A DELPHI INVESTIGATION OF STAFF DEVELOPMENT KNOWLEDGE

AND SKILLS NEEDED FOR PRIMARY SCHOOL

PRINCIPALS IN THAILAND

DISSERTATION

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By

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This study sought to determine the staff development knowledge and skill needs of school administrators as perceived by primary school principals in Thailand. This study posed the following questions for investigation: (1) what specific knowledge and skills do primary school principals in Thailand perceive as necessary for them to perform the role of staff developer in their schools? (2) which competencies are perceived to be most important?

The study concentrated on one part of the country, Educational Region I, which included five provinces: Nakhon Pathom, Nonthaburi, Pathumthani, Samuth Prakan, and Samuth Sakhon. Using the Delphi Technique, data were gathered from 49 primary school principals in these provinces during the period of August 1989 to December 1989.

A total of 43 skills and knowledge statements were generated by the first-round questionnaire. The second-round questionnaire asked panel members to rate the statements on a five-point Likert Scale. The third-round questionnaire asked the panelists to respond to statistical feedback from the second-round questionnaire. Modal

consensus, mean and standard deviations were calculated for each of the 43 statements to obtain the results of both Round II and Round III to form the basis for statistical analysis.

From 43 statements, 14 were rated as having the highest priority of importance. Twenty-nine statements were rated as above-average priority of importance. Respondents who did not join the modal consensus were asked to provide reasons for each statement.

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CHAPTER 1

INTRODUCTION

Staff development programs are the primary vehicle available for improving schools, increasing student learning, and implementing changes in the educational system. The development of human resources or staff development is, therefore, an important responsibility for the school principal. The principal needs to know, as well as improve, those competencies necessary to perform the staff developer role. Williams (1982) pointed out:

> Staff development is an important aspect of education management. As such it is vital that the staff development function is managed professionally. It is probably best if one individual at a high level in the organization is given the overall responsibility for staff development. This is not to say that he does all the development, but rather that he sees that it is done and done well (p. 6).

Earlier Harris (1966) had supported the principal's role in staff development when he noted that in human organizations such as schools, professional growth is the central leadership task of supervision and an essential requirement of each individual--times change, the public changes, curriculum changes, situations change, and so we must have dynamic professional growth programs; the principal should assist in developing these programs.

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In Thailand, the primary school principal is an influential person. The principal determines the school's qualitative direction and pace. Some concepts which can apply to the primary school principal in Thailand as elsewhere were noted by Gross (1965) as follows:

> As chief executive, the principal is best able to develop the strategy and coordination of teaching and learning. This formal leadership provides him with the opportunity to motivate his staff and to improve teaching standard and performance. He may maximize the different skills of his teachers and help to develop their expertise (p. 1).

However, educational and societal changes have brought increasing demands upon schools and, concurrently, upon administrators. Social changes have created a need for new skills on the part of the principal. Organizations must become concerned with the kinds of skills administrators exhibit in performing their jobs. A competency-based approach to the principalship provides a systematic means for analyzing and synthesizing the conceptual, human, and technical skills required for effective and efficient performance in the principal's leadership role. McIntyre (1974) suggested that teachers are more receptive to the principal's instructional improvement role if the principal is competent. And Klopf (1979) emphasized that the principal should possess those competencies which relate to the role of staff developer, trainer, and enabler.

Today the training of administrators requires more attention than in the past because of the increasingly

complex nature of administration of technological and scientific progress. At the same time, the standards required for success have become higher than in the past.

Based on a review of the literature, it appears that principals are given little training in the area of staff development. Primary school principals in Thailand are selected and officially appointed in accordance with their number of years of service and academic background. There are many primary school principals in Thailand who can be considered under-qualified for the posts they hold. At the same time, there are academically qualified principals who did not have any administrative training prior to becoming principals. Principals, therefore, need development programs to improve their job performance and prepare them for the changes and challenges that are sure to come in the future.

This study is designed to determine specific staff development needs for primary school principals. The first step in the design and development of a successful training program is to describe the people to be trained and the type of training they need. This process and the information gathered is called a "needs assessment" or "needs analysis." The information comes from a variety of sources and usually includes data on the program content, the instructional method or methods used, and other forms of implementation.

Presently, there is very little research available on specific knowledge and skills which reflect the principals' needs in the area of staff development; however, the concept of needs assessment has received renewed and widespread interest from members of the training and development profession as a planning strategy. In support of the concept of needs assessment, Newstrom and Lilyguist (1979) noted that, "need analysis is important and should be conducted early in any systematic approach to training" (p. 53). Price (1982) also maintains that needs assessment is crucial to educational and program development.

Statement of the Problem

This study seeks to identify and describe knowledge and skills necessary for primary school principals in Thailand to perform the role of staff developer.

Purposes of the Study

The purposes of this study are as follows:

1. To identify the knowledge and skills primary school principals of Thailand perceive they need to perform the role of staff developer.

2. To determine which of these knowledge and skills should be given priority for training primary school principals.

Research Questions

1. What knowledge and skills are needed by primary school principals to perform the role of staff developer?

2. What staff development knowledge and skills should be given the highest priority in the opinion of primary school principals in Thailand?

Background Information of Primary Education in Thailand

Primary education in Thailand was officially initiated when King Chulalongkorn issued the reorganization edict in 1884, according to which, three years later, the Department of Education was established for the first time. Primary education has been under the administration of various government agencies. The largest portion of provincial schools was administered by the Provincial Administration Organization of the Ministry of Interior. A reorganization of educational administrative structure to achieve unity in education transferred all primary schools from the Ministry of Interior to the Ministry of Education in October, 1980. With this change, a new department called the Office of the National Primary Education Commission (ONPEC) was created. At present, ONPEC is responsible for the administration and management of all government primary schools in Thailand, those under the auspices of the municipalities, a few experimental schools under the Department of Teacher Education and the Ministry of University Affairs and special

schools under the Department of General Education. The academic aspects of primary education development, i.e., curriculum development and teacher training, however, stayed with the Ministry of Education. As a result of the reform of the administrative structure of primary education in 1980, both academic and administrative responsibilities for primary education are now overseen by the Ministry of Education. This change paves the way for greater unity, efficiency and more effective coordination in the administration and management of primary education in Thailand.

In the operations process, several problems and obstacles are conducive to low-quality education. They are, for example: (1) low quality of teaching (teachers' inadequate knowledge of subject matter); (2) old approaches to teaching (teachers do not fully understand the essence of the new curriculum); (3) teachers' lack of experience in developing locally made teaching-learning materials; (4) shortage of textbooks and stationery; (5) shortage of instructional aids and equipment to carry out teaching and learning in line with the new curriculum; (6) inefficient supervision (lack of basic materials, knowledge and equipment to carry out supervisional activities) (ONPEC, 1984).

A research study conducted by the Provincial Primary Education Office of Nakhon Sawan (a province in northern

Thailand) in 1982 revealed the following seven major areas
of problems and limitations affecting academic achievement
of the pupils in small primary schools: (1) school
principals are not motivated; (2) teachers do not teach
every subject according to the given curriculum; (3) the
social life of the pupils is limited so they have less
motivation to learn; (4) many of the pupils come from
economically deprived and problem-oriented families; (5)
little attention is paid by the provincial and district
educational administrators, therefore, supervision is
insufficient (6) expenditures per pupil are higher than
those in larger schools; and (7) facilities, in terms of
supplemental buildings and spaces as well as teaching aids
and equipment, are limited. Many schools do not have the
teaching materials needed for learning activities (pp.
36-37).

Because ONPEC is the organization oriented for the
primary level, the effectiveness of its primary education
seems to be of greatest importance; yet ONPEC, which hardly
had any problems regarding the quality of education and
effective management as recently as five years ago, is
finding it difficult to meet the expected level of
performance. Strengthening or improving education and
management must still be carried out.

There is a variety of alternative and emergent
strategies that are potentially useful in developing the

organization and operation of primary schools. In-service education is advocated in the literature because it is thought to increase the crucial knowledge and skills of practicing educators. It deals with the ongoing development of existing personnel. During the last two decades innovations, societal changes, and attitudinal changes in students have given in-service education a major role in professional education. Thavilab (1972) insisted that in-service education is accepted as a continuous process and necessary for school staff members and professional development. It helps staff members acquire essential knowledge and skills relating to their functions and provides a meaningful experience. Sunhachawee (1968) added that in-service education, especially leadership training, should be arranged for the staff members of many educational institutions in Thailand. Furthermore, Paeratakul (1981) said that such education is vital and that the Thai Ministry of Education should provide it for principals and teachers in all schools.

At present, ONPEC has 31,250 primary schools and 385,215 primary school teachers. ONPEC is aware of the difficulty of training all the primary teachers in the country. Accordingly, ONPEC has created new strategies for in-service training. Noteworthy among them are: (1) Mobile Educational Resource Centers for Provincial Supervisors to conduct in-service training for primary school teachers at

the district level, the school cluster level and also the
primary school level; (2) school cluster based in-service
training for primary school teachers using the school
cluster resource center to facilitate it and (3) school
based in-service training for specific programs or that is
designed for the specific needs and problems of specific
schools.

As noted previously, it would be best if the competent
principals were given the overall responsibility for staff
development in their schools; in reality, however, routine
management is so time consuming and energy sapping that
principals themselves may not have sufficient time to keep
abreast of changing administrative environments or new
concepts and techniques. In addition, the expansion of
knowledge in the 20th century has been so rapid and the rate
of obsolescence so swift, that much of the knowledge
acquired by personnel during their professional training may
be outmoded.

