AN ABSTRACT OF THE THESIS OF

Aim-ut-cha Rat-rim-chong for the degree of Doctor of Education in Education presented on November 2, 1988.

Title: A Perceptual Comparison of Experts, Principals and Teachers With Respect to School Health Programs Within the Elementary Schools Under the Jurisdiction of Bangkok Metropolis, Thailand

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David W. Phelps

This study compared the perceptions of health education experts, principals and teachers regarding the ranking in order of importance of organizing school health programs within the elementary schools under the Jurisdiction of Bangkok Metropolis, Thailand. Of 604 subjects participating, 19 were health education experts from universities, Ministry of Public Health and Ministry of Education; 264 were principals and 321 were classroom teachers from elementary schools under the Jurisdiction of Bangkok Metropolis both in the inner and the outer zones of Bangkok Metropolis.

A questionnaire was constructed and examined by a Thai jury to ascertain content validity. The questionnaire was pretested before the final form for comprehension and clarity of Thai language. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data.

The results were as follows:

1. The perceptions of the principals in the inner and the outer zones regarding the organization of elementary school health programs were not significantly different at $p \leq 0.05$ level, except one choice.

2. There was no overall significant difference between the perceptions of the teachers in the inner and the outer zones regarding the organization of elementary school health programs at $p \leq 0.05$ level, except two choices.

3. The perceptions of the total principals and the total teachers regarding the organization of elementary school health programs were not significantly different at $p \leq 0.05$ level, except 12 choices.

4. The perceptions of the experts and the principals regarding the organization of elementary school health programs were not significantly different at $p \leq 0.05$ level, except seven choices.

5. The perceptions of the experts and the teachers regarding the organization of elementary school health programs were not significantly different at $p \leq 0.05$ level, except nine choices.

6. There was no overall significant difference between the perceptions of the principals and the teachers in the inner zone regarding the organization of elementary school health programs at $p \leq 0.05$ level, except four choices.

7. The perceptions of the principals and the teachers in the outer zone regarding the organization of elementary school health programs were not significantly different at $p \leq 0.05$ level, except 11 choices.

A Perceptual Comparison of Experts, Principals and Teachers With Respect to School Health Programs Within the Elementary Schools Under the Jurisdiction of Bangkok Metropolis, Thailand

by

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DEDICATION

This great success is dedicated to every member of the "RAT-RIM-CHONG" family, especially the investigator's beloved mother and father. With their love and care, including will-power and financial support, the investigator could afford her life during study far away from home. No beautiful words can be expressed to all of them, except that the deeply sincere gratitude of the investigator will be everlasting!

As for her father, even though his departure is 19 years past, hardly has the investigator forgotten his words, "Mom and I hope to see all of you guys being well-educated persons; the only one essential heritage we can give to you is education." Father, your wish has already come true! Hopefully, your soul is perceptive and proud of this worthy heritage which your daughter has earned.

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CHAPTER 1

INTRODUCTION

Background of the Problem

The statement, "The thinking and the behavior of people can be changed for the better from education," is relatively true, because a basic purpose of education is aiding people to do better the things they will be doing anyway. A fundamental belief about Thai education is that good teaching, in a favorable setting, will raise the quality of living for pupils. By enriching the lives of millions of children, elementary education can help contribute to a better society. In Thailand, it is felt that educational activities are worthwhile only to the degree that they contribute to social betterment. Schools have both a responsibility and an opportunity to help protect, maintain, and improve the health of pupils. Even though these objectives are shared by the home and government and private health agencies, the obligation of the school is clear. Schools can bring together individuals to promote physical and emotional well-being. This can be done well through an efficient School Health Program.

In principle, a school health program is the action or operation of health education in schools. It attempts to change school children's health behaviors and to promote good health for a better

life, both physically and mentally. Academically, the organization and administration of school health programs mean providing an opportunity for children to experience healthy activities so they can develop a high level of wellness. In order to maintain and promote health, the school health programs theoretically should consist of three functional components: Health Environment, Health Services, and Health Instruction.

In Thailand, experts from the University Health Education staff, Ministry of Public Health staff, and Ministry of Education Health Educators have played an important role in developing school health programs. These persons are knowledgeable in the areas of health eduction. They have important responsibilities for planning, advising, and evaluating school health programs. Health education experts act as the contributors or supporters concerning academic resources, planning school health policies, and providing some facilities. In addition, they design and conduct research on health-related matters, such as health content, health process and health behavior problems. The cooperation of these health education experts may promote positive health behaviors for everyone in the school.

Generally speaking, the school administrator, particularly the principal, is the key person in the development of school health programs. There are two primary reasons for this: This individual represents the power of the Ministry of Education or the Office of Education under the Jurisdiction of Bangkok Metropolis and he also provides the day-to-day leadership within the school regarding the

educational program. Therefore, the quality of the health program depends on whether or not a principal recognizes and accepts the opportunities and responsibilities for an effective program.

In elementary schools, the classroom teacher plays an important role by influencing health knowledge, attitudes and practices. Since the teacher is the first line of defense in the school health program, he or she needs to be familiar with the health problems of children. A teacher must accept the responsibility of an effective health program regardless of grade level and subject matter taught. Sarochan has stated that "much of the learned behaviors and attitudes of a health nature that will prevail throughout a lifetime are established during the elementary years" (Rhodes, 1981, pp. 10-11). If the attitudes and habits developed in childhood are positive, they will most likely continue into adult life. It should be the goal of any school health program to foster such attitudes and habits.

In Thailand, the elementary school health program both in the city and the country is managed by "concerned" classroom teachers. This occurs under the principal's supervision, even though some elementary schools have set up a school health committee composed of school personnel and a few concerned people from the community. For some activities of school health programs, especially for the school health services, the local public health agencies give some kinds of help to the school. However, the school must provide most of the health activities itself, so that the knowledge, experiences, and skills pertaining to all aspects of a school health program are a

very important part of the teachers' competencies. The health values and perceptions possessed by the health education experts, principals, and teachers play an important role in the school health activities. It is generally expected that if such perceptions of the health education experts, principals, and teachers are correspondingly the same, the organization and administration of elementary school health programs will work successfully.

In recent years, education in Thailand has changed considerably from a traditional to a progressive or new education. Several aspects of educational programs have been improved and promoted, but not enough attention has been given to the school health program, even though the Subcommittee on School Health Education under the National Committee on Health Education already exists (Somprayoon, Journal, 1983, p. 8). Most teachers in the elementary schools are still not properly prepared or well trained in health education, and so they cannot effectively help the children to develop optimal personal health and fitness (Office of Education, 1986, pp. 77-78). They do not think of health education as an important subject to be taught (Somprayoon, School Health Administration, 1983, p. 41). Those who teach it do so by reading and explaining a health textbook to children and then evaluating them by means of a written test (Somprayoon, School Health Administration, 1983, p. 39). Besides this, school health environment and health services are not organized in ways to serve the educational objectives of changing the children's health behaviors through changes in knowledge, attitudes, and practices. Furthermore, health environment and

health services in schools have not been able to help supplement and improve school health instruction (Martin, 1985, p. 140). Therefore, health education in the schools continues to be less effective than it should be.

As a health educator working with the elementary school health program in Bangkok Metropolis, Thailand, the investigator feels that a good school health program should be a fundamental part of the educational program. It is expected that this research project will be considerably useful to the education authorities who are concerned with the elementary school health program.

Purpose of the Study

The purpose of this study was to compare the perceptions of health education experts, principals, and teachers with respect to school health programs within the elementary schools under the Jurisdiction of Bangkok Metropolis, Thailand.

Need for the Study

It is known that the abilities of individuals differ widely in sensation and perception of various matters. In general, the perceptions of an individual are based on memory, past knowledge and experiences, needs, values, attitudes, and personality (Chiangmai University, 1984, p. 189). In order to increase the effectiveness of the organization and administration of any tasks, the perceptions of personnel about those tasks must be considered. In this study, we must consider the perceptions about school health programs that are held by health education experts, principals, and teachers. Such kinds of perceptions should be maintained if they are sound and

consistent, or be improved if unsound. Many concerned authorities attempt to provide inservice training programs for principals and teachers. However, even though they get enough knowledge and skills in health activities, their attitudes may not be desirable ones, because they have been "caught more than taught." If we can find out their perceptions regarding the importance of the organization of school health programs, not only can we select and begin school health activities more appropriately, but also help raise the minimum standards of the organization of school health education project in Thailand. The investigator hopes that this research project will result in proper supervision and better organization of the inservice training programs.

Up to now, there has not been any research related to this project in Thailand. Therefore, the comparison of the perceptions of health education experts, principals, and teachers with respect to school health programs within the elementary schools under the Jurisdiction of Bangkok Metropolis, Thailand, will serve as a strong backup for concerned educational or public health authorities. It will pave the way to improve the organization and administration of future elementary school health programs.

Scope of the Study

The questionnaire concerning the perceptions of the elementary school health programs was composed of the following categories:

- Healthful School Environment
- School Health Services
- Curriculum and Learning-Teaching

· School Health Personnel

· The Relationship between School and Community

The population used in this study were selected from health education experts, principals, and teachers throughout 24 districts located in two zones of Bangkok Metropolis. The two zones were divided on the basis of geographic and occupational classification. There were 13 districts in the inner zone, and 11 districts in the outer zone (see Appendix L). Of the 427 schools, 127 were in the inner zone while 300 were in the outer zone. All school principals and some selected classroom teachers participated in this research project. For the expert group, the selected experts were health educators from universities, Ministry of Public Health, and Ministry of Education in Bangkok Metropolis.

Limitations of the Study

Limitations of this study were as follows:

1. All experts and principals were used for the population of this study, but only a sample of teachers were selected from the classroom teachers because of the limitations owing to convenience, time, and expenses.

2. The constructed questionnaire used as an instrument included only those areas determined to be valid by a jury (outside the expert subject group) of specialists in the field of school health education.

3. Data collection was conducted only by mail.

4. This study might be limited by the fact that the data were solicited from subjects' reporting.

Basic Assumptions of the Study

The study was based on the following assumptions (concerning the teacher group only).

1. By random selection, all respondents from the inner and the outer zones were equivalent in background variables.

2. The respondents were representative samples of the population of which they were a part, and the sample was adequate to justify wide application of the findings.

Hypotheses of the Study

The hypotheses to be tested in this study were as follows:

Hypothesis 1: There was no significant difference between the perceptions of the principals in the inner and the outer zones with respect to the elementary school health programs.

Hypothesis 2: There was no significant difference between the perceptions of the teachers in the inner and the outer zones with respect to the elementary school health programs.

Hypothesis 3: There was no significant difference between the perceptions of the total principals and the total teachers with respect to the elementary school health programs.

Hypothesis 4: There was no significant difference between the perceptions of the experts and the principals with respect to the elementary school health programs.

Hypothesis 5: There was no significant difference between the perceptions of the experts and the teachers with respect to the elementary school health programs.

Hypothesis 6: There was no significant difference between the perceptions of the principals and the teachers in the inner zone with respect to the elementary school health programs.

Hypothesis 7: There was no significant difference between the perceptions of the principals and the teachers in the outer zone with respect to the elementary school health programs.

Definition of Terms

Perception: A process by which we contact with the environment; it involves the taking in of information. As used in this study, it is the awareness of the importance of the organization of the elementary school health programs.

Expert: A person who is knowledgeable and authoritative in the areas of health education. He or she has responsibilities for planning, implementing, and evaluating school health programs directly and indirectly.

Principal: The teacher, in Thailand, who holds a high level position classification in school, and who is responsible to administer the school health program by supervision through the school administrative committee or school health committee directly with the cooperation of the school personnel.

Teacher: Elementary school personnel, in Thailand, who has a role as a classroom teacher, and also conducts many health activities for children both inside and outside the class. Generally, he or she teaches many class periods a week in many subjects, and sometimes is referred to as a self-contained classroom teacher.

Usually, this work is closely and regularly related to children, but also maintains contact with the children's families and community.

Elementary School Health Program: One of the educational programs that provides knowledge, attitudes, and practices related to health behavior to school children. This is done through the organization of the three integrative components of health activities, namely, healthful school environment, school health services, and school health instruction. The main objectives of elementary school health programs are to improve and maintain children's health both in physical and mental aspects. This is in accord with one of the most important goals of the National Education Scheme.

The inner and the outer zones of Bangkok Metropolis: The land on which schools are located in the inner and the outer areas or zones according to the organization of Bangkok Metropolis Administration. The differences of the two zones are related to occupation, socio-economic status, and geographic situations. Most people in the inner zone earn their livelihood in professions and business, while those in the outer zone work on farms and gardens. Conveniences of transportation and communication can generally be found in the inner zone rather than in the outer zone.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The review of literature related to this study was divided into four sections as follows:

- Perception
- Introduction to Thailand
- Factors Influencing Thai Perceptions
- Related Research Concerning the Organization of Elementary School Health Programs in Thailand

Perception

Definition of Perception

Many definitions exist. According to Gotshalk (Yochim, 1967, p. 24), it is a complex operation which involves intellectual or cognitive factors and sensation, imagination, and feeling.

Kurt Lewin (Lewin, 1955, p. 288) describes perception in four stages: The perception of an object or event may (a) give rise to a certain physical tension (e.g., a desire), or (b) it may communicate with a state of tension already existing (as a result of some intention or need) in such a way that this tension system thereupon assumes control over motor behavior. In such cases we say that the object in question possesses a "valence." (c) Valences act as environmental forces "steering" subsequent behavior. Finally, (d) this behavior leads to satiation or to a resolution of tension so that a state of equilibrium is approached.

Perception can be also defined as the results of the combination of our past knowledge or past experiences occupied and the perception of new sensation obtained (Chiangmai University, 1984, p. 188). The structuralists, on the other hand, (Hochberg, 1969, pp. 32-33) thought the world of perception is composed of two kinds of elements: (a) sensations, which we observe when each individual receptor is stimulated, and (b) memory images, which are the recollections of previous sensations.

In summary, it can be said that perception may involve any sense modality, which is hearing, tasting, smelling, and feeling, as well as seeing. Also, perception cannot be directly observed, but must be inferred from observations of performance (including what the person says), and particularly from changes in performance (Lindgren, 1971, p. 208).

Individual Differences in Perception

People differ in the ways they process sensory inputs to give rise to what they experience. When we consider the effects of physiological differences, motivational differences, and differences resulting from learning experiences, it is clear that laws of perception must be extended to include individual differences as well as individual similarities (Lindgren, 1971, p. 229). Individual differences in learning, sets (expectations), motives, and perceptual styles are at work to make one person's perceptions different from those of another (Morgan, 1986, p. 127). This is illustrated by cases in which different perceivers with different information learn different things from observing a single object.

At other times, one of the observers completely lacks the relevant knowledge and so learns nothing at all from his observation. Brown (1977, p. 87) has described these two situations as follows. In the first case, the observed objects have a different meaning for the different observers, and in the second case the objects in question have no meaning at all for the uninformed observer.

Perceptual Styles

The perceptual processes that enable us to make everyday decisions are more or less influenced by learning and experience. Inasmuch as each individual has different learning experiences, it is very possible that each individual perceives the world in a somewhat different way. (Lindgren, 1971, p. 231). However, individual differences in perception can be studied if they can be grouped and catalogued in terms of similarities and characteristics. One approach toward identifying such patterns was proposed by Klein (Lindgren, 1971, p. 231), who conducted several experiments at the Menninger Foundation. Following are three of the perceptual attitudes or styles stated in his research:

1. Leveling vs. Sharpening of Differences. When a stimulus is altered (such as the size of projected squares), some subjects tend to keep up with the changes (sharpening) whereas others lag behind and see the stimulus as if it were unaltered (leveling). The latter subjects tend to deny or ignore differences in a search for stability whereas the former group is able to perceive the stimuli as they really are, even when changes occur. Personality studies found that the leveling group tended to avoid competition, to seek

relationships in which they could be dependent on others, and to be self-oriented, self-abusing, and passive. The sharpening group tended to be competitive, exhibitionistic, and to have high achievement needs.

2. Tolerance vs. Resistance to the Unstable. Individuals differ in the ease of perceiving this movement. The difference seems related to the ability of the subject to let go into fantasy and imagination, to tolerate any sort of instability, and to behave in a flexible manner.

3. Physiognomic vs. Literal Perception. Klein hypothesizes that physiognomic or imaginative perception is characteristic of individuals who are empathic or able to perceive the world from another's viewpoint.

Perceptual Learning

Eleanor Gibson (Morgan, 1986, p. 127) has defined perceptual learning as "an increase in the ability to extract information from the environment as a result of experience or practice with the stimulation coming it." Gibson gives many examples to show how perception can be molded by learning. She cites the competence of people trained in various occupations to make perceptual distinctions untrained people cannot make. Skill, or artistry, in many professions is based upon the ability to make these subtle distinctions. Experience is the best teacher for these perceptual skills; usually, they cannot be learned from books.

Factors Influencing Perception

It is said that attitudes and other motivational factors intervene to affect an individual's perception. Usually, an individual perceives or misperceives stimulus information coming from both outside and inside his or her own body. Knowledge, beliefs and theories play a fundamental role in determining what we perceive (Brown, 1977, p. 81). Since perception is selective rather than all-inclusive, it leads us to an examination of various factors that influence perception (Morgan, 1986, pp. 234-242).

Attention

Out of the infinite variety of stimuli bombarding our receptors at any one moment, we seem to perceive only one particular set of stimuli, those to which we are attending. Several variables influencing attention have been isolated. Many of the studies come from advertising where attention is all-important. The advertising message is ignored unless the customer's attention is caught. A large stimulus is more likely to attract attention than a small one. The intensity of a stimulus also affects attention. A repeated stimulus, such as a ringing telephone, is noticed more than a single stimulus. Contrast is extremely important in determining attention. A very tiny moving object stands out if all the other objects are stationary.

Set

We perceive what we expect to perceive. In interacting with our environment, we become familiar with the world and learn what to

expect from it. Alterations to our familiar surroundings often are missed because we are "set" to perceive certain stimuli.

Type of Surrounding

Many individuals express the general preference for pleasant surroundings. People feel happier and work better if they perceive the environment as pleasing and attractive. Industry often paints walls in soft colors, hangs curtains on the windows, and plays pleasurable music during the work day.

Effect of Learning and Experience on Perception

When a specific stimulus becomes important to the individual, he or she is able to perceive that stimulus more easily than other similar stimuli. Different cultures provide different experiences, which affect perceptions.

Social Perception

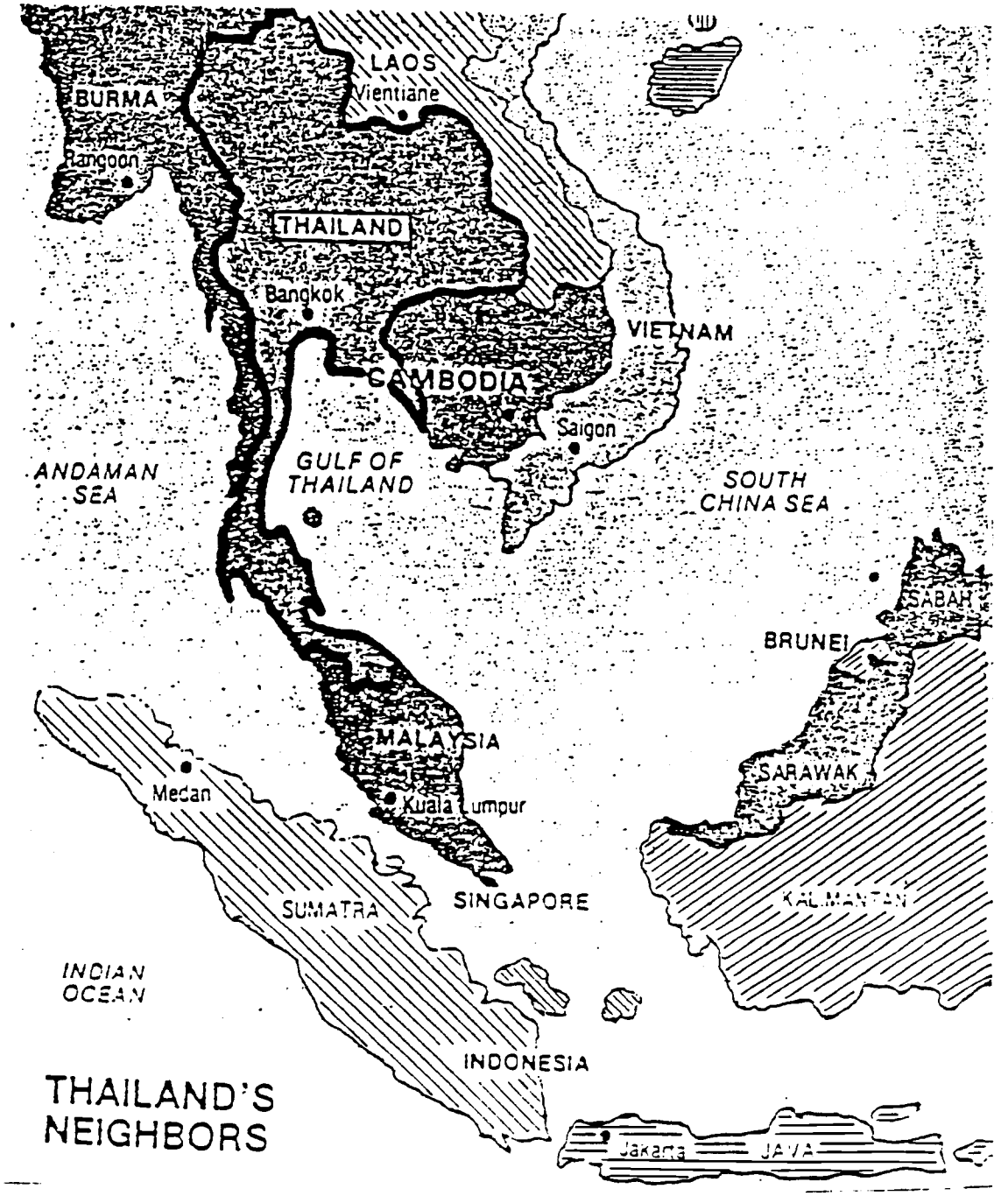
Personality and social psychologists often use the term "perception" in a more symbolic sense - in connection with attitudes toward others and toward oneself, expectations, and beliefs. Rogers (Morgan, 1986, p. 242) stated that perception of self and others is influenced by the individual's need to behave consistently. Or, an individual's perceptions of environment may be influenced by his or her group.

Introduction to Thailand

The name "Thailand" literally means "Land of the Free." Thailand is situated in the Indochinese Peninsula, bordered by Laos to the north and northeast, Malaysia to the south, Kampuchea to the east and Burma to the west. Thailand is now a member of ASEAN, the

Figure 1

Map of Thailand



Association of Southeast Asian Nations. The country is approximately the size of France or the States of California and New York combined (Kurian, 1982, p. 1731). The area is about 513,115 square kilometers or 198,000 square miles (Suparp, 1985, p. 3).

Thailand is composed of 73 provinces, and Bangkok is the capital. The country is divided into four regions, namely: the north region with high mountains and numerous streams, the northeast region with semi-arid plateau, the central region with plain and low-land, and the south with sand and mountains.

The climate varies widely. Generally, temperatures range from annual highs of 38 ^{o}C (100 ^{o}F) to lows of 19 ^{o}C (66 ^{o}F). There are winter, summer, and rainy seasons in Thailand. Since most of the area is lowlands, about 80% of the people work in agriculture.

Factors Influencing Thai Perceptions

The main factors that influence Thai perceptions are as follows:

- Family
- Education
- Religion
- Society

Family

The best way to understand the social organization of Thai society is to examine the structure of its basic unit, the family. The typical Thai family especially in rural areas is an extended family. The average family consists of a mother, a father, their children, grandparents, cousins and other children of the grand-

parents living together in the same house or the same compound. The relationships among the members usually are close and loving. The basic characteristic of every family is a blood relationship between members, or what is so-called "Kinship." In times of rapid social change like the present, the extended family tends to disintegrate. The nuclear family is more typical of the urban family, especially in Bangkok. This household, usually of two generations, consists in most cases of parents with their children and perhaps an elderly grandparent. However, these families are not cut off completely from their more extended kin.

