods for improving teaching will have a better chance for success if they are cooperative activities in which many persons participate, particularly the classroom teacher who has to work with the students directly.

2. The present secondary school in Thailand should be changed to a comprehensive secondary school because there is sufficient flexibility and allowance for the student to choose a wide range of courses which are adapted for use with varying levels of abilities and interests of each student, and to close the gap existing between academic and vocational secondary schools.

3. Some major methods of instruction found in U.S. schools which would prove the quality of education in the lower secondary school of Thailand are nongrading, independent study, differentiated staffing, flexible scheduling, and simulation or gaming.

CHAPTER 5
SUMMARY AND CONCLUSIONS

Summary

During the last century, the educational program in Thailand has evolved from a program restricted almost entirely to royalty, to a system of universal public education. The program of secondary education is undergoing a thorough review at present in response to a recommendation by the Ministry of Education, to raise compulsory attendance through the completion of grade twelve. Two areas facing major review are the curriculum and instructional practices. The study attempted to investigate specific elements of American secondary education, which has been proved to be effective, and use this background to propose some avenues for improving the public lower secondary education in Thailand.

Among the major questions to be addressed were:

1. Should the Thai centralized educational organization be changed to the decentralized educational system?
2. Should the present secondary school in Thailand be changed to a comprehensive secondary school?
3. What are some methods of instruction found in U.S. schools which would improve the quality of educational programs in the lower secondary schools in Thailand?

The present structure and operation of schools in Thailand has improved during the past century and the curriculum has undergone a number of changes. Before the 20th century, education was for royalty and monks. Princes had to be literate to govern their provinces and

monks had to know how to read and write. The first school was a temple or wat. Profoundly important to the modernization of Thai education was the introduction of modern education during the reign of King Chulalongkorn (King Rama V, 1868-1910). Democratic practices of Western world would begin to influence Thai educational systems which are greatly different from that of the Buddhist monastery education of a few decades later.

Education in Thailand is being adjusted in every way by the Thai government. The present structure of the Thai educational system is divided into five levels of education: pre-primary education, elementary education, lower secondary education, higher secondary education, and college and university education. The curriculum in the secondary school itself has been influenced by the added emphasis given to such subjects as mathematics, science, language arts, and social studies in an academic secondary program, with minor attention to vocational education. The other secondary schools emphasize vocational education, with relatively little attention to academic education. However, it must be recognized that much of the teaching is still of a traditional nature with students largely reciting to the teacher from single textbook assignments.

The American secondary education is designed for youth of all abilities and include younger students than ever before. With the contemporary movement towards the middle school, it is reasonable to include grades five through twelve in a definition of American secondary schools. The U.S. educational organization is a decentralized system in which the basic responsibility is in the hands of the States, and local

school district trends. Therefore, the public secondary school organization is hierachical.

The middle school has emerged from the junior high school to be an educational unit with a philosophy, structure, and program which will realistically deal with 11 to 14-year olds. the middle school, through a new program and organization, provides for much needed innovations in curriculum and instruction. The major innovations of the method of instruction in the middle school are: team teaching, individualized instruction, educational television, computer-assisted instruction, differentiated staffing, flexible schedules, simulation or gaming, and nongraded programs. Moreover, efforts are also made to provide a personal development and exploratory program which a wide variety of offerings, such as career education, environmental education, drug abuse education, sex education, law education, and consumer education.

Efforts were made to provide answers to some questions concerning existing educational problems in lower secondary education of Thailand. These answers were derived from a survey of related research concerned with the present educational system in the American secondary school that has proved to be effective.

Among the major answers to be addressed were:

1. The Thai centralized educational organization should be changed to the decentralized educational system because the curriculum development and the improved methods of teaching will have a better chance for success if they are cooperative activities in which many persons participate, particularly the classroom teacher who has to work with students directly.

2. The present secondary school in Thailand should be changed to a comprehensive secondary school because there is sufficient flexibility and allowance for the student to choose a wide range of courses which are adapted for use with varying levels of abilities and interests of each student, and to close the gap existing between academic and vocational secondary schools.

3. Some major methods of instruction found in U.S. schools which would improve the quality of instruction found in the lower secondary school of Thailand are nongrading, independent study, differentiated staffing, flexible scheduling, and simulation or gaming.

Conclusions

"Improving curriculum content without simultaneously improving methods of teaching produces frustration and disappointing results" (Trump and Miller, 1979:456). Methods of teaching have emphasized techniques that must make the learning experiences more effective. Methods and techniques must be selected to fit the learning situation and the learning experiences (Risk, 1968). At the present, the curriculum and the methods of teaching in the middle school and high school in the United States concentrate on continuing of learning and the individual differences among early and middle adolescents (Bryan, 1983). Stiles and Dorsey (1950:377) state:

"Every democracy must encourage high individual performance. If it does not, it closes itself off from the main springs of its dynamism and talent and imagination, and the traditional democratic invitation to the individual to realize his full potentialities becomes meaningless."

It is clear that the world is changing at a rapid and accelerating pace. New problems and opportunities present themselves daily. The future will demand people who have learned how to think rather than how to memorize. Effective uses of the growing mountains of knowledge require that students learn new ways of approaching and utilizing knowledge (Unruh and Alexander, 1970). For this reason, the proposed plans call for curriculum development and improving the method of instruction in the lower secondary school of Thailand.

It is important to note that the purpose of the lower secondary education in Thailand is to help students reach their highest potentialities and to participate fully and effectively in a democratic society. The curriculum which is offered to the students should be modified to meet abilities, interests, and needs of early adolescents. The program of study should be more realistic than theoretical, using experiences as an important way of learning. The lower secondary school curriculum should be placed in a more comprehensive setting with a balanced program to serve all Thai children. However, it is essential to state that curriculum cannot be improved without the active participation of teachers, students, and interested citizens.

Practical teaching methods should emphasize more opportunities for problem solving. The instructor should provide a variety of methods of teaching and encourage students to seek opportunities to participate, plan, and carry out classwork. Experience helps adolescents develop imagination and show them that reliance upon their own ingenuity can solve many problems in their lives (Wiles and Bondi, 1981). Thai teachers should use content that has been developed nationally and

regionally. Time and effort may be spent more profitably on planning how to relate local content to the essential and regional material.

To conclude this paper, it should be emphasized that Thailand considers education a powerful tool in developing the country and improving the quality of life of the population. Therefore, if an evolution in the flexibility and adaptability of the curriculum occurs, it would be expected that it will facilitate the development of student attitudes and understandings which are conducive to productive involvement in a rapidly changing society.

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