Recently, the Ministry of Education has recognized the
necessity of creating a central agency responsible for
training and developing educational administrators. This
agency serves as a forum in which senior administrators can
exchange views and experiences in the implementation of the
government policy, as well as a training center for junior
administrators. It has been recognized that the efficiency
and effectiveness of the implementation of various programs

depend to a large extent on administrative capability.
Administrators must be equipped, therefore, with appropriate
administrative tools. The administrators' development must
be a continuing process. These people should constantly be
exposed to new trends, theories and practices of
administration.

Significance of the Study

This study seeks to describe how primary school
principals in Thailand perceive those competencies the
principals need to carry out the functions of staff
developers in their schools. The data gathered and reported
in this dissertation will provide information for further
planning for the professional training and development of
primary school principals. Also, these data could be
helpful in upgrading knowledge and curricula which currently
exist in the area of staff development.

The implications of this study are, therefore, directed
toward aspiring administrators, practicing administrators,
those persons responsible for designing and implementing
preservice and in-service training programs for
administrators, and those persons responsible for developing
relevant information and support systems for primary school
principals in the area of staff development.

Delimitations of the Study

"School administrator" refers only to primary school principals in the central educational region of Thailand, which consists of five provinces: Nakhon Pathom, Nonthaburi, Pathum Thani, Samuth Prakan, and Samuth Sakhon. The study will not include the principals at other levels and in other educational regions.

Definition of Terms

For the specific purpose of this study, the following terms have been defined:

Needs--requirements necessary in order for the principal to administer tasks and responsibilities effectively and efficiently e.g., specific knowledge, skills, or attitudes which are lacking but may be obtained through learning experiences.

Primary school--a school in Thailand, comprised of Prathom 1 to Prathom 6, which is equivalent to American elementary school grades 1 to 6. "Prathom" is also the common term for primary school in Thailand.

Primary school principal--a person appointed by the government to be responsible for the management, organization, and supervision of a school organized as a primary school.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Although much has been written about primary education,
available literature on the role of the primary school
principal as a staff developer is limited in scope and
quantity. There are even fewer studies completed on the
topic in Thailand. Other sources of educational
investigation for the past decade indicate a paucity of
material on this topic. In these sources the roles,
responsibilities, skills, and knowledge of the primary
school principal in the area of staff development is not
viewed in isolation but as an integral part of the total
role of the principal. The review of related literature was
done to facilitate the accomplishment of the purposes of
this study as well as to broaden the researcher's
understanding of the areas addressed. The purpose of this
chapter is to present relevant research and literature of
both the United States and Thailand focusing on the
following sections:

1.   Staff development and in-service education,
     definitions, purposes, and importance;

2.   The role and functions of the primary school
     principal as a staff developer;

3. Competencies needed for an effective staff
   developer.

Staff Development and In-service Education:

Definitions, Purposes and Importance

Educators call staff development by several names.
Some call it in-service education, some call it in-service
training, and still others call it continuing education;
however, according to Harris (1969), the terms which are
synonymous with the term "staff development" are job
training, continuing education, in-service education,
renewal, professional growth and professional development.
Haws (1980) states that in-service education is to be
considered as one aspect of staff development, and it is
considered the primary, but not the sole, vehicle for staff
development. According to Wood (1985), the term in-service
education refers to the professional learning experience of
people who are employed as teachers.

In the work of Friedman and others (1980), in-service
is referred to as a planned, coordinated series of
activities which contribute to professional development.
Howsam (1976) states that in-service education is a term
that should be used in connection with the activities school
districts provide in order to train their teachers in the
particular mode of education which they choose to use.
Orrange and Van Ryn (1975) define inservice education as, "a

portion of professional development that should be publicly supported and includes a program of systematically designed activities, planned to increase the competency--knowledge, skills, and attitudes--needed by school personnel in the performance of their assigned responsibilities" (p. 24).

Lipham (1975) adds a different interpretation. He states that in-service education should include all of the collectively or individually planned experiences that contribute to the professional growth of each professional staff member. Edelfelt and Johnson (1975) define in-service education of teachers as any professional development activities that a teacher undertakes singly or with other teachers after receiving his or her initial teaching certificate and after beginning professional practice.

Harris and Bessent (1969) declare that inservice education must include all activities aimed at the improvement of professional staff members. A little over a decade later, Harris (1980) defined in-service education as

--any planned program of learning opportunities
afforded staff members of schools, colleges, or
other educational agencies for purposes of
improving the performance of the individual in
already assigned positions (p. 21).

Even though the meanings of in-service education and staff development are sources of controversy, the literature presents several examples of definitions which emphasize different points of view. Peterson's (1981) definition makes the point that staff development and organizational

development are dependent correlates. The influence of the environment on individuals is an important consideration. He notes that, "staff development is a process designed to foster personal and professional growth for individuals within a respectful, supportive, positive organizational climate having as its ultimate aim better learning for students and continuous, responsible self-renewal for educators and schools" (p. 3).

Williams (1982) suggests that staff development in schools should have aims that relate to the needs, not only of teaching and ancillary staff, but also of the pupils and of the organization within which they all function. He identifies the relationship between the individual and the organization as one of the roots of staff development and of all the other activities sanctioned by the organization. He also defines staff development as:

> --the process by which individuals, groups and organizations learn to be more effective and efficient. It can happen unsystematically and haphazardly or a school can have a policy for staff development and procedures to ensure that staff are helped to develop in the best way (p. 1).

He adds that the staff development process should be managed in such a way that the staff within the organization respond in a creative way both in their jobs and in the management of their own development.

Williams also defines staff development in curriculum terms and says it can be discussed as formal and informal

staff development. A further category that he uses causes it to be considered opportunistic staff development:

> Informal staff development includes the climate or atmosphere which surround the staff development process. It is closely related to the climate of the school and the management style of the principal. A poor climate can stifle an otherwise sound staff development programme. Opportunistic staff development refers to the process of seizing opportunities that arise and using them to develop staff. This is a creative of-the-moment approach. One-legged staff development conferences are examples of this. A principal and a teacher may be passing each other in the corridor and the principal briefly asks some searching question or gives guidance aimed at the teacher's staff development (Williams 1982, pp. 4-5).

It may be said that staff development in schools consists of all experiences that are provided by the school or organized by the school as being important for, and contributing to, the personal and professional growth of employees of the school. Less formally, staff development in school consists of all those activities sponsored or organized by the school district to help employees do their work better and with greater satisfaction (Kelley and Dillon, 1978). This is a very comprehensive definition of staff development. Kelley and Dillon go on to define in-service education as an example of a staff development experience. In the literature and in practice staff development and in-service education are used interchangeably.

We can see that the definitions of staff development and in-service education have been varied. We must as well

accept the fact that staff development is a continuous process and that it is necessary for school staff members' professional development. It helps the staff members acquire essential knowledge and skills relating to their functions and provides a meaningful experience. Staff development programs recognize not only the importance of increasing teaching effectiveness and upgrading the application of knowledge and skills, but also the development of human resources. This would be particularly significant in the rural areas of Thailand. It was generally accepted that in-service primary teacher education programs should aim at improving the effectiveness of teachers in the classroom as well as helping teachers direct more of the teaching/learning activities toward serving community development and in the preservation and development of Thai culture.

According to a report of the Asia and the Pacific Program of Educational Innovation for Development (APEID) on in-service primary teacher education in Asia, the set of national studies that include Thailand reveals a number of important findings related to the in-service education of primary teachers. The more significant of these are:

1. In-service education programs have enabled concerned teachers to develop both professionally and academically. These programs have positively influenced the behavior and teaching/learning styles of the participants. In many cases, the

teachers have developed greater confidence in
making decisions at their own local level;

2. In-service education has contributed to the
   upgrading of professional qualifications, has
   helped refresh the spirit and morale of teachers
   and has improved their classroom teaching;

3. The strategy of using 'key personnel' to implement
   in-service courses in their regional or local
   levels has been found to be effective;

4. The practice of linking in-service education with
   further formal qualifications has proved popular
   with many teachers, particularly among those who
   are seeking upward mobility; however, courses
   designed to lead to academic awards often fail to
   meet the need for particular teaching skills;

5. Most of the studies agreed in their conclusions
   that there is a need for some new thinking in
   regard to basic planning, ways of increasing the
   involvement of teachers monitoring and summative
   evaluation; and

6. A number of the studies argued for more systematic
   research and more definitive surveillance of the
   needs of teachers and the school systems (UNESCO
   1982, pp. 4-5).

It can be concluded that staff development is essential
to every school program for two reasons: to improve student
learning achievement and to improve school learning climate.

In educational organizations, staff development has come of age. As such, it should be viewed as a central subsystem within the framework of the total school which promotes the personal and professional growth of human resources. Culbertson, Henson and Morrison (1974) concurred with this viewpoint. They concluded that (1) the effective improvement of education in school systems cannot be brought about without staff development programs; (2) staff development programs should be designed to serve the needs of personnel and the goals of school systems and (3) staff development activities in school systems will continue to increase (pp. 1-17).

Harris and Bessent (1969) state that four reasons for the importance of in-service education are (1) preservice preparation of professional staff members is rarely ideal and may be primarily an introduction to professional preparation, rather than professional preparation as such; (2) social and educational changes have made current professional practices obsolete or relatively ineffective in a very short period of time, which applies to methods and techniques, tools, and substantive knowledge itself; (3) coordination and articulation of instructional practices have required changes in people; even when each instructional staff member is functioning at a highly professional level, employing an optimum number of the most effective practices such as instructional programs, these

practices might still be relatively uncoordinated from subject to subject and poorly articulated from year to year; (4) other factors argue for in-service education activities of rather diverse kinds. Morale can be stimulated and maintained through in-service education, and is a contribution to instruction in itself, even if instructional improvement of any dynamic kind does not occur (pp. 3-4).