Respect for elders is taught from a very early age. Before children are long out of infancy they begin to accept their place in the family hierarchy and to act accordingly (National Identity Office, 1984, p. 62). Usually the younger people are considerate and are respectful of the elders. They dare not object to any ideas, because they are always taught, "Don't argue, because it's bad manners." Respect is shown to teachers by their students, managers by their employees, the Prime Minister by the bureaucracy and the King by everyone (National Identity Office, 1984, p. 65).

Since the characteristics of the ideal son are compliance and devotion, and the ideal daughter are loyalty and compliance, a sense of responsibility is inculcated from early childhood. Each child has assigned chores such as looking after younger sisters and brothers or feeding domestic animals. Age and ability determine duties. One of the prime responsibilities is to take care of

parents in their old age. This form of social security is a prominent feature of the Thai concept of family.

Generally, children depend on their parents not only for support, but also for decision making. Children will be supported by their parents until they get married and usually they make decisions by asking approval from their parents or from a person who is in a higher social position. Thai people quickly learn certain behavior which demonstrates consideration for the feelings of others -- obedience, humility, politeness and respect -- can make people like and be nice to them (Cooper, 1986, p. 76). Nurture, inculcation and instillation of daily life from parents or family have great impact on Thai perceptions.

Parents play the most important role in developing health behaviors of children especially in the area of personal health. Since "respect for elders" is taught from early childhood, children will obey and practice health behaviors in the same manner as their parents. To keep the house clean is one of the children's responsibilities.

Education

"Research suggests that clarity of instruction is directly related to student achievement and positive attitude" (Montague, 1987, p. 2). Undoubtedly, the educational institution, as a socializing agent that touches most young people, plays a major role in attitudinal development. Since perception consists of sensations and memory images which are closely related to attitude, the educa-

tional institution should play an important role in perceptual development as well.

The educational system in Thailand is organized as 6:3:3: 6 years for elementary education, 3 years for junior secondary education and another 3 years for senior secondary. Higher education is mostly a four year course for undergraduate study. There are several curricula for vocational education ranging from the short courses in polytechnic school to vocational school (equivalent to senior secondary school education and also post-secondary but lower than college level). There are two courses for teacher training: upper education certificate (one year after senior secondary education) and bachelor degree course (2 years after upper education certificate at the teacher college or 4 years after senior secondary education at the university). In conjunction with the in-school system, there are numerous curricula for out-of-school educational programs.

Thailand has one unified curriculum prescribed by the Ministry of Education with provision to encourage the local authority to modify the national curriculum to suit the local situation and needs (Ministry of Education, 1982, p. 3). The elementary education curriculum is an integrated curriculum comprised of five groups (see Appendix J). This curriculum includes tool subjects (Thai language and mathematics), life experience subjects (social studies, health education, and science), character education (moral, arts, music and drama, and physical education), work-oriented education (agriculture, handcraft, home economics, and woodwork), and special

experience group (English for everyday life and basic vocational courses). Secondary education curricula are composed of core and elective areas. Core subjects are Thai language, science, social studies, physical education, and health education. Elective areas are comprised of compulsory and free electives.

Over the past few years, the government has made efforts to adapt the educational system to the development needs of the country. Practical agriculture instruction has been introduced in numerous forms at various school levels. Mobile trade training schools to bring non-formal vocational education to rural youth have been introduced during the recent plan period.

There are 14 public universities and 36 teacher colleges in Thailand. The government is concentrating on full education for all Thais. Now that schools have been established and staffed in the main upcountry villages, efforts are being made to bring education to those living in small, remote villages far from daily contact with provincial centers.

The legal age for entering the school is six years. Children are required to attend until they complete the six year elementary courses. Since many schools require pupils to know the rudiments of reading and writing before they enter grade one, there is a preparatory course or pre-school education (the age of three-five). The students must pass a number of examinations set by the Ministry at the end of each year of elementary work, after the third and sixth years of secondary work, and before university matriculation.

Hardly can health and education be separated, because the individual needs to study in order to maintain and improve his or her health, and he or she needs to be healthy for the purpose of learning. Health promotion and maintenance are perceived by each past Thai national plan of education as one of the needed major responsibilities of schools at both elementary and secondary levels. The present national plan of education considers the promotion of physical and mental health of the children as one of the main objectives. Health education has been an important subject in elementary and secondary school curricula for a long period of time in order to change children's health behaviors - knowledge, attitudes and practices. Now Thai people are likely to recognize the importance of health. They are more interested in learning health information and practicing good health habits.

Religion

Today, Theravada Buddhism is the professed religion of over 90% of the Thai people. Theravada Buddhism influences profoundly everyday life (National Identity Office, 1984, p. 51). It finds expression in the Thais' tolerance and kindness toward their fellow men, regardless of race, creed or nationality. Buddhism is at the center of the Thai view of life and forms the foundation of most attitudes. Buddhist doctrine is embedded in an amorphous mass of Thai perceptions, attitudes, customs, traditions, and daily actions.

Buddhists believe one's life does not begin with birth and end with death, but is a link in a chain of lives, each conditioned by volitional acts (karma) committed in previous existences. The

concept of karma, the law of cause and effect, suggests that craving and selfishness result in suffering. Compassion and love bring one happiness and well-being. The Four Noble Truths are composed of suffering: Suffering results from desire, cessation of desire results in the cessation of both suffering and re-birth, and this desirable outcome can be attained eventually by the pursuit of the Eightfold Path (Suriyabongse, 1954, pp. 1-4). The Eightfold Path leads to Right Purpose, Right Understanding, Right Effort, Right Speech, Right Action, Right Livelihood, Responsiveness to Truth, and Contemplation (Nitidandhaprabhas, 1962, p. 12). Pursuit of the path leads to five moral precepts (do not destroy life, do not steal, do not commit adultery, do not deceive, and do not take intoxicants) which are practiced by the great majority of Thai in their daily life. Since the heart of Buddhism is "learn to do good, cease to do evil, and cleanse your own heart", generosity, gentleness and peacefulness are characteristic virtues of Buddhist people.

The minimum standard of the Thai Buddhist morality consists of giving alms and sharing with others whatever one has, entering the priesthood for at least a short period of time to receive moral training, paying respect to one's parents and caring for them, and practicing the Five Moral Precepts.

In ancient times, the educational program was primarily the responsibility of religious leaders who related closely the school system to monastic life. Thai monasteries play the important role of spreading the teachings of the Buddha and act as centers for Thai cultural activities for the community. The majority of Thailand's

27,000 Buddhist monasteries are in the countryside (National Identity Office, 1984, p. 49). Even though the prime function of the monastery is to aid aspirants in their search for Nirvana, it has traditionally served as a village news distributor, a village hotel, a school, hospital, dispensary or community center and a recreation center, place of safe deposit and refuge for the mentally disturbed and the aged. In large towns, the monastery offers hostel accommodation for students from the outlying villages, and occasionally, juvenile delinquents are sent to live in monasteries to be reformed under the benevolent influence of elder monks.

The doctrine of "the way of hell" can help people decrease taking intoxicants and smoking. A vital village "monastic service" is counseling. When some people face serious problems of life or health, they will pray or visit the monastery to listen to the teachings of the Buddha, as taught by the monks. Mostly, Buddhism influences mental health problems.

Society

The influence of society on Thai perceptions can be considered in four areas: values, beliefs, mass media, and Western influence.

Values

A value is a standard or yardstick to guide actions, attitudes, comparisons, evaluations, and justifications of self and others (Rokeach, 1968, p. 160). The following social values relate to Thai perceptions:

· "Kreng Jai." The term "Kreng Jai" usually is translated as "consideration." It refers to the respect Thais feel for superiors,

and to humility and obedience to authority. "Kreng Jai" involves the desire to be self-effacing, respectful and extremely considerate, as well as the wish the avoid embarrassing other people, intruding upon them or causing them any trouble (Siripanishpongs, 1986, p. 34).

· "Nam Jai." The concept of "Nam Jai" or "water of the heart" stands for disposition, sympathy or kindness. It is an untranslatable concept that lies somewhere between compassion and Shakespeare's "the milk of human kindness" (National Identity, 1984, p. 74).

· "Mai Pen Rai." This concept means "never mind." "Mai Pen Rai" is used to create peaceful relationships, to express forgiveness and to avoid unnecessary friction.

· "Lack of Enthusiasm." Thai people like comfort and cheerfulness. They are rather passive more than active, and they are satisfied with the things they possess.

· "Easily Forget." Thai people are inclined to forget easily the details of past events in their life. They concentrate on the present and react to it rather than on memories of previous situations.

· "Rely Upon One Another." Thais usually help one another. In rural areas, neighboring families and friends within the village will gather to help one another in various activities which a single family could not manage unassisted, such as harvesting, irrigating the fields, or constructing a house.

· "Praise Authority." The expressions of praise, honor, respect and fear of authority are Thais' characteristics.

Beliefs

Krech and Crutchfield propose that all attitudes incorporate beliefs, but not all beliefs are necessarily a part of attitudes (Rokeach, 1968, p. 115). The conception of an attitude or perception can be considered as organization of beliefs. Some beliefs which influence Thai perceptions are as follows:

· The cycle of life (this belief includes the whole life from birth to death).

· The belief of physical and mental health (eating, nutrition, sanitation, exercise, and relaxation).

· The belief of religion (religious rituals, ordination, etc.)

· The belief of fate and astrology (barrenness, anxiety, illness, business, transaction, and embarking on journey).

· The belief of treatment and prevention from diseases (methods of treatment, prevention, rehabilitation, promotion of health, disease control, and consumer health).

Mass Media

The influence of mass media on the thoughts and behaviors of individuals in Thailand has increased over the years. At present, radio, television, and magazines as well as motion pictures are available to the majority of the Thais. The messages carried by mass media reach the entire population and have a major impact on developing social and personal characteristics.

Radio. The most popular mass media in Thailand is the radio. Thai people listen to the radio every day. The categories of radio programs listened to are (Siamchai, 1983, p. 131):

- News and general matter (92%)
- Entertainment (80%)
- Advertisement (56%)
- Information, education, and culture (52%)

Thailand has 265 radio stations. The same news is broadcast daily in nine foreign languages through its World Service (National Identity Office, 1984, p. 239). Radio Thailand is the official channel for government information.

Television. Five television companies cover the whole country. Five regional stations operate their own relay stations. The audience is interested in three categories of programs: news; information, education and culture; entertainment. Variety shows are popular, as are imported United States television series. The most popular are serial dramas produced locally (National Identity Office, 1984, p. 240). Children enjoy United States and Japanese cartoons as well as local programs especially created for them such as puppet shows, plays and musical programs in which children take part, and programs designed to impart information. Educational programs have been introduced as part of an Open University.

Publishing. Thai publishing is a lively business. A glance at an ordinary news-stand reveals hundreds of different local newspapers, paperbacks, and magazines dealing with current issues. Many foreign best-sellers are translated into Thai soon after their

appearance abroad. Magazines in both Thai and English cater to a wide variety of tastes, such as fashion, business, and sports. The analysis of content in the six newspapers namely Thai Rath, Daily Time, Siam Rath, Daily News, Down Siam, and Pra Cha Thip Pa Tai (Siamchai, 1983, p. 127), found the content as follows:

- News and general matters (52.16%)
- Information, education and culture (25.93%)
- Advertisement (16.42%)
- Entertainment (3.86%)
- Sports and games

Movies: Most Thai films are made for entertainment. Thai people are interested in entertainment, advertisement, news, and knowledge respectively.

Western Influence

Western influence has made some changes in Thai society. Western influence has introduced and created a taste for new life-styles, new leisure activities, and new fashions. Western cultural impact has influenced Thai's contemporary scene in areas such as tennis and golf, music and drama, libraries and popular games, fashion and interior decoration, and Western foods.

The family structure, though mainly the traditional extended family, has seen a significant trend toward the nuclear family in the cities where Western culture has a stronger impact. Life styles involving eating out, traveling, vacationing, and entertainment also have a more Western character. The organization of education has been adopted, though modified, from the Western system. There are

12 grades in public education, organized around the 6-3-3 (elementary, lower- and upper-secondary) plan. Health education curriculum has been adopted with modifications from America. The teaching of the moral principle of Buddhism has remained part of the elementary school program.

The religions of the West have not had a great impact on Thailand. It is a 90% Buddhist society. The King and Queen are role models for moral values based on Buddhism. Respect for the monarchy has traditionally been central to the Thai culture and remains so. There are some churches, missionaries, and church operated schools, but they do not have a widespread influence.

Some Thai values can help promote mental health by reducing anxiety, such as the concept of "Nam Jai", "Mai Pen Rai", "Lack of Enthusiasm", and "Easily Forget." The influence of beliefs about health and illness brings about health promotion and misconceptions. In general, most people have seen and assimilated information from health documents, public broadcasting, or advertising provided by health agencies. Health message advertising is popular in areas of drug abuse, smoking and getting rid of garbage. Medicine and treatments have progressed with Western influence.

Related Research Concerning the Organization of Elementary School Health Programs in Thailand

In 1976, Techakhamput (Techakhamput, 1976) conducted research entitled "The Elementary School Health Programs of four border-land provinces in the Southern part of Thailand." The results revealed that some schools under the Jurisdiction of the General Education

Department never had provided health examinations for the students, but the organization of a healthful environment was fairly good. For the municipal and local schools, the teachers who taught health education in some schools did not have any former health education background. Half of the municipal schools never had organized the school health programs. Some schools did not provide health services because most teachers did not know how to examine students' health. Waste disposal should be improved.

In 1977, Karnjanarun (Karnjanarun, 1977) found that the teachers' attitudes toward some aspects of the school health program were not correct. For example, dental examination was not the teachers' duty, and the purpose of health education teaching was to get high scores on the exams.

In 1978, Srisomboon (Srisomboon, 1978) conducted a study to determine the attitudes of the administrators toward the organization of school lunch program in the elementary schools under the Jurisdiction of Bangkok Metropolis. Results indicated the school lunch program was not effective because of the inadequate personnel, materials, budget and places. About 13.27 percent of the administrators' attitudes did not agree with the organization of the school lunch program.

In 1980, Thongprasert (Thongprasert, 1980) studied the teachers' and the parents' attitudes toward school health programs, and compared the attitudes of the teachers and the parents toward the organization of school health program in private schools. The study showed:

1. The teachers and the parents agreed that the organization for a healthful school building was fairly good, but they disagreed about the improvement of a healthful environment in the matter of risky prevention materials.

2. Consistent attitudes were found in health instruction such as the lesson plan preparation and method of imparting knowledge.

3. The training of children's health habits was at a good level.

4. The relationship between home and school was good. For example, the teachers and parents had the opportunity to meet with each other.

5. The teachers' and parents' attitudes toward the organization of school health programs were significantly different at the level of $p \leq 0.05$.

In 1981, Chantarakamin (Chantarakamin, 1981) studied the situation and problems of the elementary school health programs in Khonkhan Province. The results indicated:

1. Most schools were located on the elevated part of the grounds. The desks and chairs were insufficient and their sizes were not suitable for the students' bodies.

2. A proper method was used to dispose the sewage and garbage.

3. Most schools had nursing rooms, but lacked medical equipment.

4. Vision screening and hearing testing were not provided in most schools.

5. None of the schools were supervised in health education subjects.

6. The small schools had many problems with medical examinations provisions.

7. The problems of health education instruction were the organization of lesson plans, the provision of supplementary documents and the organization of special activities.

8. The problems of school health program administration were budget and coordination.

In 1981, Chantharat (Chantharat, 1981) investigated the status and problems of the organization and administration of school health programs by the principal in elementary schools under the Jurisdiction of the Office of Primary Education in Songkhla Province. Chantharate found:

1. Most elementary schools could not manage the school health services to meet the minimum standard of school health education set by the National Health Education Committee.

2. The principals understood well the aspects of school health program administration.

3. The major problems were budget, personnel and teaching aids.

4. The understanding of school health program administration of the principals inside Sukhapibal boundaries and outside Sukhapibal boundaries was significantly different, but there was no significant difference in understanding between the principals with different qualifications and work experience.

5. The differences of experience, level of education and working place did not affect the principals' problems with school health program administration.

In 1984, Boonmee (Boonmee, 1984) determined the status, problems and attitudes of the principals toward the organization of school health programs in elementary schools under the Jurisdiction of Bangkok Metropolis. The subjects were 275 principals from 420 elementary schools. The study revealed:

1. Most school environments were unhealthful in such areas as nuisance prevention and sewage disposal.

2. Mostly, the organization of school health services was good. However, the vision screening and hearing testing should be improved. Medical examination of teachers was not provided in approximately 56.73% of the schools.

3. Though the schools prepared for health education instruction, they still lacked teachers with health education background.

4. The principals agreed that the organization of school health programs was proper and appropriate. Problems concerned the budget more than the organization.

5. Sex, level of education, and experience did not affect the attitudes of the principals toward the organization and the problems of the organization of school health programs.

In 1984, Laksanangam (Laksanangam, 1984) studied the attitudes of the administrators toward the organization of school lunch program in elementary schools of educational region nine (the provinces of Udornthani, Khonkhan, Luei, Sakholnakorn and Nongkhai). The

results revealed that educational background, experience of being the administrator, and the size of school did not affect the attitudes of the principals toward the organization of school lunch program.

In 1985, Itthithamwinit (Itthithamwinit, 1985) studied school health program administration in primary schools under the Office of Provincial Education in Chonburi, Chacheongsao and Rayong, to compare the administrative practices with the minimum standard of school health education set by the National Health Education Committee. The administrative problems of school health programs were studied. The subjects included 853 school administrators located both inside municipal and Sukhapibal boundaries (N=116) and outside municipal and Sukhapibal boundaries (N=737).

This study revealed that the two groups of administrators managed the school health program to meet the minimum standard of school health education set by the National Health Education Committee. The most important administrative problems were lack of school health personnel, teaching aids, parents' interest, health service rooms, and medical supplies respectively.

In 1985, Boonchuaykuakul (Boonchuaykuakul, 1985) compared the actuality and expectation of the school health services as perceived by school administrators under the Jurisdiction of the Office of the National Primary Education Commission in the Eastern Region. The findings revealed:

1. The school administrators perceived school health services in the areas of health record, first aid and treatment, school

nutrition, communicable disease prevention and control, height-weight measurements, and school safety program were at a good quality level. The school administrators reported that the areas of student health examination, vision screening and hearing testing, assisting handicapped children, health guidance, mental health promotion and teachers' health promotion were at a fair quality level.

2. The school administrators felt school health services in health records and height-weight measurements were at a very good quality level. Student health examination, first aid and treatment, school nutrition, communicable disease prevention and control, vision screening and hearing testing, assisting handicapped children, school safety program, health guidance, mental health promotion and teacher's health promotion were at a good quality level.

3. There was a comparatively significant difference at the $p \leq 0.05$ level between the school health service actuality and expectation as perceived by the administrators in the following areas: health record, student health examination, first aid and treatment, school nutrition, communicable disease prevention and control, height-weight measurements, vision screening and hearing testing, assisting handicapped children, school safety program, health guidance, mental health promotion, and teacher's health promotion.

In 1985, Kietsiri (Kietsiri, 1985) studied the attitudes of the administrators and teachers toward the organization and the problems of school lunch programs in the elementary schools of poor

rural areas in Uthaithani Province. The subjects were 118 administrators and 118 teachers.

1. Only 39.04% of all schools provided the school lunch program prepared by teachers and students. They served a one-dish meal every school day provided by the school lunch program committee. School lunch was not provided in 60.96% of the schools.

2. The attitudes of the principals and teachers toward the school lunch program considered the organization of personnel, budget, place, equipment, facilities and the results of the program.

3. The most important problems with the organization of the school lunch program were budget, location, equipment and facilities.

Summary

In eleven related studies in Thailand, the investigator found most research concerned the status of the organization of school health programs in the areas of healthful school environment, school health services, and school health instruction. The majority of the respondents were administrators. The findings revealed whether the school health programs were organized or not. There have been no studies conducted concerning the perception of importance of the elementary school health programs.

CHAPTER 3

METHOD OF INVESTIGATION

The following procedures were used:

- Construction of the Research Instrument
- Selection of Subjects
- Administration of the Constructed Instrument
- Analysis of Data

Construction of the Research Instrument

Planning to Construct the Instrument

Prior to constructing the instrument, the investigator studied the literature concerning the perceptions of the organization of elementary school health programs both in Thailand and in the United States (Anderson, 1980; Bruess, 1978; Byrd, 1964; Mayshark, 1967; Pollock, 1987; Public Health, Ministry, 1982; Redican, 1986; Somboonsin, 1980; Somprayoon, 1983; and Stone, 1976).

Constructing the Pretest Form

The original form of the questionnaire was divided into two parts. The first part contained 35 choices concerning perceptions of the importance of elementary school health programs in five distinct categories:

- Healthful School Environment
- School Health Services
- Curriculum and Learning-Teaching
- School Health Personnel
- The Relationship between School and Community

The second part of the questionnaire included demographic information on the respondents. The pretest was submitted for approval to the investigator's doctoral committee, and it was translated into Thai language.

Submitting the Pretest Form to a Jury

A Thai jury examined the pretest for the validity of the questionnaire and the format. The Thai jury consisted of four outstanding experts (outside the expert subject group) in the field of school health education and two experts in test and measurement who were the faculty members of universities in Thailand (see Appendix A).

Pretesting

After the pretest form was revised in accordance with the recommendations of the Thai jury, there were 44 choices in the first part of the questionnaire. The pretest form was then administered to 30 teachers who were not in the final pool of subjects. These subjects were asked to respond to each choice in the first part of the questionnaire to check questionnaire comprehension and clarity of Thai language, and the amount of time required to answer.

Revising the Instrument

According to the suggestions and recommendations of the Thai jury, the instrument was revised and adjusted to its final form. The final form was translated into English language (see Appendix H).

Selection of Subjects

The Expert Group

A total of 22 health education experts was selected by using the following criteria:

- A master's degree in the field of school health education or a related area.
- Work experience in school health education for at least five years.
- Residence in Bangkok Metropolis for at least five years.

Expert group sample was selected from these agencies in Bangkok Metropolis:

- Chulalongkorn University (3 persons)
- Mahidol University (3 persons)
- Srinakarinwirote University
  Prasarnmitr Campus (5 persons)
  Palasuksa Campus (2 persons)
- Kasetsart Unviersity (2 persons)
- Ministry of Education (3 persons)
- Ministry of Public Health (2 persons)
- The International School (1 person)
- The Department of Health, Bangkok Metropolis (1 person)

The Principal Group

The total number of principals was 427, of whom 127 were in the inner zone while 300 were in the outer zone.

The Teacher Group

The technique of systematic random sampling was employed for selecting the subjects. Only one classroom teacher from each school in the inner and the outer zones was sampled by selecting from the first Thai consonant of the classroom teachers' names alphabetically.

Administration of the Constructed Instrument

These steps were followed in the administration of the instrument:

1. A total of 876 questionnaires, together with the cover letter and return envelopes were mailed to the sampled groups (22 questionnaires to the expert group, 427 to the principals, and 427 questionnaires to teachers). The cover letters explained the purposes of the request and the procedure for completing and returning the questionnaire within three weeks of the mailing date (see Appendix F).

2. All questionnaires were coded sytematically for ease of following-up on unanswered questionnaires.

3. A follow-up postcard reminder was sent after the third week of the initial mailing to increase the total number of responses.

4. 604 questionnaires were returned (65.95%); 19 questionnaires from the expert group (86.36%); 264 from the principals (61.83%); and 321 from the teachers (75.18%).