The Role and Functions of the Primary School
Principal as a Staff Developer

It is apparent that the principal is a vital person in school. The role responsibilities of the primary school principal are numerous and complex. Principals are often expected to be all things to all people and to be responsible for and knowledgeable about all things related to their schools including staff development.

Staff development should be a collective responsibility. In a discussion of the responsibilities of the principal in the areas of in-service and staff development, Roe and Drake (1980) maintain that this development is a major responsibility and that the effective principal must analyze the staff as a whole in order to prepare for it. Roe and Drake also add that a major responsibility of the principal is to help the staff grow into an enthusiastic, inspired, dynamic, hardworking team. Steps the principal can take to build a dynamic staff are

(1) select professional, enthusiastic people; (2) provide a climate that is professional and that inspires and releases talents; (3) stimulate the initiation of professionally relevant programs; and (4) encourage cooperation and collaboration among staff members.

In analyzing the role of the principal, Roe and Drake (1980) also divided it into two broad categories: the administrative-managerial emphasis and the educational and instructional leadership emphasis. The major duties prescribed in each are:

The Administrative-Managerial Emphasis

    a. Maintaining adequate school records of all types

    b. Preparing reports for the central office and other agencies

    c. Budget development and budget control

    d. Personnel administration

    e. Student discipline

    f. Scheduling and maintaining a schedule

    g. Building administration

    h. Administering supplies and equipment

    i. Pupil accounting

    j. Monitoring programs and instructional processes prescribed by central office

    k. Communicating to the students, staff, and the school's community as spokesman for the central office (p. 14).

The Educational and Instructional Leadership Emphasis

    a. Stimulate and motivate staff to maximum performance

    b. Develop with the staff a realistic and objective system of accountability for learning (as contrasted to merely monitoring programs and instructional processes in input terms as prescribed by the central office)

    c. Develop cooperatively operable assessment procedures for on-going programs to identify and suggest alternatives for improving weak areas

    d. Work with staff in developing and implementing the evaluation of the staff

    e. Work with staff in formulating plans for evaluating and reporting student progress

    f. Provide channels for involvement of the community in the operation of the school

    g. Encourage continuous study of curricula and instructional innovations and provide help and resources for the establishment of those that are most promising

    h. Provide leadership to students in helping them develop a meaningful and responsible student government

    i. Establish a professional learning resources center and expedite its use

    j. Develop cooperatively with the staff a dynamic

       professional development and inservice

       education program (p. 15).

Roe and Drake (1980) say that principals, on the surface, are expected to do everything that would satisfy both sets of role demands, but it is virtually impossible to wear both hats at once. The exceptional principal tends to emphasize the educational and instructional leadership emphasis, but most principals, according to Roe and Drake, are dominated by the administrative-managerial emphasis.

One generic set of roles for the school administrator as a staff developer included task specialist, team member, leader or supervisor, coordinator, external liaison, administrator and change maker. Nadler (1980) presented a complete model for the human resource developer. The primary roles and subroles were as follows:

    1. Learning Specialist

       Instructor

       Curriculum Builder

       Methods and Materials Developer

    2. Administrator

       Developer of personnel

       Supervisor of on-going programs

       Maintainer of community relations

       Arranger of facilities and finance

    3. Consultant

       Expert

Stimulater

Advocate

Change agent (p. 150).

Small (1974), in a discussion of how principals initiate and respond to change, identified ten role choices for the principal as an organizational change agent.

1. Initiator. The principal makes changes according to his perception of need.

2. Stimulater. The principal provides the opportunity for the appropriate constituencies to develop recommendations.

3. Reactor. The principal responds directly to the situation.

4. Implementor. The principal is required to implement policies decided upon by central administration.

5. Conduit. The principal may then play an intermediary role and seek to connect those requesting change with the appropriate party.

6. Orchestrator-Mediator. The principal may seek to create the context in which change can be negotiated among the parties concerned.

7. Persuader or Dissuader. He may persuade those proposing change not to push for the change they have proposed, to push for something else, or to change the timing of their efforts.

8. Advocate. He may choose to support those pushing for the change and join them in attempting to bring

the change about.

9. Ombudsman. The principal voices the concerns of any group whose point of view might otherwise not be given adequate consideration.

10. Nonactor. He may choose to make only minimal response to the change proposal and not actively pursue any of the above roles (pp. 21-22).

In Thailand, Tongsomjit (1975) conducted a study to determine how well the elementary school principals conform to their role expectations in the following areas: planning, organization, personnel administration, decision making, finance, and school coordination. The results in the personnel administration area revealed that principals performed very well in this area. Their role expectations included promotion of head teachers, promotion of teachers' professionalism, transfer of teachers and solving conflict among teachers.

Jantapoom (1967) conducted a study to investigate the principal's role expectation in the area of personnel administration. Twenty-two principals, 240 teachers, 460 pupils, and 214 parents participated in the study. The findings on the principal's role expectation for personnel administration were as follows:

1. As perceived by teachers, the role expectations at the high level were mainly concerned with the designation and verification of work assignment; at the middle level,

the maintainance of morale, professional development and the transfer, promotion, and control of work regulation; and at the lower level, the evaluation of job performance.

2. As perceived by pupils, the principal's role at the middle level included handling extra-curricular activities, guidance and other personnel services, but at the high level, his responsibilities involved the promotion of good pupil behavior and control of discipline.

3. As perceived by the parents, the principal, at the middle level, provided school information, provided school instructional media, and maintained the school's community relations but at the low level, parents saw the principal's role as enlisting the cooperation of parents in school administration.

Kaewdang (1977), in his study of elementary school principals' perceptions of their roles in performing tasks and school effectiveness, categorized perception of tasks in the area of staff personnel and student achievement scores. In the staff personnel category, the schools likely to have high effectiveness were those in which the principals were concerned with personal and family interests, increasing the feeling of belonging to the team, and improving working conditions. The behaviors perceived as very important were (1) encouraging teachers to participate in formulating school activities; (2) creating a feeling on the part of each staff member that he or she belongs to the whole team

and that what he or she does is a contributing factor to the success of the school program; (3) encouraging teachers to visit the principal's office to discuss school and personal problems.

In his study, Kaewdang also concluded that principal role perception of tasks was related to school effectiveness. The schools in which the principals' behavior provided a model for students and teachers and emphasized lessons were likely to be highly effective. Schools in which principals encouraged parents, community, teachers, and students to participate in formulating school policy and emphasized implementation of the compulsory education law, recording, reporting, and budget preparation were likely to show low effectiveness. The principal role perception of tasks that dealt with staff personnel, the school-community relationship, and physical facilities showed a high relationship to school effectiveness. Moreover, there were very strong associations between the way the principals perceived their roles and school effectiveness (p. 38).

After a review of the role responsibilities of the principal and the requirements of the principalship, it becomes clear that principals are expected to be all things to all people, to do all things and to do them well. A building principal's role set, however, is quite large and complex. It might consist of teachers, parents, aides,

supervisors, and superintendent. The principal may perform a number of optional roles related to change. In addition, a school's staff development program needs more than the presentation of in-service activities. Staff growth and change is a process, not an activity, the heart of which is the enabling role of one individual with another. Central to this process are the principals. They need to gain the competencies to enact certain functions or key areas of responsibilities of the enabler role. This calls for the primary school principal to be an expert as an instructional leader and trainer, adult educator, program planner, program administrator and consultant.

All of the aforementioned areas of responsibility and statements of competencies are based on the principal's having a concept of the teacher as continually developing and on the belief in the worth and potential of each adult and child in the school setting. The school must be seen as an instrument for improving the quality of life for the person as well as for the whole human community.

Competencies Needed for Effective Staff Development

The foregoing outlines of the role and functions of school headmasters and principals show that the school administrator is expected to perform a wide variety of duties. With the tasks of the school administrator identified, the competencies required for the successful

performance of these tasks, as reported by professionals and experts in staff development, will be reviewed.

The principal is the key individual in the school setting responsible for the staff development program. The establishment of the climate and the involvement of persons and resources to support staff development is the responsibility of the principal. Klopf (1979) has identified a number of statements of competencies which are appropriate for consideration in the present study. Those competencies include the following:

1. Analyzing the climate for change in the school setting and outlining strategies for change to teachers and other school personnel;

2. Developing survey procedures suitable for assessing the educational needs and expectations indigenous to the community and child population;

3. Adding to staff's understanding of the fundamental concepts of child development and human development;

4. Developing team relationships among staff members by delegating staff development leadership responsibility to members of a staff team;

5. Working with parents, teachers, and other school personnel to develop goals and objectives for the school;

6. Enabling teachers and other school personnel to implement strategies for carrying out school objectives;

7. Enabling teachers to develop and implement objectives for themselves and the class;

8. Working with teachers and other school personnel to develop and implement an assessment program for measuring the school's effectiveness;

9. Implementing and facilitating individual teachers' self-evaluations as part of the teacher evaluation process;

10. Providing release time for regular participation in in-service workshops for teachers and instructional paraprofessionals;

11. Offering opportunities for teachers to visit effective programs in their own schools or in other schools;

12. Providing for staff attendance at institutes, resource centers, conferences and seminars relevant to their individual professional needs;

13. Effectively communicating information about programs and materials in each major curriculum area;

14. Identifying and providing new materials, sources, resources, equipment, etc.;

15. Giving feedback to teachers based on regular observation of classroom role performance and interaction with and among students;

16. Identifying those aspects of a teacher's performance in need of development and suggesting various approaches to improvement;

17. Varying the leadership role with classroom teachers from supportive to directive, depending upon individual needs;

18. Using such personal interaction techniques as consultation, encounter, confrontation, negotiation and counseling, as required in each situation;

19. Using group training techniques such as role playing, case studies, growth exercises and games (pp. 8-11).

As observed by Goldman (1966), a list of the competencies required of school principals is, of necessity, limited by the incompleteness in knowledge of what constitutes successful administration.

He then lists seven competencies universally needed by school administrators:

1. Understanding the teaching and learning process and being able to contribute to its development;

2. Understanding school organization and being able to lead and coordinate the activities for the highly trained professional personnel who comprise this organization;

3. Understanding the nature and the composition of the school-community and being able to maintain satisfactory relationships between the school and its many community groups;

4. Understanding the technical aspects of school administration (e.g., school building maintenance, management functions and the like) and being able to obtain and allocate resources in an effective and efficient manner;

5. Understanding the change process and being able to bring about necessary and appropriate changes in school and society;

6. Understanding various cultures and being able to plan and implement programs which will meet the unique needs of each culture in the school;

7. Understanding and being able to use the findings and relevant research (p. 97).

In the Goldhammer's (1971) study of 291 principals, one of the major areas of emphasis was the training of elementary school principals. He gathered data about the

preparation programs and procedures, contemplated changes in the programs and in principals' perceptions of their training. They found that principals feel inadequately prepared for managing and supervising personnel within their buildings. The principals need more opportunities for mastering supervisory skills, teacher evaluation techniques, group decision-making processes, and the skills needed in maintaining morale. Most of the principals were confident in their abilities to take care of the everyday, routine operation of the building, but few of them had confidence in their ability to take a leadership role in the improvement of instruction, or to guide planning and evaluation procedures.

Coleman (1982) identified ten desirable skills to be included in training educational administrators. They are:

1. Purpose-defining
2. Information processing
3. Group problem solving
4. Decision making
5. Financial management
6. Communication (oral or written)
7. Management of meetings
8. Interviewing
9. Conflict management
10. Time management (pp. 53-54)

A study by Engstrom (1975) suggested that four content areas of study should be required for all elementary school principal candidates:

1. Elementary administration and personnel management --stressing the communication and personnel management skills--and utilizing the lecture method;

2. School finance and legal aspects--stressing decision-making and conflict management skills, and extensively utilizing guest speakers and case studies;

3. Elementary curriculum leadership--stressing planning and leadership skills;

4. Internship/field work--stressing coordination and public relations skills.

Knowles' (1978) andragogical model of competencies for the role of human resource developer (cited in Delka, 1982, p.63) is based on learning theories. Knowles has identified five key areas of responsibility for human resource developers, as well as the related competencies, which are shown in Figure 1.

Knowles (1978) also claims that climate setting is the most crucial element in his andragogical model. He explained

> If the climate is not really conducive to learning, if it doesn't convey that an organization values human beings as its most valuable asset and their development its most productive investment, then all the other elements in the process are jeopardized. There isn't such likelihood of having a first-rate program of educational activities in an environment that is not supportive of education (p. 114).

Figure 1

Human Resource Developer: An Andragogical Model

Area of Responsibility	Related Competency
Adult Learning	Knowledge of the various theories of learning and a personal theory about their application to particular adult learning situations
Designing and Conducting Learning Experiences	Skill in designing learning experiences that make use of combinations of methods and techniques for optimal learning
Program Developer	Ability to construct and effectively use planning mechanisms such as advisory councils, committees, task forces, etc.
Program Administrator	Ability to make and monitor financial plans and procedures.
Consultant	Knowledge of the major theories of individual, group, organizational, community, and societal change.

Knowles elaborated on the point that of the roles assigned to training and development, by far the most critical is the role of consultant.

> If the human resources developer sees himself essentially as a teacher and administrator, managing the logistics of learning experiences for collections of individuals, he will have little influence on the quality of the climate of his organization. Only if he defines his client as the improvement of its quality as an environment for the growth and development of people, will he be able to effect its climate (p. 114).

In a study of competencies needed by school administrators and supervisors in Virginia, Woodard (1954) suggests that competencies in several areas are essential for both administrative and supervisory positions:

Communications

Educational Foundations

Human Relations

Curriculum

Instructional and Guidance Activities

Supervisory Services

Evaluation and Research

He recommends that specialized training designed to develop various competencies in five areas--personnel administration, school organization and management, construction, operation and maintenance of school plant--should be provided in preservice training programs for school administrators, supervisors and superintendents.

From their study intended to identify competencies actually needed for principalship, Olivero and Arminstead (1981) derived five competencies on which there was the greatest consensus among the principals surveyed.

1. School Climate. The principal should be able to analyze the relationship of school morale and policies, and actively work toward the development of a positive school climate;

2. Personnel Evaluation. The principal should be able to provide leadership in the development of

teaching performance standards and demonstrate
ability to evaluate teaching performances;

3. Team Building. The principal should be able to
   demonstrate the application of interpersonal
   relations skills in articulating responses to
   staff needs and developing morale;

4. Internal Communications. The principal should be
   able to establish an effective two-way communication
   system utilizing a variety of procedures that allow
   for clarification and facilitation of communication
   among staff members, students, community members,
   and district level personnel;

5. Supervision. The principal should be able to
   utilize an effective planning model for developing
   and implementing curriculum designed to improve
   and maintain a high-quality instructional
   program (p. 106).

The report of a Program Development Workshop conducted
by the UNESCO Regional Office for Education in Asia and
Oceania in Bangkok, Thailand (1978) indicated that
competencies are needed in both knowledge and skills for
effective school administration in Asia. Competencies
proposed by this office included:

Knowledge

Education

   Economics of education

   Problems in education development

Trends and innovation evaluation

Community participation

Education and national development

Educational management

Principles of management

Organization

Personnel management

Supervision--school and office

Motivation

Leadership

Decision making

Information

Communication theory

Public relations

Human relations

Delegation

Educational Planning

All aspects

Educational Law

Education codes and regulations

Skills

Educational

Preparation of instruments of evaluation

Test preparation

Time table preparation

Educational management

Communication

School supervision

Reporting

Decision making

Educational Planning

Computational skills

Finally, in Haws' study (1980), "A Training Program Model for Staff Development Specialists in a Local School District Setting", she reported 13 functions of a staff development specialist, which included:

1. Program Administrator

2. Coordinator

4. Planner

5. Conductor of Needs Assessment

6. Researcher

7. Implementor

8. Evaluator

9. Analyst/Counselor

10. Teacher

11. Motivater

12. Facilitator

13. Disseminator, (p. 115)

Haws also identified eight competencies needed by staff developers. These competencies are (1) understanding adult learners, (2) motivating the teachers, (3) teaching a subject area, (4) integrating theory and practice, (5) conducting research, (6) conducting needs assessment,

(7) possessing planning skills, and (8) facilitating
self-assessment and the problem-solving process for
teachers, identifying student problems, helping teachers
solve problems, and helping teachers deal with stress
(p. 116).

During the past two years, several agencies have
surveyed principals in attempts to determine important
training needs. Items most often reported by principals
include:

- skills in decision making

- conflict-resolution techniques

- life planning for administrators

- procedures for improving school-community relations

- evaluating instructional programs and personnel

- staff development and renewal

- improving school climate

- curriculum renewal and development

- staff evaluation

- dealing with discipline

- improving student learning

- curriculum improvement

- catalysts for promoting change

- working with parents, faculty, and students

- instructional leadership

There were no examples from the literature on
conceptual frameworks for viewing administrator in-service

content and process. Some examples of actual needs
assessments are available but limited, and the informational
value of these assessments is questionable. Most of the
needs are defined in abstract terms and the reader is often
uncertain about the reference group to which the training
need is addressed, e.g., whether the need is identified as
important to the respondent, to all principals, or to "other
than me" principals.

Summary

As shown in this chapter, the review of research and
literature yielded information on competencies that
researchers and professionals in staff development and
in-service education have found important in order for
school administrators to be effective staff developers in
either Thailand or the United States. The relevant
literature in the following areas was reviewed:

1) Staff development and in-service education;
   definition, purposes, and importance.

2) The role and functions of the primary school
   principal as a staff developer.

3) Competencies needed for the primary school
   principal as a staff developer.

On the basis of the findings derived from the review of
research and literature, it was concluded that

1) no research had yet been done on a national level
   to determine Thai primary school principals'

perceptions regarding staff development skills and knowledge that they consider important and relevant for preparation of primary school administrators in Thailand.

2) programs designed specifically for the preparation of primary school principals as staff developers in their schools are non-existent.

CHAPTER III

DESIGN OF THE STUDY

Introduction

This chapter discusses the procedures used in the study. It is divided into the following sections:

1) A brief history of the Delphi method

2) Definition and characteristics of the Delphi method

3) Reliability and validity of the method

4) Limitations

5) Selection of the Delphi panel

6) Procedures for collection of data

7) The analysis of data

A Brief History of the Delphi Method

The name "Delphi" was derived from Greek mythology; the temple of the sun god, Apollo, existed in a small town in Greece known as Delphi. In this temple lived the oracle, a female prophet who would utter predictions which greatly influenced Greek religion, economics, and politics.