Analysis of Data

After the responses of all returned questionnaires from the subjects were collected, they were processed, and analyzed by a computerized system. The Statistical Package for the Social Sciences (SPSS) analyzed the data. For the demographic data such as sex, age, education, and working experiences, etc., the investigator made use of descriptive statistics. In order to determine the significant differences at $p \leq 0.05$ level between means of perceptions of the subjects, the t-test of significance was employed.

CHAPTER 4

RESULTS AND ANALYSIS

The SPSS (Statistical Package for the Social Sciences) analyzed the data. Eight findings of the data analysis were presented in tables.

1. General Information and Personal Data of the Subjects.

2. The Perceptual Comparison of the Principals in the Inner and the Outer Zones With Respect to the Elementary School Health Programs.

3. The Perceptual Comparison of the Teachers in the Inner and the Outer Zones With Respect to the Elementary School Health Programs.

4. The Perceptual Comparison of the total Principals and the total Teachers With Respect to the Elementary School Health Programs.

5. The Perceptual Comparison of the Experts and the Principals With Respect to the Elementary School Health Programs.

6. The Perceptual Comparison of the Experts and the Teachers With Respect to the Elementary School Health Programs.

7. The Perceptual Comparison of the Principals and the Teachers in the Inner Zone With Respect to the Elementary School Health Programs.

8. The Perceptual Comparison of the Principals and the Teachers in the Outer Zone With Respect to the Elementary School Health Programs.

General Information and Personal Data of the Subjects

The subjects included 19 experts, 264 principals and 321 teachers of the elementary schools under the Jurisdiction of Bangkok Metropolis, Thailand. Of the 604 subjects, 389 (64.4%) were women while 215 (35.6%) were men.

Demographic Data of Experts

Table 1

Distribution of Experts by Demographic Variables

Category	Frequency (N = 19)	Percent
Sex		
Male	11	57.9
Female	8	42.1
Age (years)		
30 - 34	3	15.8
35 - 39	1	5.3
40 - 44	2	10.5
45 - 49	3	15.8
50 - 54	2	10.5
55+	8	42.1
Education		
Master's Degree	14	73.7
Doctor's Degree	5	26.3
Working Experiences in School Health Programs (years)		
5 - 9	3	15.8
10 - 14	3	15.8
15 - 19	4	21.1
20 - 24	2	10.5
25+	7	36.8

Table 1 Cont.

Category	Frequency (N = 19)	Percent
Participating in any Training Program, Meeting or Seminar		
Yes	17	89.5
No	2	10.5
Studying or Conducting a Research Project		
Yes	14	73.7
No	5	26.3
Observing, Studying, Visiting or Developing any School Health Programs		
Yes	16	84.2
No	3	15.8

The total number of experts was 19. Eleven people (57.9%) were men and eight people (42.1%) were women. Most experts were 55 years and over (42.1%). Of the 19 people, 14 (73.7%) had a master's degree, of these five (26.3%) had doctor's degree. The most frequent number of work experience years in school health programs was 25 years and over (36.8%). Most experts had participated in organizing a training course program (89.5%). They studied and developed school health programs for the elementary schools under the Jurisdiction of Bangkok Metropolis (84.2%) and studied or conducted a research project concerning the elementary school health programs (73.7%).

Demographic Data of Principals

Table 2

Distribution of Principals by Demographic Variables

Category	Frequency (N = 264)	Percent
Zone		
Inner Zone	87	33.0
Outer Zone	177	67.0
Sex		
Male	137	51.9
Female	127	48.1
Age (years)		
20 - 24	-	-
25 - 29	1	0.4
30 - 34	4	1.5
35 - 39	10	3.8
40 - 44	56	21.2
45 - 49	85	32.2
50 - 54	54	20.5
55+	54	20.5
Education		
Certificate or Equivalent	7	2.7
Diploma or Equivalent	16	6.1
Bachelor's Degree	232	87.9
Master's Degree	9	3.4
Administrative and Supervisory Working Experience (years)		
1 - 4	47	17.8
5 - 9	57	21.6
10 - 14	46	17.4
15 - 19	40	15.2

Table 2 Cont.

Category	Frequency (N = 264)	Percent
20 - 24	25	9.5
25+	49	18.6
Experience in Taking a School Health Program Course		
Yes	211	79.9
No	53	20.1
Experience in any Training Program, Meeting or Seminar Concerning School Health Programs		
Yes	196	74.2
No	68	25.8

The respondents were from the outer zone more than the inner zone (67% and 33% respectively). There were 264 respondents, and most of them were male (51.9%). The majority of the principals (32.2%) were in the 45 - 49 age group. The highest level of education attained was bachelor's degree (87.9%). The largest number of the principals (21.6%) had administrative and supervisory working experience. They had taken the school health program course and had some additional experience concerning school health programs from some training programs, meetings or seminars as well.

Demographic Data of Teachers

Table 3

Distribution of Teachers by Demographic Variables

Category	Frequency (N = 321)	Percent
Zone		
Inner Zone	105	32.7
Outer Zone	216	67.3
Sex		
Male	67	20.9
Female	254	79.1
Age (years)		
20 - 24	3	0.9
25 - 29	42	13.1
30 - 34	90	28.0
35 - 39	76	23.7
40 - 44	56	17.4
45 - 49	35	10.9
50 - 54	13	4.0
55+	6	1.9
Education		
Certificate or Equivalent	15	4.7
Diploma or Equivalent	30	9.3
Bachelor's Degree	272	84.7
Master's Degree	4	1.2
Teaching Experience (years)		
1 - 4	27	8.4
5 - 9	78	24.3
10 - 14	108	33.6
15 - 19	46	14.3

Table 3 Cont.

Category	Frequency (N = 321)	Percent
20 - 24	41	12.8
25+	21	6.5
Experience Taking a School Health Program Course		
Yes	211	65.7
No	110	34.3
Experience in any Training Program, Meeting or Seminar Concerning School Health Programs		
Yes	172	53.6
No	149	46.4

Of the 321 teachers, 254 (79.1%) were females, while 67 (20.9%) were males. More than half of all respondents were from the outer zone (67.3%). The most frequent age (28%) fell in the 30 - 34 age group. The largest number of the teachers had a bachelor's degree (84.7%) and had ten - 14 years of teaching experience (33.6%). They had taken the school health program course (65.7%) and had some experience in training programs, meetings or seminars concerning school health programs (53.6%).

Demographic Data of Principals in the Inner Zone

Table 4

Distribution of Principals in the Inner Zone

by Demographic Variables

Category	Frequency (N = 87)	Percent
Sex		
Male	37	42.5
Female	50	57.5
Age (years)		
20 - 24	-	-
25 - 29	1	1.1
30 - 34	1	1.1
35 - 39	-	-
40 - 44	13	14.9
45 - 49	22	25.3
50 - 54	26	29.9
55+	24	27.6
Education		
Certificate or Equivalent	-	-
Diploma or Equivalent	5	5.7
Bachelor's Degree	78	89.7
Master's Degree	4	4.6
Administrative and Supervisory Working Experience (years)		
1 - 4	13	14.9
5 - 9	15	17.2
10 - 14	12	13.8
15 - 19	19	21.8
20 - 24	11	12.6
25+	17	19.5

Table 4 Cont.

Category	Frequency (N = 87)	Percent
Experience in Taking a School Health Program Course		
Yes	71	81.6
No	16	18.4
Experience in any Training Program, Meeting or Seminar Concerning School Health Programs		
Yes	67	77.0
No	20	23.0

Of the 87 principals, 50 (57.5%) were women while 37 (42.5%) were men. Subjects ranged in age from 25 to 55 and over years, with the highest frequency age group being 50 - 54 (29.9%). In terms of education, 78 principals (89.7%) reported a bachelor's degree as the highest level of education. The largest number or principals (21.8%) had administrative or supervisory working experience (ranged from 15 to 19 years). Most principals in the inner zone had taken a school health program course (81.6%) and had some experience concerning school health program activities (77%).

Demographic Data of Principals in the Outer Zone

Table 5

Distribution of Principals in the Outer Zone

by Demographic Variables

Category	Frequency (N = 177)	Percent
Sex		
Male	100	56.5
Female	77	43.5
Age (years)		
20 - 24	-	-
25 - 29	-	-
30 - 34	3	1.7
35 - 39	10	5.6
40 - 44	43	24.3
45 - 49	63	35.6
50 - 54	28	15.8
55+	30	16.9
Education		
Certificate or Equivalent	7	4.0
Diploma or Equivalent	11	6.2
Bachelor's Degree	154	87.0
Master's Degree	5	2.8
Administrative or Supervisory Working Experience (years)		
1 - 4	34	19.2
5 - 9	42	23.7
10 - 14	34	19.2
15 - 19	21	11.9
20 - 24	14	7.9
25+	32	18.1

Table 5 Cont.

Category	Frequency (N = 177)	Percent
Experience in Taking a School Health Program Course		
Yes	140	79.1
No	37	20.9
Experience in any Training Program, Meeting or Seminar Concerning School Health Programs		
Yes	129	72.9
No	48	27.1

Over half (56.5%) of the principals were males. Most principals (35.6%) were in the 45 - 49 age group. There were 154 principals (87%) who held bachelor's degrees. The greatest percentage of principals (23.7%) ranged in administrative or supervisory working experience from five to nine years. Most principals reported they had some experience in taking a school health program course (79.1%) and in participating in some activities concerning school health programs (72.9%).

Demographic Data of Teachers in the Inner Zone

Table 6

Distribution of Teachers In the Inner Zone by Demographic Variables

Category	Frequency (N = 105)	Percent
Sex		
Male	20	19.0
Female	85	81.0

Table 6 Cont.

Category	Frequency (N = 105)	Percent
Age (years)		
20 - 24	-	-
25 - 29	6	5.7
30 - 34	19	18.1
35 - 39	26	24.8
40 - 44	30	28.6
45 - 49	18	17.1
50 - 54	3	2.9
55+	3	2.9
Education		
Certificate or Equivalent	5	4.8
Diploma or Equivalent	14	13.3
Bachelor's Degree	86	81.9
Master's Degree	-	-
Teaching Experience (years)		
1 - 4	4	3.8
5 - 9	17	16.2
10 - 14	33	31.4
15 - 19	17	16.2
20 - 24	23	21.9
25+	11	10.5
Experience Taking a School Health Program Course		
Yes	58	55.2
No	47	44.8
Experience in any Training Program, Meeting or Seminar Concerning School Health Programs		
Yes	57	54.3
No	48	45.7

Eighty-one percent of the teachers (85) were women. The remaining 19% (20) were men. The 40 - 44 age group was the greatest percentage of respondents (28.6%). Most teachers held a bachelor's degree (81.9%). They had teaching experience for at least ten years (31.4%). Over half of the teachers had taken a school health program course (55.2%) and participated in some training program or seminar concerning school health programs (54.3%).

Demographic Data of Teachers in the Outer Zone

Table 7

Distribution of Teachers In the Outer Zone by Demographic Variables

Category	Frequency (N = 216)	Percent
Sex		
Male	47	21.8
Female	169	78.2
Age (years)		
20 - 24	3	1.4
25 - 29	36	16.7
30 - 34	71	32.9
35 - 39	50	23.1
40 - 44	26	12.0
45 - 49	17	7.9
50 - 54	10	4.6
55+	3	1.4

Table 7 Cont.

Category	Frequency (N = 216)	Percent
Education		
Certificate or Equivalent	10	4.6
Diploma or Equivalent	16	7.4
Bachelor's Degree	186	86.1
Master's Degree	4	1.9
Teaching Experience (years)		
1 - 4	23	10.6
5 - 9	61	28.2
10 - 14	75	34.7
15 - 19	29	13.4
20 - 24	18	8.3
25+	10	4.6
Experience Taking a School Health Program Course		
Yes	153	70.8
No	63	29.2
Experience in any Training Program, Meeting or Seminar Concerning School Health Programs		
Yes	115	53.2
No	101	46.8

There were 169 (78.2%) women and 47 (21.8%) men in this group. Most of them were in the 30 - 34 age group (32.9%), and attained a bachelor's degree (86.1%). The most frequent teaching experience (34.7%) fell in the group of ten - 14 years. More than half of the teachers had taken a school health program course (70.8%) and participated in some academic activities concerning school health programs (53.2%).

Abbreviations (for Table 8 to Table 42)

In order to simplify the presentation of data, the investigator used abbreviations in each table. A list of abbreviations used in this chapter follows.

E = Experts, P = Principals, T = Teachers

P_1 = Principals in the Inner Zone

P_2 = Principals in the Outer Zone

T_1 = Teachers in the Inner Zone

T_2 = Teachers in the Outer Zone

X_1 = Mean of Score (the first group)

SD_1 = Standard Deviation (the first group)

R_1 = Rank of Order (the first group)

N_1 = Total number of the first group

X_2 = Mean of Score (the second group)

SD_2 = Standard Deviation (the second group)

R_2 = Rank of Order (the second group)

N_2 = Total number of the second group

I = Healthful School Environment

1 = Physical Aspects

1.1 = Providing for clean, neat and safe school buildings

1.2 = Providing classrooms to serve students' health needs

1.3 = Providing adequate playground and play equipment for the students

1.4 = Providing for a clean and neat school vicinity

2 = Psychological Aspects

2.1 = Providing interesting activities in order to promote the students' mental health

2.2 = Providing recreation areas for the students

2.3 = Encouraging the teacher to provide for a good rapport to exist between the teacher and the students (i.e. students should feel free to express themselves)

2.4 = Creating good relationships among school personnel

3 = General Sanitation Aspects

3.1 = Providing for an adequate number of clean water supply stations (i.e. drinking fountains, wash areas).

3.2 = Providing an adequate number of rest rooms for both male and female students

3.3 = Encouraging students regularly to take responsibility for the clean classrooms

3.4 = Providing for sanitary garbage disposal of school buildings and places in the near vicinity of the school

II = School Health Services

4 = Health Appraisal and Follow-Up Aspects

4.1 = Requesting the teaching staff to inspect students' health on a regular basis

4.2 = Providing for a periodic health examination of all students

4.3 = Requiring that students' health be recorded regularly

4.4 = Following-up on health and medical appraisals

5 = Prevention and Control of Communicable Disease Aspects

5.1 - Conducting health examinations regularly for detecting illness of the sick students

5.2 = Isolating the sick student from others

5.3 = Providing an immunization program for contagious diseases (i.e. diphtheria, pertussis, tetanus)

5.4 = Providing elimination of diseases and animal reservoirs

6. = Health Promotion Aspects

6.1 = Providing for a nutritional school lunch program

6.2 = Presenting a school accident prevention program for all students

6.3 = Providing personal health counseling for students who need it

6.4 = Providing first-aid for injuries received at school and for the ill student

III = Curriculum and Learning-Teaching

7 = Curriculum

7.1 = Requiring that health content in the life experience subjects group be taught completely

7.2 = Improving the curriculum on the basis of local health problems and needs

7.3 = Requiring using integrated lesson plans of health content in the life experience subjects group

7.4 = Requiring that learning-teaching process be as important as health content

8 = Learning-Teaching

8.1 = Requiring that every student participate in the learning-teaching activities

8.2 = Providing learning-teaching activities in order to attain learning objectives of each lesson

8.3 = Providing suitable learning-teaching methods or activities for each subject or activity taught

8.4 = Selecting appropriate learning-teaching media for each lesson

9 = Special Activities

9.1 = Providing and preparing a health exhibition for supplementing learning-teaching activities

9.2 = Organizing a sample project of developing a health environment for the benefit of all students

9.3 = Arranging for a week of education concerning "Prevention of Dental Diseases"

9.4 = Providing special activities for aiding health defected students

IV = School Health Personnel

10 = Health Personnel

10.1 = Providing a teacher or a school nurse to occupy the health room

10.2 = Providing health education in-service training programs for the teachers

10.3 = Providing activities related to health and safety promotion for all school personnel

10.4 = Setting up a committee to organize and administer school health programs

V = The Relationship between School and Community

11 = School and Community

11.1 = Utilizing various agencies or organizations for participating in planning of developing students' health

11.2 = Providing a health education supervisor to advise the school health programs

11.3 = Encouraging participation of parents or guardians in school health matters and activities

11.4 = Requiring that the school participate in promoting public health activities

* = Significant difference at $p \leq 0.05$ level (t_{∞}, .025 = 1.960)

The Perceptual Comparison of the Principals in the Inner and the Outer Zones with Respect to the Elementary School Health Programs

Hypothesis 1: There was no significant difference between the perceptions of the principals in the inner and the outer zones with respect to the elementary school health programs.

Table 2 shows there were 87 principals in the inner zone and 177 principals in the outer zone.

Table 8

Means, Standard Deviations, Ranks of Order and t-value of Principals in the Inner and the Outer Zones (p_1 : p_2)

$N_1 = 87$, $N_2 = 177$

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
I.	Healthful School Environment:							
	1. Physical Aspects							
	1.1	3.4253	1	0.884	3.4124	1	0.822	0.12
	1.2	2.7241	2	0.845	2.7627	2	0.879	-0.34
	1.3	1.3333	4	0.742	1.3503	4	0.708	-0.18
	1.4	2.5172	3	0.847	2.4746	3	0.917	0.36
	2. Psychological Aspects							
	2.1	2.3218	3	1.040	2.2429	3	1.041	0.58
	2.2	2.0345	4	1.039	2.1073	4	1.025	-0.54
	2.3	3.1034	1	0.903	3.0282	1	0.962	0.61
	2.4	2.5402	2	1.209	2.6215	2	1.205	-0.51
	3. General Sanitation Aspects							
	3.1	3.3793	1	0.810	3.4802	1	0.805	-0.95
	3.2	3.0230	2	0.862	2.8983	2	0.805	1.15
	3.3	1.8966	3	0.822	1.9718	3	0.932	-0.64
	6.4	1.7011	4	0.954	1.6497	4	0.854	0.44
II.	School Health Services:							
	4. Health Appraisal and Follow-Up Aspects							
	4.1	3.1494	1	1.167	3.3785	1	1.021	-1.63
	4.2	2.5632	3	0.961	2.6045	2	0.880	-0.35
	4.3	2.7471	2	0.781	2.5819	3	0.870	1.50
	4.4	1.5402	4	0.860	1.4350	4	0.721	1.04

Table 8 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
5.	Prevention and Control of Communicable Disease Aspects							
	5.1	2.2529	3	1.003	2.2938	2	0.985	-0.32
	5.2	1.8276	4	0.795	2.0226	4	0.904	-1.71
	5.3	3.5057	1	0.901	3.4294	1	0.952	0.62
	5.4	2.4138	2	1.029	2.2542	3	1.065	1.16
6.	Health Promotion Aspects							
	6.1	3.6667	1	0.676	3.5254	1	0.886	1.43
	6.2	2.3908	2	0.854	2.4915	2	0.813	-0.93
	6.3	2.1609	3	1.022	2.0678	3	1.058	0.68
	6.4	1.7816	4	0.895	1.9153	4	0.935	-1.11
III.	Curriculum and Learning-Teaching:							
7.	Curriculum							
	7.1	2.5517	2	1.255	2.7401	2	1.197	-1.18
	7.2	2.6897	1	1.184	2.7458	1	1.132	-0.37
	7.3	2.2529	4	0.892	2.2994	3	0.927	-0.39
	7.4	2.5057	3	1.088	2.2147	4	1.102	2.03*
8.	Learning-Teaching							
	8.1	3.3103	1	1.060	3.1751	1	1.137	0.93
	8.2	1.9770	4	1.151	2.1638	4	1.129	-1.26
	8.3	2.3678	2	0.891	2.4633	2	0.892	-0.82
	8.4	2.3448	3	0.913	2.1977	3	1.000	1.16
9.	Special Activities							
	9.1	2.9195	1	1.037	3.1412	1	0.952	-1.73
	9.2	2.8506	2	1.062	2.7966	2	1.073	0.39
	9.3	2.2989	3	1.080	2.3390	3	1.005	-0.30
	9.4	1.9195	4	1.003	1.7232	4	0.909	1.59

Table 8 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
IV.	School Health Personnel:							
	10. Health Personnel							
	10.1	2.5402	2	1.256	2.8192	1	1.168	-1.78
	10.2	2.3103	4	0.992	2.3446	3	1.066	-0.25
	10.3	2.3678	3	0.954	2.2147	4	0.977	1.21
	10.4	2.7816	1	1.205	2.6215	2	1.162	1.04
V.	The Relationship between School and Community:							
	11. School and Community							
	11.1	2.5862	2	1.177	2.5424	2	1.153	0.29
	11.2	2.2529	3	1.037	2.1243	4	1.080	0.92
	11.3	3.0460	1	0.987	3.0452	1	0.928	0.01
	11.4	2.1149	4	1.050	2.2881	3	1.088	-1.23

Table 8 indicates there was no significant difference at $p \leq 0.05$ level between the perceptions of the principals in the inner and the outer zones with respect to the elementary school health programs, except one choice had significant difference (as shown in Table 9).

Table 9

Ranks of Order and t-value of Principals Regarding Curriculum

Item	$R_1(P_1)$	$R_2(P_2)$	t-value
7. Curriculum:			
7.1 Requiring that health content in the life experience subjects group be taught completely	2	2	-1.18
7.2 Improving the curriculum on the basis of local health problems and needs	1	1	-0.37
7.3 Requiring using integrated lesson plans of health content in the life experience subjects group	4	3	-0.39
7.4 Requiring that learning-teaching process be as important as health content	3	4	2.03*

The choice on "Requiring that learning-teaching process be as important as health content" was ranked on number 3 and number 4 by principals from the inner and the outer zones respectively. Possible reasons follow:

Working Experience

From Table 4, principals in the inner zone had more experience than those in the outer zone regarding administrative or supervisory working experience (ranged from 15 to 19 years and from five to nine years respectively). Therefore, principals in the

inner zone might see that both methods of teaching and health content were very important for developing learning-teaching.

The Readiness of Schools

Principals in the inner zone might realize that schools in the inner zone took more advantage of readiness than schools in the outer zone. Readiness for the following factors could be considered.

- Learning-teaching materials or media
- Team working cooperation among teachers
- Local academic resources

The Perceptual Comparison of the Teachers in the Inner and the Outer Zones with Respect to the Elementary School Health Programs

Hypothesis 2: There was no significant difference between the perceptions of the teachers in the inner and the outer zones with respect to the elementary school health programs.

The subjects used in these two groups were 105 teachers in the inner zone and 216 teachers in the outer zone. The table below presents means, standard deviations, ranks of order and t-value of teachers in both zones.