Abraham Kaplan, a philosopher, adopted the name for a method of forecasting. Mathematicians Norman Dalkey and Olaf Helmer developed the method at the Rand Corporation in Santa Monica, California, in 1953. It was not until the

early sixties that the Delphi technique received wide

exposure. It has been used by organizations and individuals

examining judgments, values, decisions, perceptions, and

recommendations on policy and expectations. The Delphi

technique can be applied to solving problems in many areas:

1) technological forecasting tasks

2) ascertaining values and preferences

3) estimating the quality of life in future years

4) broad or long-range policy formulation

Early Delphi exercises centered on the use of experts

as advisors in broad or long-range social and technological

forecasting. More recently, it has been used to obtain

consensus on topics of more immediate concern.

Definition and Characteristics

In defining the Delphi, Linstone and Turoff (1975) have

added a philosophical note to their discussion: "when

something has attained a point at which it is explicitly

definable, then progress has stopped" (p. 3). They do

conclude, however, that a generally acceptable definition of

the technique is:

> Delphi may be characterized as a method for
> structuring a group communication process so that
> the process is effective in allowing a group of
> individuals, as a whole, to deal with a complex
> problem (p.3).

A unique feature of this group communication process is

the fact that the Delphi relies on individual, anonymous

responses so that each participant can respond according to his own perceptions. To this point, Rescher (1969) adds the observation that the Delphi technique is:

> a process for the controlled elicitation of group opinion by an iterative use of questionnaire with a selective feedback of earlier group responses as an informational input for later reference by group members (p. 1).

Typically, the Delphi uses a series of four questionnaires. The first asks each respondent to provide some initial input on the topic under investigation. The second consists of items developed from the first-round responses, and it requests individual judgments in the form of priority ratings on each item. The third provides the respondent with an average of second-round responses for each item, usually in the form of a median or mode. The respondent is asked to consider his or her own second-round response in light of this information and either move to the group judgment or state a reason why he feels a minority position is in order. The final questionnaire provides each participant with new consensus data and a summary of minority opinions, and requests a final revision of responses.

The technique has the advantage of not requiring large groups of people to be called together. Rasp (1973) points out that the Delphi technique can be viewed as a series of individual conferences conducted in writing and having three main characteristics:

1) each participant contributes at each step of the

questionnaire process before seeing the inputs of

other participants for that step;

2) while the individual knows his own responses

throughout the process, inputs of others remain

anonymous;

3) input gained at one step of the process is shared

as part of the next step (p. 29).

Sackman (1975) described the Delphi as being "--aimed

at qualitative evaluations (qualitative scales of agreement,

disagreement, preferences among alternatives)" (p. 8). He

further stated that other key objectives for Delphi are

consensus of participants and heuristic goals.

Delphi, according to Sackman (1975), exhibits the

following characteristics:

1) The format is typically a paper and pencil

questionnaire, usually administered by mail;

2) The questionnaire consists of a series of items

concerned with study objectives;

3) The questionnaire items may be generated by

instructions, guidelines, or both;

4) The questionnaire is administered to the

participants for two or more rounds;

5) Each iteration is accompanied by some form of

statistical feedback, which usually involves a

measure of central tendency, some measure of

dispersion or perhaps the entire frequency

distribution of responses for each item;

6) Each iteration may or may not be accompanied by selected verbal feedback from some participants, with the types and amounts of feedback determined by the director;

7) Individual responses to items are kept anonymous for all iterations; however, the director may list participants by name and affiliation as part of the study;

8) Outsiders (with upper and lower quartile responses) may be asked by the director to provide written justification for their responses;

9) Iteration with the above types of feedback is continued until convergence of opinion, or "consensus," reaches some point of diminishing returns, as determined by the director;

10) Participants do not meet or discuss issues face to face and they may be geographically remote from one another (p. 9-10).

The Delphi method appears to be a more effective way to get opinions of experts than in face-to-face interaction such as committee juries, conferences, forums, etc. The value of the Delphi method is found in its characteristics. The experts are unknown to each other so there is no effect of a dominant individual or persuasive influence. There is controlled feedback--extraneous comments and opinion are eliminated and experts respond only to the pertinent facts

and information. The opinion of each group member can be represented in a statistical group response, and through iteration, convergence of opinion occurs.

Validity and Reliability

The validity and reliability of the Delphi method are dependent on the panel members and their ability and willingness to perform the task. Because we are able to assess people's opinions more deeply with the Delphi than with a one-time questionnaire, we get results having higher reliability and validity.

The validity of the Delphi Method is determined when panelists respond with the same ideas for the same frames, not knowing the responses of the rest of the panel. This would occur in the first and second rounds of the questionnaire process.

Reliability is determined by the consistency with which each panel member rates the ideas. The pull toward consensus is strong with statistical evidence, and the courage of one's convictions is tested in the second and third round. By providing each respondent with knowledge of the group's interaction, the reliability of the Delphi procedure is supposedly increased. Generally, the researcher does not expect major revisions in the ranking of survey items from one round to the next, although some changes will certainly occur.

Limitations

Critics of the technique believe that opinion is molded rather than just collected. If a respondent does not understand or misconstrues an item on the initial questionnaire, he/she may respond with the majority on the subsequent questionnaire; thus it is not clear whether responses represent opinion changes, opinion stability or a faulty instrument.

The Delphi method has been subjected to critical analysis and evaluation. Sackman (1975) conducted a "scientific appraisal of the principles, method and practice of the Delphi" and found it wanting. His criticisms of the method included:

1. The absence of critical methodological literature;

2. The lack of a fixed, universally agreed-upon definition of the Delphi;

3. The failure of the Delphi in meeting numerous experimental and methodological standards required for other types of social experimentation and opinion questionnaire design;

4. The unproven assumption of the method that "expert" opinion differs from that of laymen;

5. The questionable accuracy of "forecasts" and "expert" estimates.

Other problems and limitations of the technique were pointed out by Strauss and Zeigler (1975):

1. The Delphi process is slow and time consuming;

2. The technique's theoretical foundations may not be understood by the participants;

3. The panel of experts could be too homogeneous, thus producing a skewed data set;

4. The stimulation provided by face-to-face encounters is missing; however, Martino (1983) pointed out that this can become an advantage of the technique because the panel members can shift position without losing face when they see convincing reasons from other panel members for a shift of their estimates.

Strauss and Zeigler (1975) concluded that the primary virtue of the Delphi method was its simplicity: advanced mathematical skills are not required for the design, implementation, and analysis of a Delphi study. With an understanding of its problems, the Delphi's potential can be recognized as a vehicle for the formulation, development, and assessment of future policies.

Selection of the Panel

The group of participants in the present study consisted of 70 primary school principals in Educational Region I of Thailand which includes five provinces: Nakhon Pathom, Nonthaburi, Pathum Thani, Samuth Prakan, Smuth Sakhon. These principals are, by position, the committee of the school cluster. The school cluster, however, is a group

of schools within a district which are grouped and referred
to as a cluster, a zone or a district depending on the type
of grouping made for material assistance and cooperation.
The names of the experts were obtained from the office of
Educational Region I at Nakhon Pathom under the
recommendation of the Educational Region I superintendent.
These individual experts would be the most informed and the
most concerned about staff development for primary
education. They also conform to Brown's (1968) statement on
judging the quality of expertise.

> A man's expertise might be judged by his status
> among his peers, by his years of professional
> experience, by his own self-appraisal of relative
> competence in different areas of inquiry, by the
> amount of relevant information to which he has
> access or by some combination of objective indices
> and prior judgment factors (p. 4).

Procedures for Collection of Data

The data collection procedures covered a period of four
months beginning August 29, 1989 and ending in mid-December
of the same year.

Round I Questionnaire

On August 29, 1989, sets of questionnaire materials
(see Appendix A) were mailed to 70 primary school principals
in Educational Region I including 17 from Nakhon Pathom, 18
from Nonthaburi, 16 from Pathum Thani, 13 from Samuth
Prakan, and 6 from Samuth Sakhon. These sets of materials
included:

1) an introductory cover letter which indicated that

this study had a useful purpose and was worthy of the respondent's attention, that the respondent's participation was important to the study and that the respondent's participation and replies would be held confidential. The initial cover letter also included a complete but concise explanation of Delphi procedures;

2) Round I questionnaire that was designed as an open-ended instrument in which respondents were asked to write the skills and knowledge needed for the primary school principal to perform the role of staff developer;

3) letter of support from the researcher's major professor;

4) letter for cooperation from Educational Region I superintendent;

5) a stamped self-addressed envelope.

The Round I questionnaires were coded for the purpose of contacting the respondents in each round. This procedure was also followed in Rounds II and III. Participants were instructed to return their questionnaires within two weeks. Returns were received throughout September. No follow-up letter was sent. Of the first round participants, 60 individuals (80%) completed and returned their questionnaires.

Receipt of the first-round questionnaire and its explanatory cover letter was intended to constitute an invitation to participate in the study; return of the completed questionnaire was construed as acceptance. Only those actually participating in the first round were considered to be members of the panel for the study.

Round II Questionnaire

The Round II questionnaire was mailed to 60 panelists on October 15, 1989, with return requested within two weeks. This packet (see Appendix B) contained:

1) a letter with instructions for completing the second-round questionnaire;

2) the questionnaire itself;

3) a stamped self-addressed envelope.

The items on the Round II questionnaire were obtained by listing the responses of each of the 60 respondents to Round I. The list was then pared to the final number of 43 items by eliminating duplicate items from among the hundreds received.

All panelists were asked to rate each of the items on the second questionnaire according to their perceptions regarding each statement's importance on the basis of a one-to-five Likert scale. Instructions were included explaining the values of the five numbers. Panelists were also asked for demographic information in Round II. This demographic information provided for assistance to future

researchers who may wish to conduct research similar to this study.