Table 10

Means, Standard Deviations, Ranks of Order and t-value of Teachers in the Inner and the Outer Zones (T_1 : T_2)

N_1 = 105, N_2 = 216

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
I.	Healthful School Environment:							
	1. Physical Aspects							
	1.1	3.1619	1	0.992	3.3981	1	0.783	-2.14*
	1.2	3.0000	2	0.899	2.8565	2	0.931	1.31
	1.3	1.5143	4	0.845	1.3148	4	0.635	2.14*
	1.4	2.3238	3	0.915	2.4306	3	0.886	-1.00
	2. Psychological Aspects							
	2.1	2.5429	2	1.029	2.3843	2	1.019	1.30
	2.2	2.3143	3	1.121	2.2546	3	1.014	0.48
	2.3	3.0857	1	0.911	3.1389	1	0.940	-0.48
	2.4	2.0571	4	1.150	2.2222	4	1.230	-1.15
	3. General Sanitation Aspects							
	3.1	3.3524	1	0.866	3.3333	1	0.852	0.19
	3.2	2.9238	2	0.851	2.8935	2	0.885	0.29
	3.3	2.1143	3	0.984	2.0880	3	1.042	0.22
	3.4	1.6095	4	0.860	1.6852	4	0.859	-0.74
II.	School Health Services:							
	4. Health Appraisal and Follow-Up Aspects							
	4.1	2.8571	1	1.164	3.1065	1	1.138	-1.83
	4.2	2.8286	2	0.975	2.8056	2	0.974	0.20
	4.3	2.5333	3	1.084	2.3750	3	0.942	1.34
	4.4	1.7810	4	0.899	1.7130	4	0.890	0.64

Table 10 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
5.	Prevention and Control of Communicable Disease Aspects							
	5.1	2.2857	3	0.968	2.3102	3	0.965	-0.21
	5.2	1.7238	4	0.882	1.7361	4	0.807	-0.12
	5.3	3.4190	1	0.948	3.4259	1	0.865	-0.06
	5.4	2.5714	2	0.959	2.5278	2	1.099	0.35
6.	Health Promotion Aspects							
	6.1	3.5143	1	0.911	3.6944	1	0.708	-1.78
	6.2	2.2381	3	0.946	2.0880	4	0.844	1.44
	6.3	1.9905	4	1.005	2.0972	3	1.014	-0.89
	6.4	2.2571	2	0.941	2.1204	2	0.932	1.23
III.	Curriculum and Learning-Teaching:							
7.	Curriculum							
	7.1	2.5429	2	1.193	2.4491	3	1.211	0.65
	7.2	2.9333	1	1.085	3.0231	1	1.102	-0.69
	7.3	2.3429	3	1.027	2.4907	2	0.894	-1.32
	7.4	2.1810	4	1.036	2.0370	4	1.025	1.18
8.	Learning-Teaching							
	8.1	3.0095	1	1.181	3.1991	1	1.053	-1.45
	8.2	1.8952	4	1.117	1.9398	4	1.133	-0.33
	8.3	2.6571	2	0.918	2.5278	2	0.884	1.22
	8.4	2.4381	3	0.950	2.3333	3	1.007	0.89
9.	Special Activities							
	9.1	2.9333	1	1.040	3.0370	1	0.954	-0.89
	9.2	2.6667	2	1.053	2.8796	2	1.014	-1.74
	9.3	2.3714	3	1.085	2.2917	3	1.004	0.65
	9.4	2.0286	4	1.105	1.7917	4	1.047	1.87

Table 10 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
IV.	School Health Personnel:							
	10. Health Personnel							
	10.1	2.7238	1	1.221	2.8519	1	1.184	-0.90
	10.2	2.5333	2	1.057	2.5231	2	1.016	0.08
	10.3	2.2952	4	1.055	2.2130	4	1.007	0.68
	10.4	2.4476	3	1.109	2.4120	3	1.166	0.26
V.	The Relationship between School and Community:							
	11. School and Community							
	11.1	2.5810	2	1.081	2.4815	2	1.078	0.77
	11.2	2.2571	3	1.110	2.1667	4	1.078	0.70
	11.3	2.9714	1	1.004	3.0370	1	1.043	-0.54
	11.4	2.1905	4	1.119	2.3148	3	1.084	-0.95

Table 10 indicates that most perceptions of teachers in the inner and the outer zones with respect to the elementary school health programs were not significantly different at $p \leq 0.05$ level, only the following two choices were found significantly different.

Table 11

Ranks of Order and t-value of Teachers in the Inner and Outer Zones Regarding Physical Aspects

Item	$R_1(T_1)$	$R_2(T_2)$	t-value
1. Physical Aspects:			
1.1 Providing for clean, neat and safe school buildings	1	1	-2.14*
1.2 Providing classrooms to serve students' health needs	2	2	1.31

Table 11 Cont.

Item	$R_1(T_1)$	$R_2(T_2)$	t-value
1.3 Providing adequate playground and play equipment for the students	4	4	2.14*
1.4 Providing for a clean and neat school vicinity	3	3	-1.00

Table 11 shows the choice on "Providing for clean, neat and safe school buildings" was found significantly different. The reason might be related to the budget. The distribution of budget to each school might limit the provisions for school buildings. Each school might set the priority of providing school buildings differently.

Teachers in the inner and the outer zones perceived differently on the choice of "Providing adequate playground and play equipment for the students." The reasons might be that most schools in the inner zone had less school ground area than those in the outer zone. Teachers in the inner zone might need more playground and play equipment for the benefit of students.

The Perceptual Comparison of the Total Principals and the Total Teachers With Respect to the Elementary School Health Programs

Hypothesis 3: There was no significant difference between the perceptions of the total principals and the total teachers with respect to the elementary school health programs.

There were 264 principals and 321 teachers in the study sample.

Table 12

Means, Standard Deviations, Ranks of Order and t-value of Principals and Teachers (P : T)

$N_1 = 264$, $N_2 = 321$

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
I.	Healthful School Environment:							
	1. Physical Aspects							
	1.1	3.4167	1	0.841	3.3209	1	0.862	1.35
	1.2	2.7500	2	0.867	2.9034	2	0.922	-1.95
	1.3	1.3447	4	0.718	1.3801	4	0.715	-0.59
	1.4	2.4886	3	0.894	2.3956	3	0.896	1.25
	2. Psychological Aspects							
	2.1	2.2689	3	1.039	2.4361	2	1.023	-1.95
	2.2	2.0833	4	1.028	2.2741	3	1.049	-2.21*
	2.3	3.0530	1	0.942	3.1215	1	0.929	-0.88
	2.4	2.5947	2	1.205	2.1682	4	1.205	4.26*
	3. General Sanitation Aspects							
	3.1	3.4470	1	0.807	3.3396	1	0.855	1.55
	3.2	2.9394	2	0.825	2.9034	2	0.873	0.51
	3.3	1.9470	3	0.896	2.0966	3	1.022	-1.89
	3.4	1.6667	4	0.886	1.6604	4	0.859	0.09
II.	School Health Services:							
	4. Health Appraisal and Follow-Up Aspects							
	4.1	3.3030	1	1.075	3.0249	1	1.151	3.00*
	4.2	2.5909	3	0.906	2.8131	2	0.973	-2.84*
	4.3	2.6364	2	0.843	2.4268	3	0.991	2.76*
	4.4	1.4697	4	0.770	1.7352	4	0.892	-3.86*

Table 12 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
5.	Prevention and Control of Communicable Disease Aspects							
	5.1	2.2803	3	0.989	2.3022	3	0.965	-0.27
	5.2	1.9583	4	0.873	1.7321	4	0.831	1.95
	5.3	3.4545	1	0.934	3.4237	1	0.892	0.41
	5.4	2.3068	2	1.054	2.5421	2	1.054	1.84
6.	Health Promotion Aspects							
	6.1	3.5720	1	0.824	3.6355	1	0.783	-0.95
	6.2	2.4583	2	0.826	2.1371	3	0.880	4.52*
	6.3	2.0985	3	1.045	2.0623	4	1.010	0.42
	6.4	1.8712	4	0.922	2.1651	2	0.936	-3.80*
III.	Curriculum and Learning-Teaching:							
7.	Curriculum							
	7.1	2.6780	2	1.217	2.4798	2	1.204	1.94
	7.2	2.7273	1	1.148	2.9938	1	1.095	-1.89
	7.3	2.2841	4	0.914	2.4424	3	0.941	-2.05*
	7.4	2.3106	3	1.104	2.0841	4	1.029	2.56*
8.	Learning-Teaching							
	8.1	3.2197	1	1.112	3.1371	1	1.098	0.90
	8.2	2.1023	4	1.137	1.9252	4	1.127	1.88
	8.3	2.4318	2	0.891	2.5701	2	0.896	-1.86
	8.4	2.2462	3	0.973	2.3676	3	0.988	-1.49
9.	Special Activities							
	9.1	3.0682	1	0.984	3.0031	1	0.983	0.80
	9.2	2.8144	2	1.068	2.8100	2	1.030	0.05
	9.3	2.3258	3	1.028	2.3178	3	1.030	0.09
	9.4	1.7879	4	0.944	1.8692	4	1.070	-0.98

Table 12 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
IV.	School Health Personnel:							
	10. Health Personnel							
	10.1	2.7273	1	1.203	2.8100	1	1.196	-0.83
	10.2	2.3333	3	1.040	2.5265	2	1.028	-2.25*
	10.3	2.2652	4	0.970	2.2399	4	1.022	0.30
	10.4	2.6742	2	1.176	2.4237	3	1.146	2.60*
V.	The Relationship between School and Community:							
	11. School and Community							
	11.1	2.5568	2	1.159	2.5140	2	1.078	0.46
	11.2	2.1667	4	1.066	2.1963	4	1.088	-0.33
	11.3	3.0455	1	0.946	3.0156	1	1.029	0.36
	11.4	2.2311	3	1.077	2.2741	3	1.095	-0.48

Table 12 indicates that principals and teachers perceived the importance of the organization of school health programs to be significantly different at $p \leq 0.05$ level as follows:

Healthful School Environment: Psychological Aspects

Under this item, two choices were found to be significantly different at $p \leq 0.05$ level. Table 13 shows the details.

Table 13

Ranks of Order and t-value of Principals and Teachers Regarding Psychological Aspects

Item	R_1(P)	R_2(T)	t-value
2. Psychological Aspects:			
2.1 Providing interesting activities in order to promote the students' mental health	3	2	-1.95
2.2 Providing recreation areas for the students	4	3	-2.21*
2.3 Encouraging the teacher to provide for a good rapport to exist between the teacher and the students	1	1	-0.88
2.4 Creating good relationships among school personnel	2	4	4.26*

The perceptions of teachers and principals with respect to "Providing recreation areas for the students" were significantly different at $p \leq 0.05$ level. Since recreation could help the students relax or reduce tension, teachers ranked providing recreation areas for the benefit of their students more important than principals did. The principals might be more concerned with administrative tasks than with the students' problems, and they might think other school environments had been provided (such as school field, planting, and building decoration) which could promote students' mental health. They paid more attention to administrative affairs.

For the choice on "Creating good relationships among school personnel", principals ranked number 2 while teachers ranked number 4. The reasons might be that the principals emphasized the cooperation and unity of school personnel for the purposes of ease and convenience of administrative work. Teachers were responsible more directly for students, so they gave more attention to children's mental health than other affairs.

School Health Services:

Health Appraisal and Follow-Up Aspects

The perceptions of the principals and the teachers were obviously and significantly different on this item.

Table 14

Ranks of Order and t-value of Principals and Teachers Regarding Health Appraisal and Follow-Up Aspects

Item	R_1(P)	R_2(T)	t-value
4. Health Appraisal and Follow-Up Aspects:			
4.1 Requesting the teaching staff to inspect students' health on a regular basis	1	1	3.00*
4.2 Providing for a periodic health examination of all students	3	2	-2.84*
4.3 Requiring that students' health be recorded regularly	2	3	2.76*
4.4 Following-up on health and medical appraisals	4	4	-3.86*

The principals and teachers perceived differently on the choice of "Requesting the teaching staff to inspect students' health on a regular basis." Many teachers might neglect to inspect students' health. They might acknowledge its importance, but they might think the health inspection wasted the students' learning time.

For the choice on "Providing for a periodic health examination of all students", teachers ranked it more important than principals did. The reasons might be that teachers daily inspected students' health, and they faced the problems of students' health, so they might feel a need for some physicians or public health personnel to proceed on students' health examinations (in accordance with Tesabamrung's study, 1987, p. 60).

The principals realized that health record could serve as basic information for health examination. Since many teachers had the problems of recording, keeping and using health record properly (Somprayoon, 1983, p. 37), the principals ranked health record as second importance of health appraisal and follow-up aspects.

The choice on "Following-up on health and medical appraisals" was found significantly different. The principal might find the problems of prevention and control of communicable diseases still existed in many schools (Somprayoon, 1983, p. 36). The following-up on health and medical appraisals could be one method of solving such problems. The teachers could realize its importance, but they might complain that they did not have much time because they had other school activities.

Health Promotion Aspects

There were two choices found significantly different.

Table 15

Ranks of Order and t-value of Principals and Teachers Regarding Health Promotion Aspects

Item	R_1(P)	R_2(T)	t-value
6. Health Promotion Aspects:			
6.1 Providing for a nutritional school lunch program	1	1	-0.95
6.2 Presenting a school accident prevention program for all students	2	3	4.52*
6.3 Providing personal health counseling for students that need it	3	4	0.42
6.4 Providing first-aid for injuries received at school and for the ill student	4	2	-3.80*

Since accidents rated as the second leading cause of death, after heart diseases (31.8 per 100,000 population: data from Public Health, Ministry, 1986, p. 17), the accident prevention program was one of the urgent issues to be campaigned for with the public and in schools. Principals took responsibility for school safety and received such policy, therefore, they selected "Presenting a school accident prevention program for all students" as of second importance in promoting health.

In the aspects of "Providing first-aid for injuries received at school and for the ill student", teachers had to take care of students' health directly. They were confronted with the sick. They should regard providing first aid in school much more than the principals.

Curriculum and Learning-Teaching: Curriculum

In this aspect, the perceptions of principals and teachers were significantly different at $p \leq 0.05$ level on two choices as Table 16 shows.

Table 16

Ranks of Order and t-value of Principals and Teachers Regarding Curriculum

Item	R_1(P)	R_2(T)	t-value
7. Curriculum:			
7.1 Requiring that health content in the life experience subjects group be taught completely	2	2	1.94
7.2 Improving the curriculum on the basis of local health problems and needs	1	1	-1.89
7.3 Requiring using integrated lesson plans of health content in the life experience subjects group	4	3	-2.05*
7.4 Requiring that learning-teaching process be as important as health content	3	4	2.56*

The perceptions of principals and teachers with respect to the choices of "Requiring using integrated lesson plans of health content in the life experience subjects group" and "Requiring that learning-teaching process be as important as health content" were alternately ranked. According to the principals, they might concentrate on the general principle, and they received the policy from Office of Education under the Jurisdiction of Bangkok Metropolis, so they had to rank the learning-teaching process prior to the lesson plan. For the teachers, they took charge of the users or consumers of the curriculum. Undoubtedly, they had to consider the integrated lesson plans of health content for teaching guidelines before selecting the methods of teaching.

School Health Personnel: Health Personnel

The perceptions of principals and teachers were significantly different in two choices under this aspect.

Table 17

Ranks of Order and t-value of Principals and Teachers Regarding Health Personnel

Item	R_1(P)	R_2(T)	t-value
10. Health Personnel:			
10.1 Providing a teacher or a school nurse to occupy the health room	1	1	-0.83
10.2 Providing health education in-service training programs for the teachers	3	2	-2.25*

Table 17 Cont.

	Item	R_1(P)	R_2(T)	t-value
10.3	Providing activities related to health and safety promotion for all school personnel	4	4	0.30
10.4	Setting up a committee to organize and administer school health programs	2	3	2.60*

Teachers weighed the choice on "Providing health education in-service training programs for the teachers" much more than the principals. The reasons might be due to the needs and the direct involvement of teachers. For the sake of solving the problems of learning-teaching and increasing their knowledge, the teachers put the in-service training programs in the second place of importance. Principals' roles were dependent on administration. They might consider the cooperation of the personnel or committee beforehand.

The Perceptual Comparison of the Experts and the Principals With Respect to the Elementary School Health Programs

Hypothesis 4: There was no significant difference between the perceptions of the experts and the principals with respect to the elementary school health programs.

There were 19 experts and 264 principals in this study.

Table 18

Means, Standard Deviations, Ranks of Order and t-value of Experts and Principals (E : P)

$N_1 = 19$, $N_2 = 264$

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
I.	Healthful School Environment:							
	1. Physical Aspects							
	1.1	3.0526	2	1.026	3.4167	1	0.841	-1.79
	1.2	3.3684	1	0.831	2.7500	2	0.867	3.01*
	1.3	1.4211	4	0.507	1.3447	4	0.718	0.45
	1.4	2.1579	3	0.898	2.4886	3	0.894	-1.56
	2. Psychological Aspects							
	2.1	2.3158	2	1.057	2.2689	3	1.039	0.19
	2.2	2.1053	4	0.994	2.0833	4	1.028	0.09
	2.3	3.3684	1	0.895	3.0530	1	0.942	1.41
	2.4	2.2105	3	1.134	2.5947	2	1.205	-1.35
	3. General Sanitation Aspects							
	3.1	3.5263	1	0.772	3.4470	1	0.807	0.42
	3.2	3.0526	2	0.705	2.9394	2	0.825	0.58
	3.3	1.6316	4	0.955	1.9470	3	0.896	-1.48
	3.4	1.7895	3	0.713	1.6667	4	0.886	0.59
II.	School Health Services:							
	4. Health Appraisal and Follow-Up Aspects							
	4.1	3.6316	1	0.761	3.3030	1	1.075	1.31
	4.2	2.4737	2	0.841	2.5909	3	0.906	-0.55
	4.3	2.2105	3	1.032	2.6364	2	0.843	-2.09
	4.4	1.6842	4	0.885	1.4697	4	0.770	1.16
	5. Prevention and Control of Communicable Disease Aspects							
	5.1	2.2105	2	0.918	2.2803	3	0.989	-0.30
	5.2	1.9474	4	0.970	1.9583	4	0.873	-0.05

Table 18 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
	5.3	3.6842	1	0.749	3.4545	1	0.934	1.05
	5.4	2.1579	3	0.958	2.3068	2	1.054	-0.60
6.	Health Promotion Aspects							
	6.1	3.2105	1	0.918	3.5720	1	0.824	-1.83
	6.2	2.5263	(2)	0.841	2.4583	2	0.826	0.35
	6.3	1.7368	4	1.098	2.0985	3	1.045	-1.45
	6.4	2.5263	(2)	1.172	1.8712	4	0.922	2.93*
III.	Curriculum and Learning-Teaching:							
7.	Curriculum							
	7.1	1.6316	4	1.116	2.6780	2	1.217	-3.64*
	7.2	3.3158	1	0.820	2.7273	1	1.148	1.95
	7.3	2.3684	3	0.895	2.2841	4	0.914	0.39
	7.4	2.6842	2	1.003	2.3106	3	1.104	1.43
8.	Learning-Teaching							
	8.1	2.9474	2	1.026	3.2197	1	1.112	-1.04
	8.2	3.2105	1	1.182	2.1023	4	1.137	4.09*
	8.3	2.4737	3	0.612	2.4318	2	0.891	0.20
	8.4	1.3684	4	0.597	2.2462	3	0.973	-5.87*
9.	Special Activities							
	9.1	2.9474	2	0.911	3.0682	1	0.984	-0.52
	9.2	3.4737	1	0.905	2.8144	2	1.068	2.62*
	9.3	1.6842	4	0.671	2.3258	3	1.028	-3.85
	9.4	1.8947	3	0.937	1.7879	4	0.944	0.48
IV.	School Health Personnel:							
10.	Health Personnel							
	10.1	2.3158	2	1.057	2.7273	1	1.203	-1.45
	10.2	2.2105	3	0.976	2.3333	3	1.040	-0.50
	10.3	2.1053	4	1.150	2.2652	4	0.970	-0.69
	10.4	3.3684	1	0.895	2.6742	2	1.176	2.52*

Table 18 Cont.

Item	X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
V. The Relationship between School and Community:							
11. School and Community							
11.1	3.0526	2	1.129	2.5568	2	1.159	1.80
11.2	2.0000	3	1.054	2.1667	4	1.066	-0.66
11.3	3.2105	1	0.787	3.0455	1	0.946	0.74
11.4	1.7368	4	0.733	2.2311	3	1.077	-1.97

The table above shows that there were significant differences between the perceptions of experts and principals with respect to the school health programs at $p \leq 0.05$ level.

Healthful School Environment: Physical Aspects

Only one choice in this aspect indicated significant difference. Table 19 presents ranks of order and t-value of experts and principals with respect to physical aspects.

Table 19

Ranks of Order and t-value of Experts and Principals Regarding Physical Aspects

Item	R_1(E)	R_2(P)	t-value
2. Physical Aspects:			
1.1 Providing for clean, neat and safe school buildings	2	1	-1.79
1.2 Providing classrooms to serve students' health needs	1	2	3.01*

Table 19 Cont.

Item	R_1(E)	R_2(P)	t-value
1.3 Providing adequate playground and play equipment for the students	4	4	0.45
1.4 Providing for a clean and neat school vicinity	3	3	-1.56

Experts ranked "Providing classrooms to serve students' health needs" as of first importance while principals ranked it as the second one. Experts might be aware of the advantages for students and stressed a student-centered method of learning-teaching in the classroom. Principals might place first priority on school administration. They considered the importance of school buildings (ranked number 1) and then focused on the classroom (ranked number 2). This might be due to the requirement of being a precedent school and also to keep on the administrative criteria of outstanding standard schools as required by the Office of Education, Bangkok Metropolis (Office of Education, 1987, p. 11).

School Health Services: Health Promotion Aspects

The perceptions of experts and principals were significantly different at $p \leq 0.05$ level on the choice of "Providing first-aid for injuries received at school and for the ill student."

Table 20

Ranks of Order and t-value of Experts and Principals Regarding Health Promotion Aspects

Item	R_1(E)	R_2(P)	t-value
6. Health Promotion Aspects:			
6.1 Providing for a nutritional school lunch program	1	1	-1.83
6.2 Presenting a school accident prevention program for all students	(2)	2	0.35
6.3 Providing personal health counseling for students who need it	4	3	-1.45
6.4 Providing first-aid for injuries received at school and for the ill student	(2)	4	2.93*

The experts ranked the importance of presenting a school accident prevention program and providing first-aid in school in the same order (ranked number 2). The reason might be that experts realized the regular occurrence of school accidents. A school accident prevention program and first-aid should be provided together. The principals might consider providing first-aid as being problem-solving for injuries and sickness, so ranked it last in order of importance.

Curriculum and Learning-Teaching: Curriculum

Under this aspect, the experts and principals perceived differently and significantly at $p \leq 0.05$ level on the choice of "Requiring that health content in the life experience subjects group be taught completely."

Table 21

Ranks of Order and t-value of Experts and Principals Regarding Curriculum

Item	R_1(E)	R_2(P)	t-value
7. Curriculum:			
7.1 Requiring that health content in the life experience subjects group be taught completely	4	2	-3.64*
7.2 Improving the curriculum on the basis of local health problems and needs	1	1	1.95
7.3 Requiring using integrated lesson plans of health content in the life experience subjects group	3	4	0.39
7.4 Requiring that learning-teaching process be as important as health content	2	3	1.43

Table 21 indicates experts' ranking in the order of importance concerning curriculum was based on the process of developing and applying the curriculum. Principals ranked "Requiring that health content in the life experience subjects group

be taught completely" more important than experts. Principals might concentrate on the educational policies of the Office of Education, Bangkok Metropolis; and also understand that the life experience subjects group was the essential core of the whole curriculum. They played the roles of administration and supervision, so they had to keep track that the health content was taught completely in accordance with the curriculum.

Learning-Teaching

There were two choices found significantly different in the aspect of learning-teaching.

Table 22

Ranks of Order and t-value of Experts and Principals Regarding Learning-Teaching

Item	R_1(E)	R_2(P)	t-value
8. Learning-Teaching:			
8.1 Requiring that every student participate in the learning-teaching activities	2	1	-1.04
8.2 Providing learning-teaching activities in order to attain learning objectives of each lesson	1	4	4.09*
8.3 Providing suitable learning-teaching methods or activities for each subject or activity taught	3	2	0.20
8.4 Selecting appropriate learning-teaching media for each lesson	4	3	-5.87*

Table 22 shows that the choice on "Providing learning-teaching activities in order to attain learning objectives of each lesson" was ranked first by the experts. Experts considered the academic principles and the national curriculum. According to the elementary school curriculum, 1978 (Education, Ministry, 1987, p. 3), the curriculum was emphasized in Teaching by Objectives (TBO) and Management by Objectives (MBO). The elementary school curriculum had been used for ten years. The principals might be familiar with it. They paid more attention to confronting problems in regard to learning-teaching activities. Since the problems of learning-teaching were related to the classroom activities, the insufficiency of media, and the inappropriate use of learning-teaching media; the principals should rank "Selecting appropriate learning-teaching media for each lesson" as of third importance and "Providing learning-teaching activities in order to attain learning objectives of each lesson" as of last importance. As for the experts, they gave less importance to "Selecting appropriate learning-teaching media for each lesson"; the reason might be that it did not concern them directly.

Special Activities

The experts and principals perceived significantly and differently regarding "Organizing a sample project of developing a health environment for the benefit of all students." Table 23 indicates ranks of order and t-value of both groups concerning this aspect.

Table 23

Ranks of Order and t-value of Experts and Principals Regarding Special Activities

Item	R_1(E)	R_2(P)	t-value
9. Special Activities:			
9.1 Providing and preparing a health exhibition for supplementing learning-teaching activities	2	1	-0.52
9.2 Organizing a sample project of developing a health environment for the benefit of all students	1	2	2.62*
9.3 Arranging for a week of education concerning "Prevention of Dental Diseases"	4	3	-3.85
9.4 Providing special activities for aiding health defected students	3	4	0.48

The choice on "Organizing a sample project of developing a health environment for the benefit of all students" was ranked number 1 and 2 by the experts and principals respectively. Experts might realize how important the environment was. They perused the educational principles to be the interaction between the learner and environment, and everyone learned from the environment all the time (Somprayoon, 1982, p. 35). Organizing a project of developing a health environment should be put in the first priority. In school, most activities concerning health environment and other subjects

except health education subject had been provided. Therefore the principals ranked "Organizing a project of developing a health environment" next to "Providing a health exhibition."

School Health Personnel: Health Personnel

In this aspect, experts and principals ranked in order of the importance regarding "Setting up a committee to organize and administer school health programs" alternately (ranked number 1 and 2 respectively). The details appear in Table 24.

Table 24

Ranks of Order and t-value of Experts and Principals Regarding Health Personnel

Item	R_1(E)	R_2(P)	t-value
10. Health Personnel:			
10.1 Providing a teacher or a school nurse to occupy the health room	2	1	-1.45
10.2 Providing health education in-service training programs for the teachers	3	3	-0.50
10.3 Providing activities related to health and safety promotion for all school personnel	4	4	-0.69
10.4 Setting up a committee to organize and administer school health programs	1	2	2.52*

Experts recognized that the effectiveness of the organization and administration of school health programs started from a committee who took part in administering and developing school health programs. Though a committee had been set up in many schools, it has not been functional yet. This problem might be due to the lack of working cooperation and the understanding of school health program administration among school personnel. Some schools did not set up a committee or a group of teachers to be responsible for school health services (Tesabamrung, 1987, p. 42).

The principals set "Providing a teacher or a school nurse to occupy the health room" as the first priority and "Setting up a committee to organize and administer school health programs" for the second priority. The principals might try to solve the problems involving school accidents and minor sickness.

The Perceptual Comparison of the Experts and the Teachers With Respect to the Elementary School Health Programs

Hypothesis 5: There was no significant difference between the perceptions of the experts and the teachers with respect to the elementary school health programs.

Nineteen experts and 321 teachers were the respondents used in this study. Table 12 indicates means, standard deviations, ranks of order, and t-value of experts and teachers with respect to school health programs.

Table 25

Means, Standard Deviations, Ranks of Order and t-value of Experts and Teachers (E : T)

$N_1 = 19$, $N_2 = 321$

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
I.	Healthful School Environment:							
	1. Physical Aspects							
	1.1	3.0526	2	1.026	3.3209	1	0.862	-1.30
	1.2	3.3684	1	0.831	2.9034	2	0.922	2.15*
	1.3	1.4211	4	0.507	1.3801	4	0.715	0.25
	1.4	2.1579	3	0.898	2.3956	3	0.896	-1.12
	2. Psychological Aspects							
	2.1	2.3158	2	1.057	2.4361	2	1.023	-0.50
	2.2	2.1053	4	0.994	2.2741	3	1.049	-0.68
	2.3	3.3684	1	0.895	3.1215	1	0.929	1.13
	2.4	2.2105	3	1.134	2.1682	4	1.205	0.15
	3. General Sanitation Aspects							
	3.1	3.5263	1	0.772	3.3396	1	0.855	0.93
	3.2	3.0526	2	0.705	2.9034	2	0.873	0.73
	3.3	1.6316	4	0.955	2.0966	3	1.022	-1.93
	3.4	1.7895	3	0.713	1.6604	4	0.859	0.64
II.	School Health Services:							
	4. Health Appraisal and Follow-Up Aspects							
	4.1	3.6316	1	0.761	3.0249	1	1.151	1.95
	4.2	2.4737	2	0.841	2.8131	2	0.973	-1.49
	4.3	2.2105	3	1.032	2.4268	3	0.991	-0.92
	4.4	1.6842	4	0.885	1.7352	4	0.892	-0.24
	5. Prevention and Control of Communicable Disease Aspects							
	5.1	2.2105	2	0.918	2.3022	3	0.965	-0.40
	5.2	1.9474	4	0.970	1.7321	4	0.831	1.09

Table 25 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
	5.3	3.6842	1	0.749	3.4237	1	0.892	1.25
	5.4	2.1579	3	0.958	2.5421	2	1.054	-1.55
6.	Health Promotion Aspects							
	6.1	3.2105	1	0.918	3.6355	1	0.783	-1.94
	6.2	2.5263	(2)	0.841	2.1371	3	0.880	1.88
	6.3	1.7368	4	1.098	2.0623	4	1.010	-1.36
	6.4	2.5263	(2)	1.172	2.1651	2	0.936	1.61
III.	Curriculum and Learning-Teaching:							
7.	Curriculum							
	7.1	1.6316	4	1.116	2.4798	2	1.204	-2.99*
	7.2	3.3158	1	0.820	2.9938	1	1.095	1.26
	7.3	2.3684	3	0.895	2.4424	3	0.941	-0.33
	7.4	2.6842	2	1.003	2.0841	4	1.029	2.47*
8.	Learning-Teaching							
	8.1	2.9474	2	1.026	3.1371	1	1.098	-0.73
	8.2	3.2105	1	1.182	1.9252	4	1.127	4.82*
	8.3	2.4737	3	0.612	2.5701	2	0.896	-0.46
	8.4	1.3684	4	0.597	2.3676	3	0.988	-6.76*
9.	Special Activities							
	9.1	2.9474	2	0.911	3.0031	1	0.983	-0.24
	9.2	3.4737	1	0.905	2.8100	2	1.030	2.75*
	9.3	1.6842	4	0.671	2.3178	3	1.030	-3.86*
	9.4	1.8947	3	0.937	1.8692	4	1.070	0.10
IV.	School Health Personnel:							
10.	Health Personnel							
	10.1	2.3158	2	1.057	2.8100	1	1.196	-1.76
	10.2	2.2105	3	0.976	2.5265	2	1.028	-1.31
	10.3	2.1053	4	1.150	2.2399	4	1.022	-0.55
	10.4	3.3684	1	0.895	2.4237	3	1.146	3.53*

Table 25 Cont.

Item	X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
V. The Relationship between School and Community:							
11. School and Community							
11.1	3.0526	2	1.129	2.5140	2	1.078	1.93
11.2	2.0000	3	1.054	2.1963	4	1.088	-0.77
11.3	3.2105	1	0.787	3.0156	1	1.029	0.81
11.4	1.7368	4	0.733	2.2741	3	1.095	-3.00*

Table 25 shows there were significant differences between the perceptions of experts and teachers with respect to the school health programs at $p \leq 0.05$ level. Details follow.

Healthful School Environment: Physical Aspects

The experts and teachers perceived differently and significantly only on the choice of "Providing classrooms to serve students' health needs." Table 26 presents ranks of order and t-value of both groups in regard to physical aspects.

Table 26

Ranks of Order and t-value of Experts and Teachers Regarding Physical Aspects

Item	R_1(E)	R_2(T)	t-value
1. Physical Aspects:			
1.1 Providing for clean, neat and safe school buildings	2	1	-1.30
1.2 Providing classrooms to serve students' health needs	1	2	2.15*

Table 26 Cont.

Item	R_1(E)	R_2(T)	t-value
1.3 Providing adequate playground and play equipment for the students	4	4	0.25
1.4 Providing for a clean and neat school vicinity	3	3	-1.12

Since the experts concentrated on the benefit for the students and tried to encourage schools to provide the student-centered method of learning-teaching in order to promote the effectiveness of learning-teaching, they set first priority on "Providing classrooms to serve students' health needs." The teachers might have provided classrooms to serve students' health needs in accordance with their roles and duties. They paid their attentions previously to the "Providing for clean, neat and safe school buildings" (rank number 1) so the environments both outside and inside the classrooms were in harmony and they could help reinforce the development of students' health.

Curriculum and Learning-Teaching: Curriculum

Table 27 presents the differences in the perceptions between the experts and teachers regarding curriculum.

Table 27

Ranks of Order and t-value of Experts and Teachers Regarding Curriculum

Item	R_1(E)	R_2(T)	t-value
7. Curriculum:			
7.1 Requiring that health content in the life experience subjects group be taught completely	4	2	-2.99*
7.2 Improving the curriculum on the basis of local health problems and needs	1	1	1.26
7.3 Requiring using integrated lesson plans of health content in the life experience subjects group	3	3	-0.33
7.4 Requiring that learning-teaching process be as important as health content	2	4	2.47*

The perceptions of experts and teachers regarding curriculum were significantly different at $p \leq 0.05$ level on two choices. They are "Requiring that health content in the life experience subjects group be taught completely" and "Requiring that learning-teaching process be as important as health content." Experts might emphasize academic theory and judge the importance of organizing curriculum on the basis of the processes of curriculum development and application. The teachers had to be conscious of using the curriculum because their teaching was usually supervised and

evaluated in accordance with the national curriculum. They might think they had provided various activities for the classroom and learning-teaching process could be flexible according to the events and needs. Consequently, the teachers had to pay more attention to the health content than the learning-teaching process (ranked number 2 and 4 respectively).

Learning-Teaching

In this aspect, the experts and teachers perceived differently and significantly on two choices.

Table 28

Ranks of Order and t-value of Experts and Teachers Regarding Learning-Teaching

Item	R_1(E)	R_2(T)	t-value
8. Learning-Teaching:			
8.1 Requiring that every student participate in the learning-teaching activities	2	1	-0.73
8.2 Providing learning-teaching activities in order to attain learning objectives of each lesson	1	4	4.82*
8.3 Providing suitable learning-teaching methods or activities for each subject or activity taught	3	2	-0.46
8.4 Selecting appropriate learning-teaching media for each lesson	4	3	-6.76*

The experts ranked "Providing learning-teaching activities in order to attain learning objectives of each lesson" as of first importance and Selecting appropriate learning-teaching media for each lesson" as of last importance. The reasons might be that they considered the elementary school curriculum (1978) which focused on the behavioral objectives or "Teaching by Objectives" (TBO) and "Management by Objectives" (MBO) (Education, Ministry, 1987, p. 3). They were not in the situation of learning-teaching, so they were not directly involved with the learning-teaching media.

The teachers might be aware of the problems and needs of the learning-teaching media, because they had been using the media and realized that the media could help more conveniently and effectively the learning-teaching in the classroom. For the choice on "Providing learning-teaching activities in order to attain learning objectives of each lesson", teachers knew they should provide them on a regular basis. Then they ranked the providing learning-teaching media prior to the providing learning-teaching activities to attain learning objectives of each lesson.

Special Activities

There were significant differences between the perceptions of experts and teachers regarding special activities at $p \leq 0.05$ level. Table 29 indicates the details.

Table 29

Ranks of Order and t-value of Experts and Teachers Regarding Special Activities

Item	R_1(E)	R_2(T)	t-value
9. Special Activities:			
9.1 Providing and preparing a health exhibition for supplementing learning-teaching activities	2	1	-0.24
9.2 Organizing a sample project of developing health environment for the benefit of all students	1	2	2.75*
9.3 Arranging for a week of education concerning "Prevention of Dental Diseases"	4	3	-3.86*
9.4 Providing special activities for aiding health defected students	3	4	0.10

The experts and teachers ranked in order of importance on the choices of "Organizing a sample project of developing a health environment for the benefit of all students" and "Providing and preparing a health exhibition for supplementary learning-teaching activities" alternately. The experts recognized how important the environment was, because students learned from the environment all the time. The organization of a project of developing health environment was a good sample for learning-teaching health in the classrooms which could help promote the positive health of students.

Teachers might realize that a health exhibition was an interesting activity for students, and it could help the students learn more effectively. Few schools provided health exhibitions because providing a health exhibition was side-line work and it seemed that many schools overlooked its importance.

"Arranging for a week of education concerning 'Prevention of Dental Diseases'", experts ranked as the last importance while teachers ranked it precedingly. The teachers might see the activity could supplement the learning-teaching in the classrooms by transferring health knowledge and experiences for the students more completely. By confronting problems of dental disease among school children, disease could be expected to decrease. The experts did not have direct contact with the students' problems. Some thought that the campaign of prevention of dental diseases had been organized by some government agencies (such as Ministry of Public Health) and "The Dental Association of Thailand."

School Health Personnel: Health Personnel

Only one choice in this aspect was significantly different at $p \leq 0.05$ level.

Table 30

Ranks of Order and t-value of Experts and Teachers Regarding Health Personnel

Item	R_1(E)	R_2(T)	t-value
10. Health Personnel:			
10.1 Providing a teacher or a school nurse to occupy the health room	2	1	-1.76
10.2 Providing health education in-service training programs for the teachers	3	2	-1.31
10.3 Providing activities related to health and safety promotion for all school personnel	4	4	-0.55
10.4 Setting up a committee to organize and administer school health programs	1	3	3.53*

Experts ranked "Setting up a committee to organize and administer school health programs" as of first importance, while teachers ranked it of third importance. The reasons might relate to the administrative affairs. The experts emphasized the principles and the effectiveness of the administration of school health programs. They might realize that human resource was the key factor in organizing and administering school health programs efficiently. Teachers might consider it was the school duty, and they did not have much time to spend organizing or administering school health

programs. They assumed responsibilities not only for teaching various subjects, but also participated in other school activities.

The Relationship between School and Community:

School and Community

The experts and teachers perceived differently and significantly at $p \leq 0.05$ level only on the choice of "Requiring that the school participate in promoting public health activities."

Table 31

Ranks of Order and t-value of Experts and Teachers Regarding School and Community

Item	R_1(E)	R_2(T)	t-value
11. School and Community:			
11.1 Utilizing various agencies or organizations for participating in planning of developing students' health	2	2	1.93
11.2 Providing a health education supervisor to advise the school health programs	3	4	-0.77
11.3 Encouraging participation of parents or guardians in school health matters and activities	1	1	0.81
11.4 Requiring that the school participate in promoting public health activities	4	3	-3.00*

Since teachers usually kept in touch with the students' parents or guardians, and many school activities had been aided and

supported by the students' parents, teachers might consider that the school should do a good turn for the public. They might hold the principle that "Taking and Giving should go together."

Table 31 shows experts paid more attention to developing inside the school. They might reason that the school should be improved and make good progress first and foremost, then it could help develop other activities outside the school.

The Perceptual Comparison of the Principals and the Teachers in the Inner Zone with Respect to the Elementary School Health Programs

Hypothesis 6: There was no significant difference between the perceptions of the principals and the teachers in the inner zone with respect to the elementary school health programs.

There were 87 principals and 105 teachers in the inner zone. Table 13 shows means, standard deviations, ranks of order and t-value of these two groups.

Table 32

Means, Standard Deviations, Ranks of Order and t-value of the Principals and the Teachers in the Inner Zone (P_1:T_1)

$N_1 = 87$, $N_2 = 105$

Item	X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
I. Healthful School Environment:							
1. Physical Aspects							
1.1	3.4253	1	0.884	3.1619	1	0.992	1.92
1.2	2.7241	2	0.845	3.0000	2	0.899	-1.94

Table 32 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
	1.3	1.3333	4	0.742	1.5143	4	0.845	-1.56
	1.4	2.5172	3	0.847	2.3238	3	0.915	1.51
2.	Psychological Aspects							
	2.1	2.3218	3	1.040	2.5429	2	1.029	-1.47
	2.2	2.0345	4	1.039	2.3143	3	1.121	-1.78
	2.3	3.1034	1	0.903	3.0857	1	0.911	0.13
	2.4	2.5402	2	1.209	2.0571	4	1.105	2.83*
3.	General Sanitation Aspects							
	3.1	3.3793	1	0.810	3.3524	1	0.866	0.22
	3.2	3.0230	2	0.862	2.9238	2	0.851	0.80
	3.3	1.8966	3	0.822	2.1143	3	0.984	-1.64
	3.4	1.7011	4	0.954	1.6095	4	0.860	0.70
II.	School Health Services:							
4.	Health Appraisal and Follow-Up Aspects							
	4.1	3.1494	1	1.167	2.8571	1	1.164	1.73
	4.2	2.5632	3	0.961	2.8286	2	0.975	-1.89
	4.3	2.7471	2	0.781	2.5333	3	1.084	1.59
	4.4	1.5402	4	0.860	1.7810	4	0.899	-1.88
5.	Prevention and Control of Communicable Disease Aspects							
	5.1	2.2529	3	1.003	2.2857	3	0.968	-0.23
	5.2	1.8276	4	0.795	1.7238	4	0.882	0.85
	5.3	3.5057	1	0.901	3.4190	1	0.948	0.65
	5.4	2.4138	2	1.029	2.5714	2	0.959	-1.10
6.	Health Promotion Aspects							
	6.1	3.6667	1	0.676	3.5143	1	0.911	1.33
	6.2	2.3908	2	0.854	2.2381	3	0.946	1.16
	6.3	2.1609	3	1.022	1.9905	4	1.005	1.16
	6.4	1.7816	4	0.895	2.2571	2	0.941	-3.56*

Table 32 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
III.	Curriculum and Learning-Teaching:							
	7. Curriculum							
	7.1	2.5517	2	1.255	2.5429	2	1.193	0.05
	7.2	2.6897	1	1.184	2.9333	1	1.085	-1.49
	7.3	2.2529	4	0.892	2.3429	3	1.027	-0.64
	7.4	2.5057	3	1.088	2.1810	4	1.036	2.11*
	8. Learning-Teaching							
	8.1	3.3103	1	1.060	3.0095	1	1.181	1.84
	8.2	1.9770	4	1.151	1.8952	4	1.117	0.50
	8.3	2.3678	2	0.891	2.6571	2	0.918	-1.95
	8.4	2.3448	3	0.913	2.4381	3	0.950	-0.69
	9. Special Activities							
	9.1	2.9195	1	1.037	2.9333	1	1.040	-0.09
	9.2	2.8506	2	1.062	2.6667	2	1.053	1.20
	9.3	2.2989	3	1.080	2.3714	3	1.085	-0.46
	9.4	1.9195	4	1.003	2.0286	4	1.105	-0.71
IV.	School Health Personnel:							
	10. Health Personnel							
	10.1	2.5402	2	1.256	2.7238	1	1.221	-1.02
	10.2	2.3103	4	0.992	2.5333	2	1.057	-1.50
	10.3	2.3678	3	0.954	2.2952	4	1.055	0.50
	10.4	2.7816	1	1.205	2.4476	3	1.109	2.00*
V.	The Relationship between School and Community:							
	11. School and Community							
	11.1	2.5862	2	1.177	2.5810	2	1.081	0.03
	11.2	2.2529	3	1.037	2.2571	3	1.110	-0.03
	11.3	3.0460	1	0.987	2.9714	1	1.004	0.52
	11.4	2.1149	4	1.050	2.1905	4	1.119	-0.48

Table 32 indicates four choices had significant differences at $p \leq 0.05$ level.

Healthful School Environment: Psychological Aspects

There was only one choice in this aspect found significantly different at $p \leq 0.05$ level. Table 33 shows the finding.

Table 33

Ranks of Order and t-value of Principals and Teachers in the Inner Zone Regarding Psychological Aspects

Item	$R_1(P_1)$	$R_2(T_1)$	t-value
2. Psychological Aspects:			
2.1 Providing interesting activities in order to promote the students' mental health	3	2	-1.47
2.2 Providing recreation areas for the students	4	3	-1.78
2.3 Encouraging the teacher to provide for a good rapport to exist between the teacher and the students	1	1	0.13
2.4 Creating good relationships among school personnel	2	4	2.83*

The principals and teachers in the inner zone perceived differently the choice of "Creating good relationships among school personnel." Since the principals were the school administrators, they should look to the coordination and cooperation of school personnel. The teachers were not concerned directly with

administrative affairs. They might assume responsibilities for the students' mental and emotional health.

School Health Services:

Health Promotion Aspects

The choice of "Providing first-aid for injuries received at school and for the ill student" had significant difference at $p \leq 0.05$ level.

Table 34

Ranks of Order and t-value of Principals and Teachers in the Inner Zone Regarding Health Promotion Aspects

Item	$R_1(P_1)$	$R_2(T_1)$	t-value
6. Health Promotion Aspects:			
6.1 Providing for a nutritional school lunch program	1	1	1.33
6.2 Presenting a school accident prevention program for all students	2	3	1.16
6.3 Providing personal health counseling for students who need it	3	4	1.16
6.4 Providing first-aid for injuries received at school and for the ill student	4	2	-3.56*

Teachers gave more importance than principals to providing first-aid in schools. The reasons might be that teachers faced the students' health problems, and they had to take primary

responsiblity for them. The principals were interested more in providing preventive projects.

Curriculum and Learning-Teaching: Curriculum

For this aspect, only one choice was found significantly different at $p \leq 0.05$ level as shown in Table 35.

Table 35

Ranks of Order and t-value of Principals and Teachers in the Inner Zone Regarding Curriculum

Item	$R_1(P_1)$	$R_2(T_1)$	t-value
7. Curriculum:			
7.1 Requiring that health content in the life experience subjects group be taught completely	2	2	0.05
7.2 Improving the curriculum on the basis of local health problems and needs	1	1	-1.49
7.3 Requiring using integrated lesson plans of health content in the life experience subjects group	4	3	-0.64
7.4 Requiring that learning-teaching process be as important as health content	3	4	2.11*

The perceptions of principals and teachers were significantly different on the choice of "Requiring that learning-teaching process be as important as health content". The reason might be that principals held to the educational policy obtained from the Office

of Education, Bangkok Metropolis. The teachers might pay less attention to this matter, because many already observed this policy.

School Health Personnel: Health Personnel

The principals and teachers perceived significantly and differently at $p \leq 0.05$ level on the choice of "Setting up a committee to organize and administer school health programs." Table 36 shows ranks of order and t-value of the principals and teachers concerning this aspect.

Table 36

Ranks of Order and t-value of Principals and Teachers in the Inner Zone Regarding Health Personnel

Item	$R_1(P_1)$	$R_2(T_1)$	t-value
10. Health Personnel:			
10.1 Providing a teacher or a school nurse to occupy the health room	2	1	-1.02
10.2 Providing health education in-service training programs for the teachers	4	2	-1.50
10.3 Providing activities related to health and safety promotion for all school personnel	3	4	0.50
10.4 Setting up a committee to organize and administer school health programs	1	3	2.00*

Table 36 indicates the principals ranked number 1 while the teachers ranked number 3 on the choice of "Setting up a committee to

organize and administer school health programs." It might reason that the principals looked at the problems of organizing school health programs and concentrated on the administrative affairs. Various schools might face the problem of lack of school personnel to take responsibilities for adminstering and organizing school health programs. The cooperation of personnel was a good ideal for meeting with success for any tasks.

The Perceptual Comparison of the Principals and the Teachers in the Outer Zone with Respect to the Elementary School Health Programs

Hypothesis 7: There was no significant difference between the perceptions of the principals and the teachers in the outer zone with respect to the elementary school health programs.

The subjects in this study were 177 principals and 216 teachers in the outer zone.