On the second round of the Delphi investigation, 55 panelists (92%) returned the questionnaire. The responses were tabulated by computer. When utilizing a Likert-type scale for rating importance, the mode represents the group's level of agreement regarding the importance of an item.

Round III Questionnaire

The third mailing was sent to 55 participants on November 24, 1989, with the requested return within two weeks. The packet (see Appendix C) contained:

1) Round III questionnaire, which consisted of the identical questionnaire used in the second round with the addition of feedback on the results of Round II. This questionnaire was created using the responses gathered from the second questionnaire. Statistical feedback was provided for this questionnaire by computing the total group modal consensus for each statement.

2) The cover letter with Round III explained that the purpose of the iteration of the questionnaire was to offer the participants the opportunity to review their responses and to make changes if they wish. Each panelist was provided with a record of his/her responses from the second questionnaire. During this third round, the panelists were asked to make any revisions in their ratings that they felt were

necessary. Participants, when joining the consensus, were asked to leave that question blank, only answering questions on which they did not wish to join the consensus. The functions of this questionnaire were to increase consensus and to more clearly define minority opinion. The intent of this type of feedback was to allow each participant to see clearly where his or her response for each item lay in comparison to the majority's.

Eighty-nine percent or 49 participants returned the Round III questionnaire.

Analysis of the Data

The statistical package for the social sciences (SPSS) was used for the computerized analysis of the questionnaire data. Two kinds of data were received in this study:

1) Demographic information. Data analyses for each of the six demographic items in the questionnaire were analyzed in the third round. The data were inspected for frequency count and percentage representation in each demographic category.

2) Competency rating scale. A Likert type or summated rating scale was chosen to indicate the importance of each competency to the respondent. A five-point scale selected for this study was interpreted according to these criteria:

1 = Lowest Priority of Importance

2 = Below Average Priority of Importance

3 = Average Priority of Importance

4 = Above Average Priority of Importance

5 = Highest Priority of Importance

The modal consensus proposed by Bunning (1976) was utilized to calculate each statement on questionnaires II and III. The modal consensus, however, is the response selected most often by respondents, but not necessarily by a majority. The mean and standard deviation were also calculated for each statement and illustrated in tables. The analysis procedure is reported in detail in Chapter IV, where the results of the study are also presented in narrative form to provide a basis for the survey conclusions and recommendations.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

Introduction

The analysis of data was organized to determine what the data revealed about the administrators' perceptions of competencies needed in order for primary school principals to perform the role of staff developer in their schools. All data were reported in the following tables:

1) Summary of returns;

2) Demographic information for the panel;

3) An edited summary of the statements in Round I;

4) An analysis and comparison of the rankings returned in Questionnaires II and III as well as the mean and standard deviation for each statement;

5) An analysis of Questionnaire III regarding the statement positions of those respondents who did not join the majority.

Summary of Returns

In the study, 70 primary school principals in Educational Region I were selected to participate. This included 17 school principals from Nakhon Pathom, 18 from Nonthaburi, 16 from Pathum Thani, 13 from Samuth Prakan, and

six from Samuth Sakhon as shown in Table 1. Only those actually participating in the first round were considered to be members of the panel for the study.

Table 1

Number of Panel Members Chosen as Respondents to Delphi Questionnaires, Classified by Province

Province	Number
1. Nakhon Pathom	17
2. Nonthaburi	18
3. Pathum Thani	16
4. Samuth Prakan	13
5. Samuth Sakhon	6
Total	70

Table 2 displays, for each round of questioning, the number of questionnaires sent, the number of questionnaires returned, the percentage of mailed questionnaires returned, and the percentage of questionnaires returned as compared to the original 70 potential respondents. The number of questionnaires mailed diminished with each round of questioning as succeeding questionnaires were mailed only to individuals who responded to each preceding questionnaire.

Table 2

Compilation of the Number of Respondents as Compared
with the number of questionnaires mailed out
in each of the three rounds of questioning

Questionnaire	Number Sent	Number Returned	Percent Returned	Percent Returned of Original
I	70	60	85.7	85.7
II	60	55	91.7	78.6
III	55	49	89.1	70.0

Questionnaire II had the highest percentage of returns
with 91.7 percent while questionnaire I had the lowest
percentage of returns with 85.7 percent. The percentage of
returns when compared with the total 70 respondents began
with 60 returns in Questionnaire I or 85.7 percent and
diminished to 49 or 70 percent in Questionnaire III.

Characteristics of the Delphi Panel

In this study, 49 panelists were asked to supply six
categories of demographic information: (1) workplace, (2)
age, (3) gender, (4) highest educational level, (5) years
of experience in administrative position, (6) training
experience in administration.

The reported work place of the panelists showed that
twelve persons (24.5%) were school principals from Nakhon

Table 3

The Workplace

Work Place	Panelists (N=49)	Percent
Nakhon Pathom	12	24.5
Nonthaburi	14	28.6
Pathum Thani	10	20.4
Samuth Prakan	9	18.4
Samuth Sakhon	4	8.2

Pathom; fourteen persons (28.6%) were from Nonthaburi; ten persons (20.4%) were from Pathum Thani; nine persons (18.4%) were from Samuth Prakan and four persons (8.2%) were from Samuth Sakhon.

The reported ages of the panelists in Table 4 showed that eight persons (16.3%) were under thirty-five years old; ten persons (20.4%) were between thirty-six and forty; the same numbers were as well between forty-one to forty-five years old; twelve persons (24.5%) were between forty-six to fifty years of age; and nine persons (18.4%) reported ages over fifty years.

As shown in Table 5, majority of the panelists were male; 43 persons (87.8%) reported male and six persons (12.2%) reported female.

Table 4

Age

Years	Panelists (N=49)	Percent
35 or under	8	16.3
36-40	10	20.4
41-45	10	20.4
46-50	12	24.5
Over 50	9	18.4

Table 5

Gender

Gender	Panelists (N=49)	Percent
Male	43	87.8
Female	6	12.2

It can be observed in Table 6 that the majority (44 or 89.8%) of the panelists held bachelor's degrees; and five panelists (10.2%) reported having less than a bachelor's degree.

The reported years of experience in an administrative position showed that fifteen persons (30.6%) had less than 5

Table 6

Highest Educational Level

Educational Level	Panelists (N=49)	Percent
Less than a bachelor's degree	5	10.2
Bachelor degree or equivalent	44	89.8

Table 7

Years of Experience in Administrative Position

Years	Panelists (N=49)	Percent
Less than 5	15	30.6
5-10	18	36.7
11-15	6	12.3
More than 15	10	20.4

years of experience in an administrative position; the majority or eighteen persons (36.7%) reported having five to ten years of experience in an administrative position; six persons (12.3%) reported having eleven to fifteen years of experience in an administrative position; and ten persons (20.4%) reported their experience in administrative position was over 15 years.

Table 8

Training Experience in Administration

Training experience	Panelists (N=49)	Percent
Yes	45	91.8
No	4	8.2

It can be observed in Table 8 that the majority (45 or 91.8%) of the panelists reported having some kind of administrative training experience and four persons (8.2%) reported having no administrative training experience.

From the demographic information on the Delphi Panel, it can be concluded that the most representative panelists came from primary schools in Nonthaburi, were between 36 and 50 years of age, were male school principals, held bachelor's degrees, had five - ten years of experience in administrative position, and had training experience in administration.

Analysis of the Data Generated by the Study Respondents in Questionnaire I

The first questionnaire solicited information on the knowledge that would be needed by the primary school principals in order to perform the role of staff developer. Although the questionnaire provided a space of 10 lines in

which to respond, participants sometimes wrote only 4-5
items. Many duplications were found among these "knowledge"
and "skill" statements. The processes of interpreting,
editing, combining, and rewriting were therefore required.
The outcome of the editing process resulted in 43 knowledge
and skill statements which were used to formulate
Questionnaire II. The complete listing of items generated
by the panelists is shown in the following lists:

Complete Listing of Round I Delphi Items

1. School budgeting and financial management: how to prepare
   a school budget; procurement and management of funds in
   accordance with Ministry of Education regulations;

2. Rules, regulations, acts and laws for school
   administrators;

3. Educational research methods enabling school administrators
   to develop educational quality;

4. Survey and analysis of staff development problems and
   needs;

5. Information system and planning;

6. Personnel administration: how to plan personnel within
   school;

7. Position classification: defining position and job
   quantity, determining roles;

8. Job analysis;

9. The art of putting the right person in the right job;

10. Educational planning methods;

11. Training techniques and in-service planning for staff development to improve competence;

12. Academic administration (curriculum and instructional planning);

13. Primary school curriculum management;

14. Staff evaluation: techniques for assessing staff performance;

15. Procedure for the recruitment and selection of staff personnel;

16. Organizational theory and development;

17. Application of knowledge, technology and innovation in managing school;

18. Team development;

19. Staff quality-control techniques;

20. Stimulating and providing opportunities for professional growth of staff personnel;

21. Administrative leadership;

22. Power delegation: how to delegate authority and responsibility;

23. Decision making;

24. Development and maintenance of good staff morale;

25. Techniques to stimulate and motivate staff to maximum performance;

26. Arrangement of learning environment and improving climate for working;

27. Conflict-resolution techniques;

28. Management of meetings and seminars;

29. Orientation technique for new teachers;

30. Virtue and morality of administrators;

31. Administrative theories;

32. Guidance and counseling knowledge;

33. Procedures for improving school-community relations;

34. Developing human relationships;

35. Time management;

36. Supervision and follow-up within school;

37. Group dynamics;

38. Methods of establishing and maintaining order,
    effective discipline, moral education of staff;

39. Management of the general welfare within school;

40. Administration of extra activities for staff personnel
    such as field trips and in-service education;

41. Psychology of adult learning;

42. Communication development for coordination within
    school;

43. Problem solving and analysis to improve student learning.

Analysis and Comparison of the Priority Responses of Participants to Skills and Knowledge Statements in Questionnaires II and III

In Questionnaire II, the participants were asked to
give a priority rating to each statement generated from the
first-round questionnaire. This resulted in a total of 43
staff development knowledge and skill statements. A
five-point rating scale was utilized designating (1) as the

lowest priority and (5) as the highest priority. When a majority of responses to the questionnaires from round two had been received, a tabulation of the data determined the modal consensus of all participants scoring the statements. These consensus ratings then served as the basis for scoring Questionnaire III (which contained the same statements as Questionnaire II) where participants were given the opportunity to reconsider their answers and decide whether they wanted to join the consensus rating or remain outside the consensus and state their reason for not joining the consensus.