Table 37

Means, Standard Deviations, Ranks of Order and t-value of the Principals and the Teachers in the Outer Zone (P_2: T_2)

$N_1 = 177$, $N_2 = 216$

Item	X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
I. Healthful School Environment:							
1. Physical Aspects							
1.1	3.4142	1	0.822	3.3981	1	0.783	0.18
1.2	2.7627	2	0.879	2.8565	2	0.931	-1.02
1.3	1.3503	4	0.708	1.3148	4	0.635	0.52
1.4	2.4746	3	0.917	2.4306	3	0.886	0.48

Table 37 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
2.	Psychological Aspects							
	2.1	2.2429	3	1.041	2.3843	2	1.019	-1.36
	2.2	2.1073	4	1.025	2.2546	3	1.014	-1.43
	2.3	3.0282	1	0.962	3.1389	1	0.940	-1.15
	2.4	2.6215	2	1.205	2.2222	4	1.230	3.23*
3.	General Sanitation Aspects							
	3.1	3.4802	1	0.805	3.3333	1	0.852	1.74
	3.2	2.8983	2	0.805	2.8935	2	0.885	0.06
	3.3	1.9718	3	0.932	2.0880	3	1.042	-1.15
	3.4	1.6497	4	0.854	1.6852	4	0.859	-0.41
II.	School Health Services:							
4.	Health Appraisal and Follow-Up Aspects							
	4.1	3.3785	1	1.021	3.1065	1	1.138	2.47*
	4.2	2.6045	2	0.880	2.8056	2	0.974	-2.13*
	4.3	2.5819	3	0.870	2.3750	3	0.942	2.24*
	4.4	1.4350	4	0.721	1.7130	4	0.890	-3.42*
5.	Prevention and Control of Communicable Disease Aspects							
	5.1	2.2938	2	0.985	2.3102	3	0.965	-0.17
	5.2	2.0226	4	0.904	1.7361	4	0.807	3.32*
	5.3	3.4294	1	0.952	3.4259	1	0.865	0.04
	5.4	2.2542	3	1.065	2.5278	2	1.099	-2.49*
6.	Health Promotion Aspects							
	6.1	3.5254	1	0.886	3.6944	1	0.708	-1.94
	6.2	2.4915	2	0.813	2.0880	4	0.844	4.79*
	6.3	2.0678	3	1.058	2.0972	3	1.014	-0.28
	6.4	1.9153	4	0.935	2.1204	2	0.932	-2.17*
III.	Curriculum and Learning-Teaching:							
7.	Curriculum							
	7.1	2.7401	2	1.197	2.4491	2	1.211	2.38*
	7.2	2.7458	1	1.132	3.0231	1	1.102	-1.95

Table 37 Cont.

Item		X_1	R_1	SD_1	X_2	R_2	SD_2	t-value
	7.3	2.2994	3	0.927	2.4907	2	0.894	-2.08*
	7.4	2.2147	4	1.102	2.0370	4	1.025	1.65
8.	Learning-Teaching							
	8.1	3.1751	1	1.137	3.1991	1	1.053	-0.22
	8.2	2.1638	4	1.129	1.9398	4	1.133	1.95
	8.3	2.4633	2	0.892	2.5278	2	0.884	-0.72
	8.4	2.1977	3	1.000	2.3333	3	1.007	-1.33
9.	Special Activities							
	9.1	3.1412	1	0.952	3.0370	1	0.954	1.08
	9.2	2.7966	2	1.073	2.8796	2	1.014	-0.79
	9.3	2.3390	3	1.005	2.2917	3	1.004	0.46
	9.4	1.7232	4	0.909	1.7917	4	1.047	-0.68
IV.	School Health Personnel:							
10.	Health Personnel							
	10.1	2.8192	1	1.168	2.8519	1	1.184	-0.27
	10.2	2.3446	3	1.066	2.5231	2	1.016	-1.70
	10.3	2.2147	4	0.977	2.2130	4	1.007	0.02
	10.4	2.6215	2	1.162	2.4120	3	1.166	1.77
V.	The Relationship between School and Community:							
11.	School and Community							
	11.1	2.5424	2	1.153	2.4815	2	1.078	0.54
	11.2	2.1243	4	1.080	2.1667	4	1.078	-0.39
	11.3	3.0452	1	0.928	3.0370	1	1.043	0.08
	11.4	2.2881	3	1.088	2.3148	3	1.084	-0.24

Table 37 shows that there were significant differences between the perceptions of principals and teachers in the outer zone

regarding the organization of school health programs at $p \leq 0.05$ level as follows:

Healthful School Environment: Psychological Aspects

There was only one choice found significantly different at $p \leq 0.05$ level as seen in Table 38.

Table 38

Ranks of Order and t-value of Principals and Teachers in the Outer Zone Regarding Psychological Aspects

Item	$R_1(P_2)$	$R_2(T_2)$	t-value
2. Psychological Aspects:			
2.1 Providing interesting activities in order to promote the students' mental health	3	2	-1.36
2.2 Providing recreation areas for the students	4	3	-1.43
2.3 Encouraging the teacher to provide for a good rapport to exist between the teacher and the students	1	1	-1.15
2.4 Creating good relationships among school personnel	2	4	3.23*

The choice on "Creating good relationships among school personnel" was found significantly different. The reason might be that the principals might expect that the cooperation and coordination of school personnel could help increase the effectiveness of developing school activities.

School Health Services: Health Appraisal and Follow-Up Aspects

The perceptions of principals and teachers in the outer zone were significantly different on this item.

Table 39

Ranks of Order and t-value of Principals and Teachers in the Outer Zone Regarding Health Appraisal and Follow-Up Aspects

Item	$R_1(P_2)$	$R_2(T_2)$	t-value
4. Health Appraisal and Follow-Up Aspects			
4.1 Requesting the teaching staff to inspect students' health on a regular basis	1	1	2.47*
4.2 Providing for a periodic health examination of all students	2	2	-2.13*
4.3 Requiring that students' health be recorded regularly	3	3	2.24*
4.4 Following-up on health and medical appraisals	4	4	-3.42*

Table 39 shows that the principals and teachers perceived differently on the choice of "Requesting the teaching staff to inspect students' health on a regular basis." Principals held to the educational policy obtained from the Office of Education, Bangkok Metropolis. They needed the teachers to inspect students' health. Even though the teachers realized the importance of students' health, they might prefer spending more time teaching.

The perceptions of principals and teachers were significantly different on the choice of "Providing for a periodic health examination of all students." The principals might emphasize the school responsibility or duty for providing all students with a periodic health examination. The teachers considered the students were served better by the physicians who had needed equipment and facilities for special testing and for treatment.

For the choice on "Requiring that students' health be recorded regularly", the principals and teachers also perceived significantly differently. The principals might realize that not only could a health record reveal the problems of students' health, but also aid in evaluating the students' progress regarding normal growth and development. The teachers might be aware of how important and useful the health record was, but they might lack knowledge for recording health properly. Teachers might feel not ready to do so.

The principals and teachers perceived significantly differently on the choice of "Following-up on health and medical appraisals." The principals considered the prevention and control of communicable diseases could reduce the total expenses of school and also solve student health problems. Teachers might feel that they were trained to teach, not to spend their time filling out follow-ups on health and medical appraisals. They might pay less attention to such work.

Prevention and Control of Communicable Disease Aspects

In these aspects, there was only one choice found significantly different at $p \leq 0.05$ level.

Table 40

Ranks of Order and t-value of Principals and Teachers in the Outer Zone Regarding Prevention and Control of Communicable Disease Aspects

Item	$R_1(P_2)$	$R_2(T_2)$	t-value
5. Prevention and Control of Communicable Disease Aspects:			
5.1 Conducting health examinations regularly for detecting illness of the sick students	2	3	-0.17
5.2 Isolating the sick student from others	4	4	3.32*
5.3 Providing an immunization program for contagious diseases	1	1	0.04
5.4 Providing elimination of diseases and animal reservoirs	3	2	-2.49*

The perceptions of principals and teachers were significantly different on the choice of "Isolating the sick student from others." The principals realized isolating the sick students from others could decrease the spread of disease, and the teachers might be concerned with the students' recovery.

The principals and teachers ranked in order of importance on the choice of "Providing elimination of diseases and animal

reservoirs" differently. The reasons might be that teachers concentrated first on prevention of diseases and accidents. The elimination of animal reservoirs in schools could have been ineffective.

Health Promotion Aspects

Two choices had significant differences at $p \leq 0.05$ level.

Table 41

Ranks of Order and t-value of Principals and Teachers in the Outer Zone Regarding Health Promotion Aspects

Item	$R_1(P_2)$	$R_2(T_2)$	t-value
6. Health Promotion Aspects:			
6.1 Providing for a nutritional school lunch program	1	1	-1.94
6.2 Presenting a school accident prevention program for all students	2	4	4.79*
6.3 Providing personal health counseling for students who need it	3	3	-0.28
6.4 Providing first-aid for injuries received at school and for the ill student	4	2	-2.17*

Table 41 indicates the principals and teachers ranked alternately the order of importance on the choices of "Presenting a school accident prevention program for all students" and "Providing first-aid for injuries received at school and for the ill student."

The reasons might well be stated that the principals obtained the policy from the National Safety Council in order to campaign accident prevention, and they had to be responsible for all at school. They should raise the importance of providing school accident prevention program. The teachers played direct roles in taking care of students' health and confronted students' health problems. Thus, they might give more importance to providing first aid in schools than to providing school accident prevention programs.

Curriculum and Learning-Teaching: Curriculum

There were two choices found significantly different at $p \leq 0.05$ level.

Table 42

Ranks of Order and t-value of Principals and Teachers in the Outer Zone Regarding Curriculum

Item	$R_1(P_2)$	$R_2(T_2)$	t-value
7. Curriculum:			
7.1 Requiring that health content in the life experience subjects group be taught completely	2	3	2.38*
7.2 Improving the curriculum on the basis of local health problems and needs	1	1	-1.95

Table 42 Cont.

	Item	$R_1(P_2)$	$R_2(T_2)$	t-value
7.3	Requiring using integrated lesson plans of health content in the life experience subjects group	3	2	-2.08*
7.4	Requiring that learning-teaching process be as important as health content	4	4	1.65

The choices on "Requiring that health content in the life experience subjects group be taught completely" and "Requiring using integrated lesson plans of health content in the life experience subjects group" were ranked alternately by the principals and teachers in the outer zone. The reasons might well be stated that the principals had to supervise and keep health content taught completely in accordance with the curriculum. The teachers paid more attention to using integrated lesson plans of health content in the life experience subjects group. They could use the lesson plans as a guide for curriculum application.

CHAPTER 5

SUMMARY, CONCLUSION, IMPLEMENTATIONS AND RECOMMENDATIONS

A summary of this study, conclusion, implementations and recommendations are presented in this chapter.

Summary of the Study

This study compared the perceptions of health education experts, principals, and teachers with respect to the importance of the organization of school health programs within the elementary schools under the Jurisdiction of Bangkok Metropolis, Thailand. There were 604 subjects who participated in this study: 19 health education experts, 264 principals and 321 teachers within the elementary schools under the Jurisdiction of Bangkok Metropolis both in the inner and the outer zones of Bangkok Metropolis, Thailand.

The investigator constructed the questionnaire used in this study. It was divided into two parts. The first part contained 11 items (44 choices) concerning perceptions of the importance of organizing elementary school health programs in five categories. The second part of the questionnaire related to demographic information.

A total of 876 questionnaires were mailed to the sampled groups (22 questionnaires to the expert group, 427 to the principals, and 427 questionnaires to the teachers). A follow-up postcard reminder was sent, yet only 604 questionnaires were returned (65.95%): 19 questionnaires from the expert group (86.36%); 264 from the principals (61.83%) and 321 were from the teachers (75.18%). The data was analyzed by the Statistical Package for the

Social Sciences (SPSS). The investigator used descriptive statistics for describing and discussing the demographic data. The t-test of significance was used to determine the significant differences at $p \leq 0.05$ level between means of perceptions of the subjects in regard to the importance of the organization of school health programs.

The results of hypotheses testing in this study were:

Hypothesis 1: "There was no significant difference between the perceptions of the principals in the inner and the outer zones with respect to the elementary school health programs."

Findings: There was no overall significant difference between the perceptions of the principals in the inner and the outer zones with respect to the elementary school health programs at $p \leq 0.05$ level. Only one of forty-four choices had significant difference: "Requiring that learning-teaching process be as important as health content" (a choice in the item of curriculum).

Hypothesis 2: "There was no significant difference between the perceptions of the teachers in the inner and the outer zones with respect to the elementary school health programs."

Findings: Most perceptions of teachers in the inner and the outer zones regarding the elementary school health programs were not significantly different at $p \leq 0.05$ level. Only the following two choices were found significantly different.

2.1 "Providing for clean, neat and safe school buildings" (a choice in the item of physical aspects).

2.2 "Providing adequate playground and play equipment for the students" (a choice in the item of physical aspects).

Hypothesis 3: "There was no significant difference between the perceptions of the total principals and the total teachers with respect to the elementary school health programs."

Findings: There was no overall significant difference between the perceptions of the total principals and the total teachers with respect to the elementary school health programs at $p \leq 0.05$ level, however 12 choices did have significant differences.

3.1 "Providing recreation areas for the students" (a choice in the item of psychological aspects).

3.2 "Creating good relationships among school personnel" (a choice in the item of psychological aspects).

3.3 "Requesting the teaching staff to inspect students' health on a regular basis" (a choice in the item of health appraisal and follow-up aspects).

3.4 "Providing for a periodic health examination of all students" (a choice in the item of health appraisal and follow-up aspects).

3.5 "Requiring that students' health be recorded regularly" (a choice in the item of health appraisal and follow-up aspects).

3.6 "Following-up on health and medical appraisals" (a choice in the item of health appraisal and follow-up aspects).

3.7 "Presenting a school accident prevention program for all students" (a choice in the item of health promotion aspects).

3.8 "Providing first-aid for injuries received at school and for the ill student" (a choice in the item of health promotion aspects).

3.9 "Requiring using integrated lesson plans of health content in the life experience subjects group" (a choice in the item of curriculum).

3.10 "Requiring that learning-teaching process be as important as health content" (a choice in the item of curriculum).

3.11 "Providing health education in-service training programs for the teachers' (a choice in the item of health personnel).

3.12 "Setting up a committee to organize and administer school health programs" (a choice in the item of health personnel).

Hypothesis 4: "There was no significant difference between the perceptions of the experts and the principals with respect to the elementary school health programs."

Findings: There was no significant difference between the perceptions of the experts and the principals with respect to the elementary school health programs at $p \leq 0.05$ level, except for the following perceived differently:

4.1 "Providing classrooms to serve students' health needs" (a choice in the item of physical aspects).

4.2 "Providing first-aid for injuries received at school and for the ill student" (a choice in the item of health promotion aspects).

4.3 "Requiring that health content in the life experience subjects group be taught completely" (a choice in the item of curriculum).

4.4 "Providing learning-teaching activities in order to attain learning objectives of each lesson" (a choice in the item of learning-teaching).

4.5 "Selecting an appropriate learning-teaching media for each lesson" (a choice in the item of learning-teaching).

4.6 "Organizing a sample project of developing a health environment for the benefit of all students" (a choice in the item of special activities).

4.7 "Setting up a committee to organize and administer school health programs" (a choice in the item of health personnel).

Hypothesis 5: "There was no significant difference between the perceptions of the experts and the teachers with respect to the elementary school health programs."

Findings: There was no overall significant difference between the perceptions of the experts and the teachers with respect to the

elementary school health programs at $p \leq 0.05$ level, except nine choices had significant differences:

5.1 "Providing classrooms to serve students' health needs" (a choice in the item of physical aspects).

5.2 "Requiring that health content in the life experience subjects group be taught completely" (a choice in the item of curriculum).

5.3 "Requiring the learning-teaching process be as important as health content" (a choice in the item of curriculum).

5.4 "Providing learning-teaching activities in order to attain learning objectives of each lesson" (a choice in the item of learning-teaching).

5.5 "Selecting appropriate learning-teaching media for each lesson" (a choice in the item of learning-teaching).

5.6 "Organizing a sample project of developing a health environment for the benefit of all students" (a choice in the item of special activities).

5.7 "Arranging for a week of education concerning 'Prevention of Dental Diseases'" (a choice in the item of special activities).

5.8 "Setting up a committee to organize and administer school health programs" (a choice in the item of health personnel).

5.9 "Requiring that the school participate in promoting public health activities" (a choice in the item of school and community).

Hypothesis 6: "There was no significant difference between the perceptions of the principals and the teachers in the inner zone with respect to the elementary school health programs."

Findings: Most perceptions of the principals and the teachers in the inner zone with respect to the elementary school health programs were not significantly different at $p \leq 0.05$ level. Only the following four choices had significant differences.

6.1 "Creating good relationships among school personnel" (a choice in the item of psychological aspects).

6.2 "Providing first-aid for injuries received at school and for the ill student" (a choice in the item of health promotion aspects).

6.3 "Requiring that learning-teaching process be as important as health content" (a choice in the item of curriculum).

6.4 "Setting up a committee to organize and administer school health programs" (a choice in the item of health personnel).

Hypothesis 7: "There was no significant difference between the perceptions of the principals and the teachers in the outer zone with respect to the elementary school health programs."

Findings: There was no overall significant difference between the perceptions of the principals and the teachers in the outer zone

with respect to the elementary school health programs at $p \leq 0.05$ level, except for 11 choices.

7.1 "Creating good relationships among school personnel" (a choice in the item of psychological aspects).

7.2 "Requesting the teaching staff to inspect students' health on a regular basis" (a choice in the item of health appraisal and follow-up aspects).

7.3 "Providing for a periodic health examination of all students" (a choice in the item of health appraisal and follow-up aspects).

7.4 "Requiring that students' health be recorded regularly" (a choice in the item of health appraisal and follow-up aspects).

7.5 "Following-up on health and medical appraisals (a choice in the item of health appraisal and follow-up aspects).

7.6 "Isolating the sick student from others" (a choice in the item of prevention and control of communicable disease aspects).

7.7 "Providing elimination of diseases and animal reservoirs" (a choice in the item of prevention and control of communicable disease aspects).

7.8 "Presenting a school accident prevention program for all students" (a choice in the item of health promotion aspects).

7.9 "Providing first-aid for injuries received at school and

for the ill student" (a choice in the item of health promotion aspects).

7.10 Requiring that health content in the life experience subjects group be taught completely" (a choice in the item of curriculum).

7.11 "Requiring using integrated lesson plans of health content in the life experience subjects group" (a choice in the item of curriculum).

Conclusion

Based on the results of hypotheses testing, the perceptions of experts, principals, and teachers regarding the importance of the organization of school health programs within the elementary schools under the Jurisdiction of Bangkok Metropolis, Thailand were both significantly different and were not significantly different at $p \leq 0.05$ level. The perceptions which had no significant differences could be explained in that the experts, principals, and teachers had almost the same educational background. Most of them held a bachelor degree. Not only had they taken the school health program course, but also had some experience in training programs, meetings, or seminars concerning school health programs. In addition, the learning from life experiences, some Thai values and beliefs from family, religion, and society influenced the similarity of their perceptions. The good examples for such matters would be the nurture of "respect for elders" and "responsibility of cleanness" from the family; the essential doctrine of Buddha about "learn to do good, cease to do evil, and cleanse your own heart"; some Thai

values concerning "Kreng Jai" or consideration, "Nam Jai" or water of the heart, "Mai Pen Rai" or never mind, and "Rely upon one another"; the beliefs of physical and mental health, and treatment and prevention from diseases; and the health information from health documents and public broadcasting.

For the significantly different perceptions, the reasons could be that experts, principals, and teachers emphasized roles and responsibilities. The experts paid more attention to theory or academic principles, while the principals gave importance to administrative affairs, and the teachers considered the importance of organizing school health programs in the practical aspect.

Recommendations for Implementation

The investigator hopes educational or public health authorities concerned will realize the importance of health for everyone in the school and will take action to improve the organization of school health programs. The findings of this study should be applied to a pilot school to reaffirm the results of this study.

Since the results of this study were composed of two aspects; the first aspect concerning no significant differences and the second one concerning the significant differences at $p \leq 0.05$ level among the perceptions of experts, principals, and teachers regarding the elementary school health programs, the following implementations were recommended.

Recommendations for Implementation for the Aspect of Having no Significant Differences

It is very important for principals and teachers to hold consistent and similar perceptions concerning school health programs. The activities ranked by the principals and teachers should be considered as a guideline for setting priorities for developing, organizing, and implementing health programs. The following were the activities ranked unequally in each aspect according to the perceptions of having no significant differences. Those activities not listed did have significant differences.

Recommendations for implementation for the aspect of having no significant differences divides into three areas: for all elementary schools under the Jurisdiction of Bangkok Metropolis, inner zone and outer zone.

Recommendations for Implementation for All Elementary Schools under the Jurisdiction of Bangkok Metropolis

Healthful School Environment

- Physical Aspects

  Rank 1: Providing for clean, neat and safe school buildings.

  Rank 2: Providing classrooms to serve students' health needs.

  Rank 3: Providing for a clean and neat school vicinity

  Rank 4: Providing adequate playground and play equipment for the students.

- Psychological Aspects

  Rank 1: Encouraging the teacher to provide for a good rapport to exist between the teacher and the students.

  Rank 2: Providing interesting activities in order to promote the students' mental health.

- General Sanitation Aspects

  Rank 1: Providing for an adequate number of clean water supply stations.

  Rank 2: Providing an adequate number of rest rooms for both male and female students.

  Rank 3: Encouraging students regularly to take responsibility for clean classrooms.

  Rank 4: Providing for sanitary garbage disposal of school buildings and places in the near vicinity of the school.

School Health Services

- Prevention and Control of Communicable Disease Aspects

  Rank 1: Providing an immunization program for contagious diseases.

  Rank 2: Providing elimination of diseases and animal reservoirs.

  Rank 3: Conducting health examinations regularly for detecting illness of the sick students.

  Rank 4: Isolating the sick student from others.

- Health Promotion Aspects

  Rank 1: Providing for a nutritional school lunch program.

  Rank 4: Providing personal health counseling for students who need it.

Curriculum and Learning-Teaching

- Curriculum

  Rank 1: Improving the curriculum on the basis of local health problems and needs.

  Rank 2: Requiring that health content in the life experience subjects group be taught completely.

- Learning-Teaching

  Rank 1: Requiring that every student participate in the learning-teaching activities.

  Rank 2: Providing suitable learning-teaching methods or activities for each subject or activity taught.

  Rank 3: Selecting appropriate learning-teaching media for each lesson.

  Rank 4: Providing learning-teaching activities in order to attain learning objectives of each lesson.

- Special Activities

  Rank 1: Providing and preparing a health exhibition for supplementing learning-teaching activities.

  Rank 2: Organizing a sample project of developing a health environment for the benefit of all students.

Rank 3: Arranging for a week of education concerning "Prevention of Dental Diseases".

Rank 4: Providing special activities for aiding health defected students.

School Health Personnel

- Health Personnel

Rank 1: Providing a teacher or a school nurse to occupy the health room.

Rank 4: Providing activities related to health and safety promotion for all school personnel.

The Relationship between School and Community

- School and Community

Rank 1: Encouraging participation of parents or guardians in school health matters and activities.

Rank 2: Utilizing various agencies or organizations for participating in planning of developing students' health.

Rank 3: Requiring that the school participate in promoting public health activities.

Rank 4: Providing a health education supervisor to advise the school health programs.

Recommendations for Implementation for the Elementary Schools in the Inner Zone

Healthful School Environment

- Physical Aspects

  Rank 1: Providing for clean, neat and safe school buildings.

  Rank 2: Providing classrooms to serve students' health needs.

  Rank 3: Providing for a clean and neat school vicinity.

  Rank 4: Providing adequate playground and play equipment for the students.

- Psychological Aspects

  Rank 1: Encouraging the teacher to provide for a good rapport to exist between the teacher and the students.

  Rank 2: Providing interesting activities in order to promote the students' mental health.

  Rank 4: Providing recreation areas for the students.

- General Sanitation Aspects

  Rank 1: Providing for an adequate number of clean water supply stations.

  Rank 2: Providing an adequate number of rest rooms for male and female students.

  Rank 3: Encouraging students regularly to take responsibility for the clean classrooms.

Rank 4: Providing for sanitary garbage disposal of school buildings and places in the near vicinity of the school.

School Health Services

- Health Appraisal and Follow-Up Aspects

  Rank 1: Requesting the teaching staff to inspect students' health on a regular basis.

  Rank 2: Providing for a periodic health examination of all students.

  Rank 3: Requiring that students' health be recorded regularly.

  Rank 4: Following-up on health and medical appraisals.

- Prevention and Control of Communicable Disease Aspects

  Rank 1: Providing an immunization program for contagious diseases.

  Rank 2: Providing elimination of diseases and animal reservoirs.

  Rank 3: Conducting health examinations regularly for detecting illness of the sick students.

  Rank 4: Isolating the sick student from others.

- Health Promotion Aspects

  Rank 1: Providing for a nutritional school lunch program.

  Rank 2: Presenting a school accident prevention program for all students.

Rank 4: Providing personal health counseling for students who need it.

Curriculum and Learning-Teaching

- Curriculum

  Rank 1: Improving the curriculum on the basis of local health problems and needs.

  Rank 2: Requiring that health content in the life experience subjects group be taught completely.

  Rank 3: Requiring using integrated lesson plans of health content in the life experience subjects group.

- Learning-Teaching

  Rank 1: Requiring that every student participate in the learning-teaching activities.

  Rank 2: Providing suitable learning-teaching methods or activities for each subject or activity taught.

  Rank 3: Selecting appropriate learning-teaching media for each lesson.

  Rank 4: Providing learning-teaching activities in order to attain learning objectives of each lesson.

- Special Activities

  Rank 1: Providing and preparing a health exhibition for supplementing learning-teaching activities.

  Rank 2: Organizing a sample project of developing a health environment for the benefit of all students.

Rank 3: Arranging for a week of education concerning "Prevention of Dental Diseases".

Rank 4: Providing special activities for aiding health defected students.

School Health Personnel

- Health Personnel

Rank 2: Providing a teacher or a school nurse to occupy the health room.

Rank 3: Providing health education in-service training programs for the teachers.

Rank 4: Providing activities related to health and safety promotion for all school personnel.

The Relationship between School and Community

- School and Community

Rank 1: Encouraging participation of parents or guardians in school health matters and activities.

Rank 2: Utilizing various agencies or organizations for participating in planning of developing students' health.

Rank 3: Providing a health education supervisor to advise the school health programs.

Rank 4: Requiring that the school participate in promoting public health activities.

Recommendations for Implementation for the Elementary Schools in the Outer Zone

Healthful School Environment

- Physical Aspects

  Rank 1: Providing for clean, neat and safe school buildings.

  Rank 2: Providing classrooms to serve students' health needs.

  Rank 3: Providing for a clean and neat school vicinity.

  Rank 4: Providing adequate playground and play equipment for the students.

- Psychological Aspects

  Rank 1: Encouraging the teacher to provide for a good rapport to exist between the teacher and the students.

  Rank 2: Providing interesting activities in order to promote the students' mental health.

  Rank 4: Providing recreation areas for the students.

- General Sanitation Aspects

  Rank 1: Providing for an adequate number of clean water supply stations.

  Rank 2: Providing an adequate number of rest rooms for male and female students.

  Rank 3: Encouraging students regularly to take responsibility for clean classrooms.

Rank 4: Providing for sanitary garbage disposal of school buildings and places in the near vicinity of the school.

School Health Services

- Prevention and Control of Communicable Disease Aspects

  Rank 1: Providing an immunization program for contagious diseases.

  Rank 2: Conducting health examinations regularly for detecting illness of the sick students.

- Health Promotion Aspects

  Rank 1: Providing for a nutritional school lunch program.

  Rank 3: Providing personal health counseling for students who need it.

Curriculum and Learning-Teaching

- Curriculum

  Rank 1: Improving the curriculum on the basis of local health problems and needs.

  Rank 4: Requiring the learning-teaching process be as important as health content.

- Learning-Teaching

  Rank 1: Requiring that every student participate in the learning-teaching activities.

  Rank 2: Providing suitable learning-teaching methods or activities for each subject or activity taught.

Rank 3: Selecting appropriate learning-teaching media for each lesson.

Rank 4: Providing learning-teaching activities in order to attain learning objectives of each lesson.

· Special Activities

Rank 1: Providing and preparing a health exhibition for supplementing learning-teaching activities.

Rank 2: Organizing a sample project of developing a health environment for the benefit of all students.

Rank 3: Arranging for a week of education concerning "Prevention of Dental Diseases".

Rank 4: Providing special activities for aiding health defected students.

School Health Personnel

· Health Personnel

Rank 1: Providing a teacher or a school nurse to occupy the health room.

Rank 2: Setting up a committee to organize and administer school health programs.

Rank 3: Providing health education in-service training programs for the teachers.

Rank 4: Providing activities related to health and safety promotion for all school personnel.

The Relationship between School and Community

- School and Community

  Rank 1: Encouraging participation of parents or guardians in school health matters and activities.

  Rank 2: Utilizing various agencies or organizations for participating in planning of developing students' health.

  Rank 3: Requiring that the school participate in promoting public health activities.

  Rank 4: Providing a health education supervisor to advise the school health programs.

Remarks

In case of the two choices ranked by the principals and teachers in different orders, the ranking in order of the experts was considered as an indicator for determining the proper order.

Recommendations for Implementation for the Aspects of Having Significant Differences

The 12 activities ranked by the principals and teachers were found significantly different. These activities should be used as a basis of planning working policy, improving and supervising the organization of the elementary school health programs within the schools under the Jurisdiction of Bangkok Metropolis, Thailand. To serve these purposes, the principals or the authorities concerned could adjust activities to have no significant differences by organizing seminars, meetings, or training-course programs for school personnel.

The 12 activities to be adjusted for the implementation of these purposes were:

1. Healthful School Environment:
   - 1.1 "Providing recreation areas for the students (one choice in the item of psychological aspects).
   - 1.2 "Creating good relationships among school personnel" (one choice in the item of psychological aspects).
2. School Health Services:
   - 2.1 "Requesting the teaching staff to inspect students' health on a regular basis" (one choice in the item of health appraisal and follow-up aspects).
   - 2.2 "Providing for a periodic health examination of all students" (one choice in the item of health appraisal and follow-up aspects).
   - 2.3 "Requiring that students' health be recorded regularly" (one choice in the item of health appraisal and follow-up aspects).
   - 2.4 "Following-up on health and medical appraisals" (one choice in the item of health appraisal and follow-up aspects).
   - 2.5 "Presenting a school accident prevention program for all students" (one choice in the item of health promotion aspects).

2.6 "Providing first-aid for injuries received at school and for the ill student" (one choice in the item of health promotion aspects).

3. Curriculum and Learning-Teaching:

3.1 "Requiring using integrated lesson plans of health content in the life experience subjects group" (one choice in the item of curriculum).

3.2 "Requiring the learning-teaching process be as important as health content" (one choice in the item of curriculum).

4. School Health Personnel:

4.1 "Providing health education in-service training programs for the teachers" (one choice in the item of health personnel).

4.2 "Setting up a committee to organize and administer school health programs" (one choice in the item of health personnel).

Recommendations for Further Study

The investigator proposes these recommendations for further study:

1. Replication of this study should be conducted between principals and teachers in other elementary schools, especially schools under the Jurisdiction of Office of the National Primary Education and Office of Private Education Commission.

2. A perceptual comparison of principals and teachers regarding school health programs within the elementary schools under the

Jurisdiction of Bangkok Metropolis, Office of the National Primary Education and Office of Private Education Commission should be studied.

3. A perceptual comparison of principals and teachers regarding school health programs within the elementary schools in Thailand should be conducted in order to determine the direction of significant differences between both groups.

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APPENDICES

APPENDIX A

List of the Thai Jury

Thai Jury of Experts in Health Education (outside the expert subject group)

1. Professor Dr. Suchart Somprayoon
   Department of Physical Education
   Faculty of Education, Chulalongkorn University.
2. Associate Professor Ratchanee Kuanboonjan
   Department of Physical Education
   Faculty of Education, Chulalongkorn University.
3. Assistant Professor Thepwanee Homsanit
   Department of Physical Education
   Faculty of Education, Chulalongkorn University
4. Dr. Pornsuk Hunnirun
   Department of Health Education
   Faculty of Physical Education, Srinakarinwirote University (Prasarnmitr Campus).

Thai Jury of Experts in Test and Measurement

1. Associate Professor Dr. Suparb Wadkhien
   Department of Educational Research
   Faculty of Education, Chulalongkorn University.
2. Dr. Thaweewat Pitayanont
   Department of Educational Research
   Faculty of Education, Chulalongkorn University.

APPENDIX B

Letter of Support from Major Advisor,

Dr. David W. Phelps

(to the Thai Jury)

Department of Health

Oregon State University

Waldo Hall 256
Corvallis, Oregon 97331-6406

(503) 754-2686

August 1, 1987

To Whom It May Concern:

This is to verify that Miss Aimutcha Ratrimchong is a doctoral candidate at Oregon State University. She is working on a dissertation topic titled, "A Perceptual Comparison of Experts, Principals and Teachers with Respect to School Health Programs Within the Elementary Schools Under the Jurisdiction of Bangkok Metropolis, Thailand." Her study requires that she validate her instrument, using a delphi panel in Thailand.

As her major advisor and doctoral thesis director, I am hereby asking the experts cooperate with Miss Ratrimchong in this endeavor. Thank you for your consideration.

Sincerely,

Redacted for Privacy

David W. Phelps, Ed.D.
Professor

DWP/cl

APPENDIX C

Letter to the Thai Jury (English Version)

Division of Health and Physical
Education Promotion
Department of Physical Education
National Stadium, Patumwan,
Bangkok 10500

September 7, 1987

Dear Sir:

I am a doctoral candidate at Oregon State University, U.S.A. I am presently working on a dissertation entitled, "A Perceptual Comparison of Experts, Principals and Teachers with Respect to School Health Programs Within the Elementary Schools Under the Jurisdiction of Bangkok Metropolis, Thailand."

In order to proceed on the dissertation more effectively, I am very pleased to invite you to be one of the Thai jury of experts. Your kind cooperation in correction and recommendations for the content validity of the instrument will be very much appreciated.

Thank you so much for your assistance.

Sincerely,

Miss Aimutcha Ratrimchong

Enclosures: 1. A Pretest Form
2. A Letter of Support from Dr. David W. Phelps

APPENDIX D

Letter to the Thai Jury (Thai Version)

กองส่งเสริมพลศึกษาและสุขภาพ
กรมพลศึกษา ปทุมวัน กรุงเทพฯ 10500

7 กันยายน 2530

เรื่อง ขอความอนุเคราะห์ในการตรวจแก้ไขเนื้อหาแบบสอบถามวิทยานิพนธ์

เรียน

สิ่งที่ส่งมาด้วย 1. แบบสอบถาม จำนวน 1 ชุด
2. หนังสือรับรองจากอาจารย์ที่ปรึกษา จำนวน 1 ฉบับ

ด้วยดิฉัน นางสาวเอมอัชฌา รัตน์ริมจง นักศึกษาระดับปริญญาเอกทางการศึกษา สาขาสุขศึกษา มหาวิทยาลัยโอรีกอน รัฐโอรีกอน ประเทศสหรัฐอเมริกา กำลังทำวิทยานิพนธ์ในหัวข้อเรื่อง "การเปรียบเทียบการรับรู้เกี่ยวกับโครงการสุขภาพในโรงเรียนของผู้เชี่ยวชาญทางสุขศึกษา ครูใหญ่ และครูโรงเรียนประถมศึกษา สังกัดกรุงเทพมหานคร"

อนึ่ง เนื่องจากแบบสอบถามจำเป็นต้องมีเนื้อหาที่ถูกต้อง ชัดเจน และสามารถวัดผลได้ตรงตามที่ต้องการจะวัด โดยที่ท่านเป็นผู้หนึ่งที่มีความรู้ความสามารถและประสบการณ์ทางด้านสุขศึกษาในโรงเรียน และ/หรือ ทางด้านการวิจัยและวัดผลทางการศึกษา ดิฉันจึงใคร่ขอความอนุเคราะห์จากท่าน ขอได้โปรดพิจารณาแก้ไขเนื้อหาแบบสอบถามของวิทยานิพนธ์ครั้งนี้ด้วย

หวังเป็นอย่างยิ่งว่าคงได้รับความร่วมมือจากท่านด้วยดี หากเป็นไปได้ ดิฉันขอมารับแบบสอบถามที่แก้ไขเรียบร้อยแล้ว ภายในวันศุกร์ที่ 18 กันยายน 2530 ขอกราบขอบพระคุณเป็นอย่างสูงมา ณ โอกาสนี้ด้วย.

ขอแสดงความนับถือ

(นางสาวเอมอัชฌา รัตน์ริมจง)

APPENDIX E

Letter of Support from Major Advisor,

Dr. David W. Phelps

(to Selected Respondents)

Department of Health

Oregon State University

Waldo Hall 256
Corvallis, Oregon 97331-6406

(503) 754-2686

August 1, 1987

To Whom It May Concern:

This is to verify that Miss Aimutcha Ratrimchong is a doctoral candidate at Oregon State University. She is working on a dissertation topic titled, "A Perceptual Comparison of Experts, Principals and Teachers with Respect to School Health Programs Within the Elementary Schools Under the Jurisdiction of Bangkok Metropolis, Thailand." Her study requires that she be allowed to collect data from _____ at _____.

As her major advisor and doctoral thesis director, I would appreciate your cooperation with Miss Ratrimchong's efforts and that she be permitted to collect data from _____.

Sincerely,

Redacted for Privacy

David W. Phelps, Ed.D.
Professor

DWP/cl

APPENDIX F

Letter Sent Requesting Cooperation for Completing the Questionnaire to the Selected Respondents (English Version)

Division of Health and Physical
Education Promotion
Department of Physical Education
National Stadium, Patumwan,
Bangkok 10500

November 9, 1987

Dear Sir:

I am a doctoral candidate at Oregon State University, U.S.A. I am presenting conducting a study entitled, "A Perceptual Comparison of Experts, Principals and Teachers With Respect to School Health Programs Within the Elementary Schools Under the Jurisdiction of Bangkok Metropolis, Thailand."

In order to have this study done completely, you are requested to be one of the subjects. Please respond to the enclosed questionnaire and if it is possible, please return it in the envelope provided by November 30, 1987 as well.

Your kind cooperation for this study will be very appreciated.

Sincerely,

Miss Aimutcha Ratrimchong

Enclosures:
1. A Questionnaire
2. A Return Envelope
3. A Letter of Support from Dr. David W. Phelps

APPENDIX G

Letter Sent Requesting Cooperation for Completing the Questionnaire to the Selected Respondents (Thai Version)

กองส่งเสริมพลศึกษาและสุขภาพ
กรมพลศึกษา ปทุมวัน กรุงเทพฯ 10500

9 พฤศจิกายน 2530

เรื่อง ขอความร่วมมือในการตอบแบบสอบถามเพื่อการวิจัย

เรียน

สิ่งที่ส่งมาด้วย 1. แบบสอบถาม จำนวน 1 ชุด
2. ซองจดหมายพร้อมติดแสตมป์ จำนวน 1 ชุด
3. หนังสือรับรองจากอาจารย์ที่ปรึกษา จำนวน 1 ฉบับ

ด้วยดิฉัน นางสาวเอมอัชฌา รัตน์ริมจง นักศึกษาระดับปริญญาเอกทางการศึกษา สาขาสุขศึกษา มหาวิทยาลัยโอรีกอน รัฐโอรีกอน ประเทศสหรัฐอเมริกา กำลังทำวิทยานิพนธ์ เรื่อง "การเปรียบเทียบการรับรู้เกี่ยวกับโครงการสุขภาพในโรงเรียนของผู้เชี่ยวชาญทางสุขศึกษา ครูใหญ่ และครูโรงเรียนประถมศึกษา สังกัดกรุงเทพมหานคร"

เพื่อให้การทำวิทยานิพนธ์ครั้งนี้ดำเนินไปด้วยดี ดิฉันจึงใคร่ขอความกรุณาจากท่าน ได้โปรดตอบแบบสอบถามดังแนบ หากเป็นไปได้ ขอความกรุณาจัดส่งกลับคืนตามที่ได้จ่าหน้าซองและติดแสตมป์ไว้เรียบร้อยแล้ว ภายในวันที่ 30 พฤศจิกายน 2530 นี้ และดิฉันหวังเป็นอย่างยิ่งว่าคงจะได้รับความร่วมมือจากท่านเป็นอย่างดี จึงขอกราบขอบพระคุณมา ณ โอกาสนี้ด้วย.

ขอแสดงความนับถือ

(นางสาวเอมอัชฌา รัตน์ริมจง)

APPENDIX H

Survey Questionnaire

(English Version)

Questionnaire

"Perceptions of the importance of the elementary school health programs within the elementary schools which are under the Jurisdiction of the Bangkok Metropolis."

Statements:

1. The purpose of this questionnaire is to study the perceptions of the importance of the elementary school health program organization within the schools under the Jurisdiction of Bangkok Metropolis.

2. The questionnaire is divided into two parts.

3. Your response will be very much appreciated because your reply will be useful and helpful for the development of elementary school health programs in the Bangkok Metropolitan area.

Part I: Perceptions of the Organization of the Elementary School Health Programs.

Directions: Please rank the following choices regarding the organization of elementary school health programs in the order in which you perceive their importance (1 being the most important):

Category I: Healthful School Environment

1. Physical Aspects:

   The school should . . .

   1.1 (_____) provide for clean, neat and safe school buildings

   1.2 (_____) provide classrooms to serve students' health needs

   1.3 (_____) provide adequate playground and play equipment for the students

   1.4 (_____) provide for a clean and neat school vicinity

2. Psychological Aspects:

   The school should . . .

   2.1 (_____) provide interesting activities in order to promote the students' mental health

   2.2 (_____) provide recreation areas for the students

   2.3 (_____) encourage the teacher to provide for a good rapport to exist between the teacher and the students (i.e. students should feel free to express themselves)

   2.4 (_____) create good relationships among school personnel

3. General Sanitation Aspects:

The school should . . .

3.1 (_____) provide for an adequate number of clean water supply stations (i.e. drinking fountains, wash areas)

3.2 (_____) provide an adequate number of restrooms for both male and female students

3.3 (_____) encourage students regularly to take responsibility for the clean classrooms

3.4 (_____) provide for sanitary garbage disposal of school buildings and places in the near vicinity of the school

Category II: School Health Services

4. Health Appraisal and Follow-Up Aspects:

The school should . . .

4.1 (_____) request the teaching staff to inspect students' health on a regular basis

4.2 (_____) provide for a periodic health examination of all students

4.3 (_____) require that students' health be recorded regularly

4.4 (_____) follow-up on health and medical appraisals

5. Prevention and Control of Communicable Disease Aspects:

The school should:

5.1 (_____) conduct health examinations regularly for detecting illnesses of the sick students

5.2 (_____) isolate the sick student from others

5.3 (_____) provide an immunization program for contagious diseases (i.e. diphtheria, pertussis, tetanus)

5.4 (_____) provide elimination of diseases and animal reservoirs

6. Health Promotion Aspects:

The school should . . .

6.1 (_____) provide for a nutritional school lunch program

6.2 (_____) present a school accident prevention program for all students

6.3 (_____) provide personal health counseling for students who need it

6.4 (_____) provide first-aid for injuries received at school and for the ill student

Category III: Curriculum and Learning-Teaching

7. Curriculum:

The school should . . .

7.1 (_____) require that health content in the life experience subjects group be taught completely

7.2 (_____) improve the curriculum on the basis of local health problems and needs

7.3 (_____) require using integrated lesson plans of health content in the life experience subjects group

7.4 (_____) require that learning-teaching process be as important as health content

8. Learning-Teaching:

The Teacher should . . .

8.1 (_____) require that every student participate in the learning-teaching activities

8.2 (_____) provide learning-teaching activities in order to attain learning objectives of each lesson

8.3 (_____) provide suitable learning-teaching methods or activities for each subject or activity taught

8.4 (_____) select appropriate learning-teaching media for each lesson

9. Special Activities:

The school should . . .

9.1 (_____) provide and prepare a health exhibition for supplementing learning-teaching activities

9.2 (_____) organize a sample project of developing a health environment for the benefit of all students

9.3 (_____) arrange for a week of education concerning "Prevention of Dental Diseases"

9.4 (_____) provide special activities for aiding health defected students

Category IV: School Health Personnel:

10. Health Personnel

The school should . . .

10.1 (_____) provide a teacher or a school nurse to occupy the health room

10.2 (_____) provide health education in-service training programs for the teachers

10.3 (_____) provide activities related to health and safety promotion for all school personnel

10.4 (_____) set up a committee to organize and administer school health programs

Category V: The Relationship Between School and Community:

11. School and Community

The school should . . .

11.1 (_____) utilize various agencies or organizations for participating in planning of developing students' health

11.2 (_____) provide a health education supervisor to advise the school health programs

11.3 (_____) encourage participation of parents or guardians in school health matters and activities

11.4 (_____) require that the school participate in promoting public health activities

Part II: General Information and Personal Data of the Respondents

1. For the Expert Group:

Directions: Please place a check mark (✓) in the square box (☐) in front of your choice of answers.

1. Sex ☐ Male ☐ Female
2. Age ☐ 30-34 years ☐ 35-39 years
   ☐ 40-44 years ☐ 45-49 years
   ☐ 50-54 years ☐ 55 years and over

3. Highest level of education attained

☐ Master's Degree

☐ Doctor's Degree

4. Total number of years working experience in school health education

☐ 5-9 years ☐ 10-14 years

☐ 15-19 years ☐ 20-24 years

☐ 25 years and over

5. Have you ever participated in organizing a training course program, a professional meeting or seminar concerning school health programs for the elementary school under the Jurisdiction of Bangkok Metropolis?

☐ Yes ☐ No

6. Have you ever studied or conducted a research project concerning the elementary school health program?

☐ Yes ☐ No

7. Have you ever observed, studied, visited or developed any school health programs for the elementary schools under the Jurisdiction of Bangkok Metropolis?

☐ Yes ☐ No

Thank you so much for your kind cooperation and for your interest in my study.

2. For the Principal and Teacher Group:

Directions: Please place a check mark (√) in the square box (☐) in front of your choice of answers. Also, please write some pertinent and important information in the space provided.

1. School's District _____

2. Sex ☐ Male ☐ Female

3. Age ☐ 20-24 years ☐ 25-29 years
☐ 30-34 years ☐ 35-39 years
☐ 40-44 years ☐ 45-49 years
☐ 50-54 years ☐ 55 years and over

4. Highest level of education attained
☐ Certificate or Equivalent
☐ Diploma or Equivalent
☐ Bachelor's Degree
☐ Master's Degree

5. Total number of years teaching experience (classroom teacher) or total number of years in administration and supervisory work (principal)
☐ 1-4 years ☐ 5-9 years
☐ 10-14 years ☐ 15-19 years
☐ 20-24 years ☐ 25 years and over

6. Have you ever taken a school health program course?

☐ Yes ☐ No

7. Have you ever had any additional experiences concerning school health programs from any training program, meeting or seminar?

☐ Yes ☐ No

Thank you so much for your kind cooperation and for assisting me with this school health program survey.