After a majority of the responses to Questionnaire III had been received, the ratings of each statement for both Questionnaires II and III were computed as to modal consensus, mean scores, differences in mean scores, direction of mean score change from Questionnaire II to Questionnaire III, and the standard deviation for each item on both questionnaires. The analyses of the total list of 43 staff development knowledge and skill statements are presented in Table 9. The minus sign (-) in differences in the mean score column represents the movement toward a lower rating while the plus sign (+) indicates a movement toward a higher priority rating. It was observed that out of the total of 43, 16 statements showed a movement toward a lower priority rating (-) and 26 statements exhibited a movement toward a higher priority (+). There was one statement which

TABLE 9
SUMMARY OF KNOWLEDGE AND SKILL STATEMENTS BASED ON
MODAL CONSENSUS AND MEAN SCORES

Rank	Item No.	Statements	M.C.	Q.II Mean	Q.III Mean	Mean Diff	Q.II S.D.	Q.III S.D
1	12	Academic administration (curriculum & instructional planning)	5	4.66	4.92	+.26	.55	.27
2	2	Rules, regulations, acts, and laws for school administration	5	4.64	4.84	+.20	.59	.42
3	9	The art of putting the right person in the right job	5	4.56	4.90	+.34	.63	.30
4	34	Developing human relationships	5	4.53	4.86	+.33	.60	.50
5	36	Supervision and follow-up within school	5	4.51	4.84	+.33	.66	.47
6	33	Procedures for improving school-community relations	5	4.51	4.78	+.27	.77	.68
7	24	Development and maintenance of good staff morale	5	4.49	4.74	+.25	.64	.60
8	27	Conflict-resolution techniques	5	4.47	4.76	+.29	.57	.52
9	18	Team development	5	4.44	4.94	+.50	.60	.24
10	23	Decision making	5	4.44	4.86	+.42	.59	.45
11	13	Primary school curriculum management	5	4.40	4.90	+.50	.63	.30
12	5	Information system and planning	5	4.33	4.88	+.55	.72	.33
13	22	Power delegation: How to delegate authority and responsibility	5	4.33	4.82	+.49	.80	.56
14	1	School budgeting and financial management: how to prepare a school budget; procurement and management of funds in accordance with Ministry of Education	5	4.27	4.63	+.36	.93	.72
15	25	Techniques to stimulate and motivate staff to maximum performance	4	4.35	4.00	-.35	.67	.40
16	30	Virtue and morality of administration	4	4.35	4.04	-.31	.70	.45
17	31	Administrative theories	4	4.31	4.02	-.29	64	.14
18	35	Time management	4	4.29	4.06	-.23	.71	.47
19	26	Arrangement of leaving environment and improving climate for working	4	4.29	4.00	-.29	.74	.50
20	19	Staff quality-control techniques	4	4.27	4.04	-.23	.65	.20
21	10	Educational Planning methods	4	4.26	4.10	-.16	.70	.36
22	21	Administrative Leadership	4	4.24	3.98	-.26	.72	.32
23	43	Problem solving and analysis to improve student learning	4	4.24	4.06	-.18	.82	.42
24	20	Stimulating and providing opportunities for professional growth of staff personnel	4	4.20	4.02	-.18	.55	.14

Rank	Item No.	Statements	M.C.	Q.II Mean	Q.III Mean	Mean Diff	Q.II S.D.	Q.III S.D
25	28	Management of meetings and seminars	4	4.16	4.02	-.14	.71	.43
26	6	Personnel administration: how to plan personnel within school	4	4.16	4.08	-.08	.81	.34
27	32	Guidance and counseling knowledge	4	4.15	4.08	-.07	.65	.27
28	17	Application of knowledge, technology and innovation in managing school	4	4.15	4.10	-.05	.76	.30
29	38	Methods of establishing and maintaining order, effective discipline, moral education of staff	4	4.11	4.02	-.09	.79	.47
30	14	Staff evaluation: techniques for assessing staff performance	4	4.04	3.94	-.10	.67	.37
31	11	Training techniques and in-service planning for staff development to improve competence	4	4.02	4.06	+.04	.62	.37
32	8	Job analysis	4	4.00	4.10	+.10	.64	.30
33	37	Group dynamics	4	3.98	3.98	.00	.71	.43
34	42	Communication development for coordination within school	4	3.98	4.06	+.08	.73	.24
35	39	Management of the general welfare within school	4	3.86	3.94	+.08	.71	.51
36	16	Organizational theory and development	4	3.86	4.00	+.14	.71	.20
37	7	Position classification: defining position and job quantity, determining roles	4	3.86	3.94	+.08	.80	.51
38	4	Survey and analysis of staff development problems and needs	4	3.84	4.02	+.18	.76	.43
39	29	Orientation techniques for new teachers	4	3.78	3.90	+.12	.76	.51
40	3	Educational research methods enabling school administrators to develop educational quality	4	3.73	3.96	+.23	.71	.45
41	40	Administration of extra activities for staff personnel such as field trips and in-service education	4	3.67	3.96	+.29	.77	.49
42	41	Psychology of adult learning	4	3.66	3.92	+.26	.80	.44
43	15	Procedure for the recruitment and selection of staff personnel	4	3.56	3.80	+.24	1.07	.88

* M.C - Modal Consensus
* Q.II - Questionnaire Round II
* Q.III - Questionnaire Round III
* Mean Diff - Mean Difference

showed no difference in mean score because its mean score on Questionnaires II and III were the same. That statement is ranked 33, item number 37, group dynamics.

It is also shown in Table 9 that 14 statements were rated as a modal value of five or the highest priority by respondents' consensus. Those statements are:

Item #   Statements

1.   School budgeting and financial management, how to prepare a school budget; procurement and management of funds in accordance with Ministry of Education regulations;

2.   Rules, regulations, acts and laws for school administrators;

5.   Information system and planning;

9.   The art of putting the right person in the right job;

12.   Academic administration (curriculum and instructional planning);

13.   Primary school curriculum management;

18.   Team development;

22.   Power delegation, how to delegate authority and responsibility;

23.   Decision making;

24.   Development and maintenance of good staff morale;

27.   Conflict-resolution techniques;

33.   Procedures for improving school-community relations;

34.   Developing human relationships;

36.   Supervision and follow up within school.

In the same table, 29 statements were rated as a modal value of four, or the second highest priority. Those are:

Item #	Statements
3.	Educational research methods enabling school administrators to develop educational quality;
4.	Survey and analysis of staff development problems and needs;
6.	Personnel administration: how to plan personnel within school;
7.	Position classification: defining position and job quantity, determining roles;
8.	Job analysis;
10.	Educational planning methods;
11.	Training techniques and in-service planning for staff development to improve competence;
14.	Staff evaluation: techniques for assessing staff performance;
15.	Procedure for the recruitment and selection of staff personnel;
16.	Organizational theory and development;
17.	Application of knowledge, technology and innovation in managing school;
19.	Staff quality-control techniques;
20.	Stimulating and providing opportunities for professional growth of staff personnel;

21.   Administrative leadership;

25.   Techniques to stimulate and motivate staff to
        maximum performance;

26.   Arrangement of learning environment and improving
        climate for working;

28.   Management of meetings and seminars;

29.   Orientation technique for new teachers;

30.   Virtue and morality of administrators;

31.   Administrative theories;

32.   Guidance and counseling knowledge;

35.   Time management;

37.   Group dynamics;

38.   Methods of establishing and maintaining order,
        effective discipline, moral education of staff;

39.   Management of the general welfare within school;

40.   Administration of extra activities for staff
        personnel such as field trips and in-service
        education;

41.   Psychology of adult learning;

42.   Communication development for coordination within
        school;

43.   Problem solving and analysis to improve student
        learning.

        It also can be observed in Table 9 that none of the
respondents' consensus rated 3, 2, and 1.

Appendix D (see page 120) displays the mean rating, the number of choices for each priority rating and the standard deviation of each statement in Questionnaire II. These statements are listed in order of priority rating and subranked according to mean rating. Five statements (see Table 9 pages 68-69) rated as second-highest priority (4) were found to have mean scores which were higher than the lowest mean of the top priority statements. These five statements were statement #25 "techniques to stimulate and motivate staff to maximum performance," statement #30 "virtue and morality of administrators," statement #31 "administrative theories," statement #35 "time management," statement #26 "arrangement of learning environment and improving climate for working." One statement rated second-highest priority has the same mean score as that of the lowest mean of the top-priority statement. That statement was statement #19 "staff quality-control."