APPENDIX I

Survey Questionnaire

(Thai Version)

แบบสอบถามเรื่อง
ความสำคัญของการจัดดำเนินงานโครงการสุขภาพในโรงเรียนประถมศึกษา

<u>คำชี้แจง</u>

1. วัตถุประสงค์ของแบบสอบถามนี้ เพื่อต้องการศึกษาความสำคัญของการจัดดำเนินงานโครงการสุขภาพในโรงเรียนประถมศึกษา สังกัดกรุงเทพมหานคร

2. แบบสอบถามประกอบด้วย 2 ตอน

<u>ตอนที่ 1</u> อันดับความสำคัญของการจัดดำเนินโครงการสุขภาพในโรงเรียน

<u>ตอนที่ 2</u> ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

3. ผู้วิจัยจะรวบรวมคำตอบของท่านมาเป็นข้อมูล และนำผลไปวิเคราะห์ในเชิงสถิติ เพื่อประโยชน์ในการพัฒนาโครงการสุขภาพในโรงเรียนต่อไป โดยจะไม่นำคำตอบของแต่ละท่านมาเสนอในผลการวิจัย

<u>ตอนที่ 1</u> อันดับความสำคัญของการจัดดำเนินงานโครงการสุขภาพในโรงเรียนประถมศึกษา

โปรดเรียงอันดับความสำคัญของกิจกรรมเกี่ยวกับการจัดดำเนินงานในแต่ละด้านของโครงการสุขภาพในโรงเรียนประถมศึกษา ตามความคิดเห็นของท่าน โดยใส่หมายเลข 1, 2, 3 หรือ 4 แทนความสำคัญอันดับที่ 1, 2, 3 หรือ 4 ตามลำดับให้ครบทุกข้อ (โดยไม่ให้ซ้ำอันดับกัน)

1. <u>ด้านการจัดสิ่งแวดล้อมทางสุขภาพในโรงเรียน</u>

ท่านจะเรียงอันดับความสำคัญของกิจกรรมเกี่ยวกับการจัดสิ่งแวดล้อมทางสุขภาพต่อไปนี้อย่างไรบ้าง

1.1 <u>สิ่งแวดล้อมทางกายภาพ</u>

(.....) จัดสภาพอาคารต่าง ๆ ภายในโรงเรียนให้สะอาด เรียบร้อยและปลอดภัย

(.....) จัดห้องเรียนให้สนองความต้องการทางสุขภาพของนักเรียน

(.....) จัดสนามและเครื่องเล่นสำหรับเด็กให้เพียงพอ

(.....) จัดบริเวณโรงเรียนให้สะอาดเรียบร้อย

1.2 <u>สิ่งแวดล้อมทางจิตภาพ</u>

(.....) จัดกิจกรรมที่น่าสนใจ เพื่อส่งเสริมสุขภาพจิตของนักเรียน

(.....) จัดมุมนันทนาการหรือสถานที่พักผ่อนหย่อนใจสำหรับนักเรียน

(.....) จัดสร้างบรรยากาศแห่งความเป็นกันเองระหว่างครูกับนักเรียน

(.....) จัดสร้างความสัมพันธ์อันดีระหว่างบุคลากรต่าง ๆ ภายในโรงเรียน

1.3 <u>การสุขาภิบาลทั่วไป</u>

(.....) จัดให้มีน้ำดื่มน้ำใช้ที่สะอาดอย่างเพียงพอ

(.....) จัดส้วมและที่ปัสสาวะให้สะอาดและเพียงพอกับความต้องการของนักเรียน

(.....) จัดให้นักเรียนช่วยกันทำความสะอาดห้องเรียนเป็นประจำ

(.....) จัดให้มีการกำจัดขยะมูลฝอยทั้งภายในอาคารและบริเวณโรงเรียน

2. <u>ด้านการบริการสุขภาพในโรงเรียน</u>

ท่านจะเรียงอันดับความสำคัญของกิจกรรมเกี่ยวกับการจัดบริการสุขภาพในโรงเรียนต่อไปนี้อย่างไรบ้าง

2.1 <u>การตรวจสุขภาพและติดตามผล</u>

(.....) จัดให้มีการตรวจสุขภาพโดยครูเป็นประจำ

(.....) จัดให้มีการตรวจสุขภาพโดยแพทย์หรือเจ้าหน้าที่สาธารณสุข เป็นครั้งคราว

(.....) จัดให้มีการบันทึกสุขภาพประจำตัวนักเรียนอย่างสม่ำเสมอ

(.....) จัดให้มีการติดตามผลการตรวจและรักษาโรค

2.2 <u>การป้องกันและควบคุมโรคติดต่อ</u>

(.....) จัดให้มีการตรวจเพื่อค้นหานักเรียนที่เจ็บป่วย

(.....) จัดให้มีการแยกนักเรียนที่เจ็บป่วยให้พ้นจากนักเรียนคนอื่น ๆ

(.....) จัดให้นักเรียนทุกคนได้รับภูมิคุ้มกันโรค (เช่น โรคคอตีบ ไอกรน บาดทะยัก ไข้ไทฟอยด์)

(.....) จัดให้มีการทำลายเชื้อโรคและแหล่งเพาะพันธุ์สัตว์นำโรคต่าง ๆ ภายในโรงเรียน

2.3 <u>การส่งเสริมสุขภาพ</u>

(.....) จัดโครงการอาหารกลางวันให้ถูกหลักโภชนาการ

(.....) จัดโครงการป้องกันอุบัติภัยภายในโรงเรียน

(.....) จัดบริการแนะแนวสุขภาพให้แก่นักเรียน

(.....) จัดให้มีการบริการการปฐมพยาบาลภายในโรงเรียน

3. <u>ด้านหลักสูตรและการเรียนการสอน</u>

ท่านจะเรียงอันดับความสำคัญของกิจกรรมเกี่ยวกับการจัดหลักสูตรและการเรียนการสอนกลุ่มสร้างเสริมประสบการณ์ชีวิตทางสุขภาพต่อไปนี้อย่างไรบ้าง

3.1 <u>หลักสูตร</u>

(.....) จัดสอนเนื้อหากลุ่มสร้างเสริมประสบการณ์ชีวิตให้ครบตามหลักสูตร

(.....) จัดให้มีการปรับปรุงหลักสูตรโดยคำนึงถึงปัญหาสุขภาพของท้องถิ่น

(.....) จัดให้มีการใช้แผนการสอนฉบับบูรณาการของกลุ่มสร้างเสริมประสบการณ์ชีวิต

(.....) จัดให้มีการใช้หลักสูตรโดยเน้นกระบวนการเรียนการสอนให้มากพอ ๆ กับเนื้อหาวิชา

3.2 <u>การเรียนการสอน</u>

(.....) จัดให้นักเรียนทุกคนมีส่วนร่วมในกิจกรรมการเรียนการสอน

(.....) จัดการเรียนการสอนเพื่อสนองจุดประสงค์การเรียนรู้ของแต่ละบทเรียน

(.....) จัดกิจกรรมหรือวิธีสอนให้เหมาะสมกับเนื้อหาของแต่ละบทเรียน

(.....) จัดให้มีการใช้สื่อการเรียนการสอนให้เหมาะสมกับเนื้อหาของแต่ละบทเรียน

3.3 <u>กิจกรรมพิเศษ</u>

(.....) จัดนิทรรศการทางสุขภาพเพื่อเสริมการเรียนการสอน

(.....) จัดโครงการพัฒนาสิ่งแวดล้อมทางสุขภาพให้เป็นตัวอย่างแก่นักเรียน

(.....) จัดสัปดาห์ป้องกันโรคฟันผุเป็นกิจกรรมเสริมหลักสูตร

(.....) จัดกิจกรรมพิเศษเพื่อช่วยเหลือเด็กที่มีความบกพร่องทางสุขภาพ

4. ด้านบุคลากรทางสุขภาพ

ท่านจะเรียงอันดับความสำคัญของกิจกรรมเกี่ยวกับการจัดบุคลากรทางสุขภาพต่อไปนี้อย่างไรบ้าง

4.1 บุคลากรทางสุขภาพ

(.....) จัดให้มีครูดูแลห้องพยาบาลเป็นประจำ

(.....) จัดอบรมครูประจำการทางด้านสุขศึกษา

(.....) จัดกิจกรรมส่งเสริมสุขภาพและสวัสดิภาพให้แก่บุคลากรทุกคนในโรงเรียน

(.....) จัดให้มีคณะกรรมการเพื่อดำเนินงานโครงการสุขภาพในโรงเรียน

5. ด้านความสัมพันธ์ระหว่างโรงเรียนกับชุมชน

ท่านจะเรียงอันดับความสำคัญของกิจกรรมเกี่ยวกับการจัดความสัมพันธ์ระหว่างโรงเรียนกับชุมชนต่อไปนี้อย่างไรบ้าง

5.1 โรงเรียนกับชุมชน

(.....) จัดให้หน่วยงานหรือองค์กรต่าง ๆ ในชุมชนมีส่วนร่วมในการวางแผนเพื่อพัฒนาสุขภาพนักเรียน

(.....) จัดให้มีศึกษานิเทศก์ทางด้านสุขศึกษามาแนะนำเกี่ยวกับโครงการสุขภาพในโรงเรียน

(.....) จัดให้พ่อแม่หรือผู้ปกครองมีส่วนร่วมในกิจกรรมพิเศษเพื่อส่งเสริมสุขภาพนักเรียน

(.....) จัดให้โรงเรียนได้มีส่วนในการส่งเสริมกิจกรรมสาธารณสุขของชุมชน

ตอนที่ 2 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

1. สำหรับกลุ่มผู้เชี่ยวชาญ

โปรดเขียนเครื่องหมาย ✓ ลงในช่อง ☐ หน้าข้อความ ตามสภาพจริงเกี่ยวกับท่าน

1. เพศ ☐ ชาย ☐ หญิง

2. อายุ ☐ 30 – 34 ปี ☐ 35 – 39 ปี
☐ 40 – 44 ปี ☐ 45 – 49 ปี
☐ 50 – 54 ปี ☐ ตั้งแต่ 55 ปีขึ้นไป

3. วุฒิการศึกษาสูงสุดของท่าน
☐ ปริญญาโท
☐ ปริญญาเอก

4. ประสบการณ์ในการทำงานทางด้านสุขศึกษาในโรงเรียน
☐ 5 – 9 ปี ☐ 10 – 14 ปี
☐ 15 – 19 ปี ☐ 20 – 24 ปี
☐ ตั้งแต่ 25 ปีขึ้นไป

5. ท่านเคยมีส่วนร่วมในการจัดการอบรม การประชุม หรือการสัมมนาเกี่ยวกับโครงการสุขภาพในโรงเรียน ให้แก่ครูโรงเรียนประถมศึกษา สังกัดกรุงเทพมหานคร หรือไม่
☐ เคย ☐ ไม่เคย

6. ท่านเคยทำการศึกษา ค้นคว้า หรือวิจัยเกี่ยวกับโครงการสุขภาพในโรงเรียนประถมศึกษา หรือไม่
☐ เคย ☐ ไม่เคย

7. ท่านเคยมีประสบการณ์ในการไปสังเกต ศึกษา เยี่ยมชม หรือช่วยพัฒนาโครงการสุขภาพในโรงเรียนประถมศึกษา สังกัดกรุงเทพมหานคร หรือไม่
☐ เคย ☐ ไม่เคย

ขอขอบพระคุณในความร่วมมือเป็นอย่างดี

2. <u>สำหรับกลุ่มครูใหญ่และครูประจำชั้น</u>

โปรดเขียนเครื่องหมาย ✓ ลงในช่อง ☐ หน้าข้อความ และเติมข้อความลงในช่องว่างตามสภาพจริงเกี่ยวกับท่าน

1. โรงเรียน..... เขต.....

2. เพศ ☐ ชาย ☐ หญิง

3. อายุ ☐ 20 – 24 ปี ☐ 25 – 29 ปี
☐ 30 – 34 ปี ☐ 35 – 39 ปี
☐ 40 – 44 ปี ☐ 45 – 49 ปี
☐ 50 – 54 ปี ☐ ตั้งแต่ 55 ปีขึ้นไป

4. วุฒิการศึกษาสูงสุดของท่าน
☐ ประกาศนียบัตรหรือเทียบเท่า
☐ ป.กศ.สูง หรือเทียบเท่า
☐ ปริญญาตรี
☐ ปริญญาโท

5. ประสบการณ์ในการสอนของ<u>ครูประจำชั้น</u> หรือประสบการณ์ในการบริหารงานของ<u>ผู้บริหารโรงเรียน</u>
☐ 1 – 4 ปี ☐ 5 – 9 ปี
☐ 10 – 14 ปี ☐ 15 – 19 ปี
☐ 20 – 24 ปี ☐ ตั้งแต่ 25 ปีขึ้นไป

6. ท่านเคยศึกษาวิชาโครงการสุขภาพในโรงเรียน หรือวิชาสุขศาสตร์ในโรงเรียน หรือวิชาชื่ออื่นที่เกี่ยวข้องกับการพัฒนาสุขภาพนักเรียนหรือไม่
☐ เคย ☐ ไม่เคย

7. ท่านเคยได้รับประสบการณ์เพิ่มเติมเกี่ยวกับวิชาในข้อ 6 จากการอบรม การประชุม หรือการสัมมนา หรือไม่

☐ เคย ☐ ไม่เคย

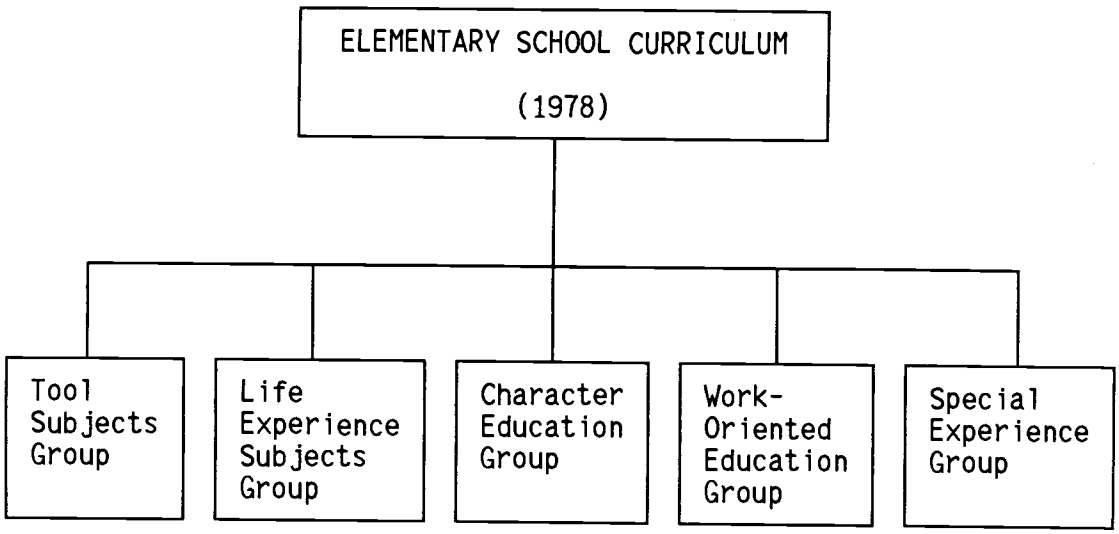
ขอขอบพระคุณในความร่วมมือเป็นอย่างดี

APPENDIX J

Chart Showing Elementary School Curriculum 1978

(Thailand)

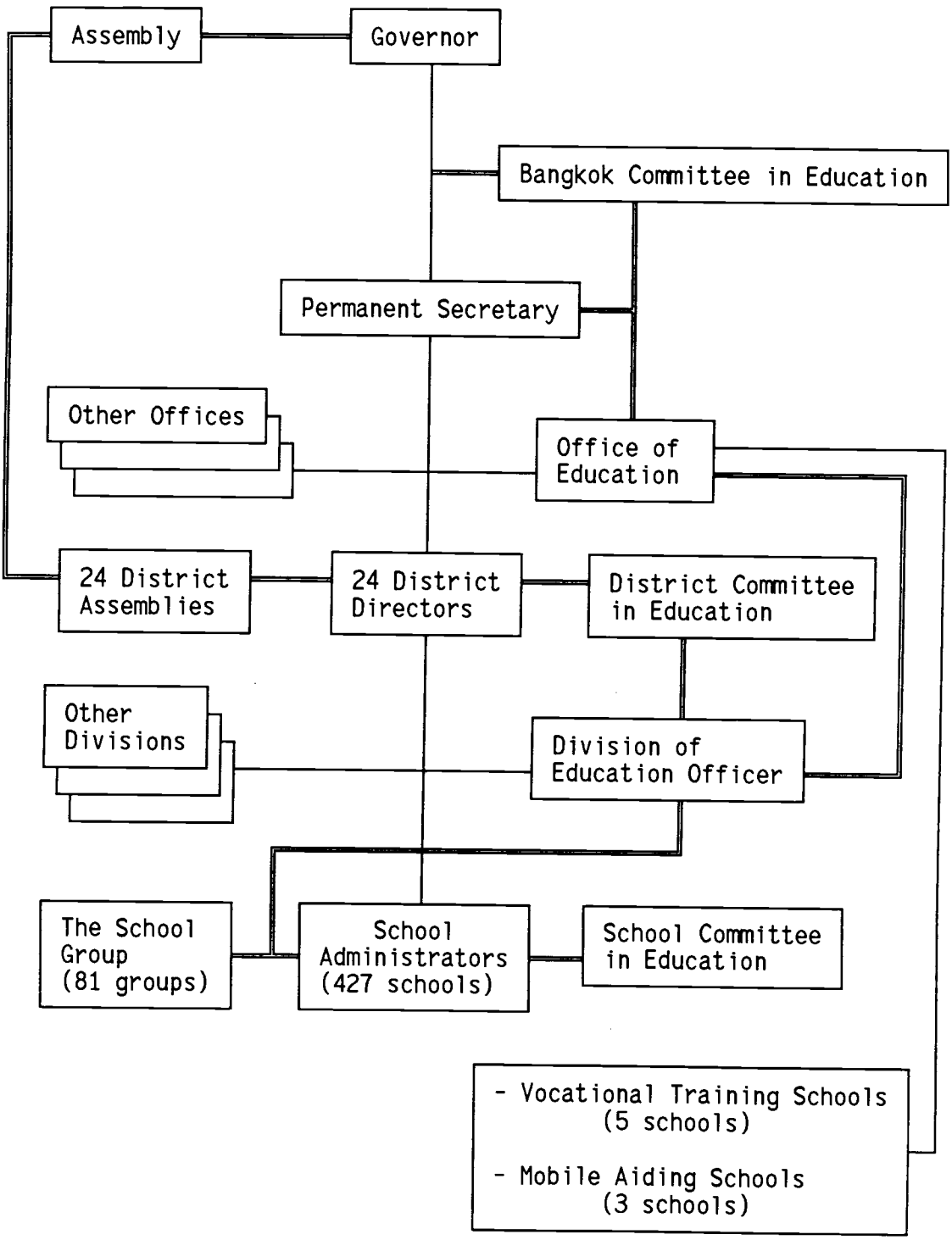
Chart Showing Elementary School Curriculum 1978



APPENDIX K

The Organization Chart of the Bangkok Metropolitan Education Administration

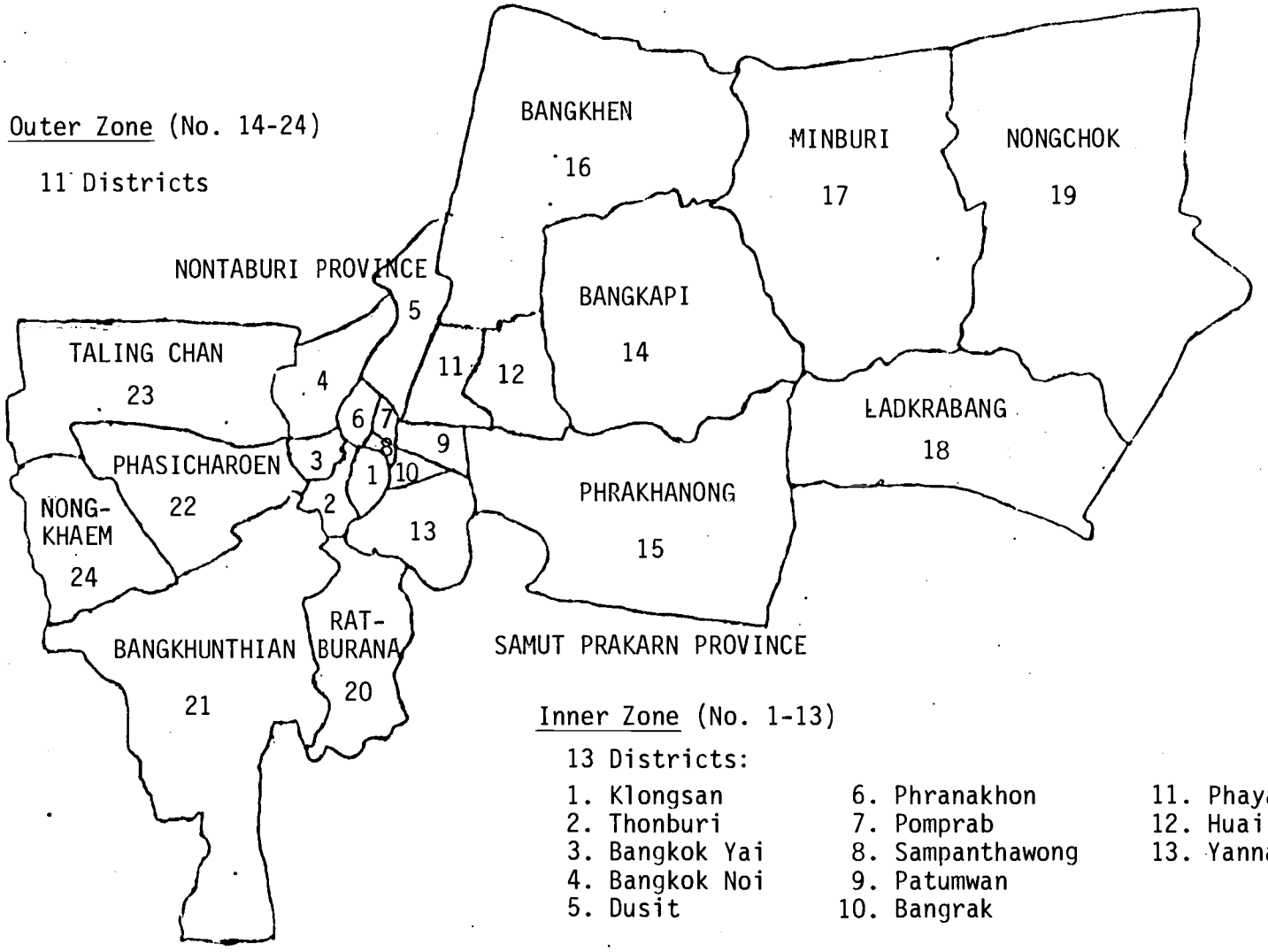
The Organization Chart of the
Bangkok Metropolitan Education Administration



APPENDIX L

Map of Bangkok Metropolis

MAP OF BANGKOK METROPOLIS



Outer Zone (No. 14-24)

11 Districts

Inner Zone (No. 1-13)

13 Districts:

1. Klongsan
2. Thonburi
3. Bangkok Yai
4. Bangkok Noi
5. Dusit
6. Phranakhon
7. Pomprab
8. Sampanthawong
9. Patumwan
10. Bangrak
11. Phayathai
12. Huai Khwang
13. Yannawa

APPENDIX M

Vita

VITA

Name: Aim-ut-cha Rat-rim-chong

Date of Birth: January 9, 1955

Place of Birth: Prachinburi, Thailand

Educational History:

1. High School Certificate

   Prachinrasadornumrung School, Prachinburi (1973)

2. Bachelor of Education (Second Class Honor)

   Major: School Health Education

   Minor: Population Education

   Chulalongkorn University, Bangkok (1977)

3. Master of Science in Health Education

   Mahidol University, Bangkok (1984)

4. Doctor of Education

   Major: Health Education

   Minor: Community Health

   Oregon State University, Oregon, U.S.A. (1988)

Working Experience:

1. Health Educator at Public Health Promotion Division, Department of Health, Bangkok Metropolis (1977 - 1979)

2. Health Educator at Health and Physical Education Promotion Division, Department of Physical Education, National Stadium, Bangkok (1979 - present)

Special Experience:

1. Writing work (co-author):
   1.1 Health Textbooks and Workbooks (Grades 7 - 12)
   1.2 Health Teaching Manuals (Grades 7 - 12)
2. Participating in the Ship for Southeast Asian Youth Program (1979)

Awards: Graduate Assistantship Scholarship
Department of Health, College of Health and Physical Education, Oregon State University, U.S.A. (1985 - 1987)