Appendix E (see page 123) displays the means, the number of choices for each priority rating and standard deviation of each statement in Questionnaire III. These statements are listed in order of priority rating and subranked according to mean rating. No "overlap of means" or bimodal consensus were found in Questionnaire III. In line with the major consensus gained in Questionnaire III, standard deviations of all items were found to be significantly less than those of Questionnaire II.

Analysis of Non-consensus Responses
to Questionnaire III

Appendix F (see page 126) displays a ranking by magnitude of standard deviation and the frequency of non-consensus responses (both higher and lower) for Questionnaire III. Most respondents to Questionnaire III join consensus (the percentage of the consensus respondents increases from 53.5 percent in Questionnaire II to 88.3 percent in Questionnaire III). Nineteen respondents or 38.8 percent, returned Questionnaire III with no minority opinion while several others defended virtually every minority response.

The most common minority opinion was "very important for administrators," "not that important," or a similar response; however, some specific reasons were also given as minority opinions and many of them were vague. Some neither changed nor gave any rationale to support no change, but some did change and gave additional comments. Many of them gave opinions opposing to what they had rated. For example, one rated 3 which was lower than consensus, but still gave his reason as, "this topic is very important for administrators."

The following portion of this study includes each statement ranked by magnitude of its standard deviation, the priority or consensus ranking for each statement, the number of persons who rated it higher or lower than the consensus

and a summary of minority opinions written about the statements by respondents.

> Statement 1
> Item 15. Procedure for the recruitment and selection of staff personnel. S.D. = 0.88, consensus = 4, higher rater = 5, lower rater = 8.

This statement had the largest standard deviation of all Questionnaire III statements as well as the largest number of non-consensus responses (13 persons). Five persons rated it higher and eight rated it lower than the consensus rating.

Those in favor of a higher rating argued that the administrators should have the opportunity to select their own personnel in order to get competent persons who were suitable for the job; these people would work more effectively. Also, human beings are the most important resources; they should be selected carefully.

Those defending lower ratings stated that recruiting and selecting staff personnel were beyond principals' authority; it was the Office of the National Primary Education Commission (ONPEC) who would perform this function. One mentioned that personnel recruitment and selection is not a problem of the school, so he rated this statement 3.

> Statement 2
> Item 1. School budgeting and financial management: how to prepare a school budget; procurement and management of funds in accordance with Ministry of Education regulations. S.D. = .72, consensus = 5, higher rater = 0, lower rater = 12.

Twelve persons rated this statement below the consensus rating of top priority. Reasons were diverse. Primary reasons given were that there were regulations on budget and finance established by the Ministry of Education, and the person who was supposed to know the details about this should be the financial officer in a school. One of them expressed, in a very short statement, "the school is so small." This probably implied that there was no complexity about this matter in his school because his school was so small; therefore, the principal did not need such knowledge. One respondent, although, rated this statement 4, which was lower than the consensus, gave his supportive reason for rating this statement. He wrote, "Money and procurement are the most important elements to support the programs within school, so an administrator should have this competency in order to handle school budget and finance." A few suggested the principals' knowledge about this item is not good enough, so they rated it 3 and 4. This may mean that the principals have no knowledge about budgeting and finance so they need more training.

Statement 3
Item 33. Procedures for improving school community relations. S.D. = .68, consensus = 5, higher rater = 0, lower rater = 6.

Most of the persons who rated this statement below the highest priority had similar reasons: that a principal should not emphasize this matter too much because there were

more important things to do and school does not have much of

a relationship with the community. One said that this was

the job that the principal already knew. One principal who

rated it 5 said that the principal should have good public

relations skills to gain increased participation in school

activities.

Statement 4
Item 24. Development and maintenance of good staff
morale. S.D. = .60, consensus = 5, higher rater = 0,
lower rater = 9.

Nine respondents rated this statement lower than the

highest priority. Two respondents stated that their schools

were open and informal. This probably implied that there

were no staff morale problems in their schools. The same

implication might be made about the other two respondents'

opinions that, "the administrator has already concentrated

on this subject." One respondent understood that the reward

was a motivation to build good staff morale; he mentioned

that, "Using too much motivation causes the habit of working

for reward."

Statement 5
Item 22. Power delegation: how to delegate authority
and responsibility. S.D. = .56, consensus = 5,
higher rater = 0, lower rater = 6.

There were six persons who rated this statement as less

than top priority. A variety of statements were marked with

the reasoning for a lower rating. These most often were:

- it is the principal's job, he already knew what to do

- some administrative jobs can not be delegated

- some jobs are not performed well after delegation

Statement 6
Item 27. Conflict-resolution techniques. S.D. = .52,
consensus = 5, higher rater = 0, lower rater = 10.

Ten persons rated this statement as being lower than
highest priority. The following statements typify the
non-consensus group's reasons.

- sometimes the administrator resolves conflict better

  by ignoring it

- if the administrator keeps his eyes, ears and mouth

  shut to some problems, it helps resolve the conflict

- the staff understand each other very well; they never

  create any conflicts

- the administrator knows how to handle this problem

  to create a good relationship among staff

Statement 7
Item 7. Position classification: defining position
and job quantity, determining roles. S.D. = .51,
consensus = 4, higher rater = 3, lower rater = 4.

Three persons ranked this statement higher and four
ranked it lower. The individuals rating it higher were
primarily concerned with increasing staff responsibility.
This knowledge is necessary for job quality as well.

Lower respondents most often argued that position
classification had something to do with individuals'
benefits because it concerned staff promotion. One thought
that because of the bad system and lack of a budget, "we
gain an unqualified staff." One rated it 3 but gave no
reason.

Statement 8
Item 29. Orientation technique for new teachers.
S.D. = .51, consensus = 4, higher rater = 2, lower
rater = 5.

Higher non-consensus ratings numbered two, and lower,

five. Arguments in favor of a high rating included,

"orientation can prepare the personnel to work and

understand the goals of the school," and "familiarize them

with the organization structure."

Several lower raters had the same idea--that transfer

of personnel within school hardly happened, and besides,

personnel have worked together for a long time so

orientation only has occasional use. There were not many

new personnel needing orientation in schools. One said this

topic was too simple; it required a general knowledge but no

specific emphasis.

Statement 9
Item 39. Management of the general welfare within
school. S.D. = .51, consensus = 4, higher rater = 3,
lower rater = 4.

The non-consensus ratings for this statement fell, with

three respondents rating it higher and four lower. Higher

raters thought that management of the general welfare was

the tool for administrator to the personnel administration.

Welfare was provided to help personnel who had problems; it

should be one of motivation.

The lower raters seemed to contradict the ideas of

higher raters. They thought that welfare, especially loans

for teachers, was increasing debt among teachers. Personnel

should learn how to save money by themselves.

Statement 10
Item 26. Arrangement of learning environment and
inproving climate for working. S.D. = .50,
consensus = 4, higher rater = 3, lower rater = 1.

There was little discussion of this statement because

there was only one lower rater who gave a reason; the

administrator knew this very well. This might assume that

they do not need any more knowledge. The other three higher

raters agreed that a good workplace climate would provide a

good environment for working and if the administrators had

less knowledge on this topic, it might cause less

effectiveness in staff development. Also, one pointed out

that a good climate would bring about good staff morale.

Statement 11
Item 34. Developing human relationships. S.D. = .50,
consensus = 5, higher rater = 0, lower rater = 4.

Four persons failed to join consensus on this

statement. All of them rated it lower than top priority.

They stated that

- Good learning and teaching is enough.

- The principal is doing a fair job here already.

- This statement should not be highly rated. Four is

  enough.

Statement 12
Item 40. Administration of extra activities for staff
personnel such as field trips and in-service education.
S.D. = .49, consensus = 4, higher rater = 3, lower
rater = 3.

Dissent for this statement was evenly split, with three

persons rating it higher and three rating it lower than

consensus.

The majority of the higher responses were based on the opinion that this kind of activity leads to better learning and development for personnel.

The group of opinions which were rated lower centered on the outcomes of the activities. "If it's worth the time we spare."

Statement 13
Item 35. Time management. S.D. = .47, consensus = 4, higher rater = 6, lower rater = 2.

Minority opinions for this statement totaled eight. Those rating it higher based their reasons around the premise that administrators manage time well in order to minimize less essential activities and be able to work effectively.

Respondents giving the statement a lower rating based their disagreement on their belief that training for this skill and knowledge is a waste of time because they never bring this knowledge into practice.

Statement 14.
Item 36. Supervision and follow-up within school S.D. = .47, consensus = 5, higher rater = 0, lower rater = 6.

Six respondents rated this statement as lower than top priority. Reasons were diverse and vague. For instance

- ONPEC has already instructed schools to do this job;

- working should be flexible, not too strict;

- principals have to teach class as well, there is no time for supervision or follow-up;

- The school is very small.

There were two respondents who rated it as 4 or below consensus and gave reasons which seemed to support the highest priority rating. They said that supervision and follow-up within school will improve the quality of learning and teaching.

> Statement 15
> Item 38. Methods of establishing and maintaining order,
> effective discipline, moral education of staff.
> S.D. = .47, consensus = 4, higher rater = 5, lower
> rater = 3.

Higher- and lower-than-consensus ratings were split at 5 and 3 respectively. Those rating it higher most often cited the need for staff to maintain order, discipline and morals. Exemplary statements of this reasoning included:

- in order for staff to work together well;

- basic knowledge to be a good teacher;

- in order for teachers to be model for students;

- in order for teachers to develop themselves.

The low raters had different ideas. One of them mentioned that this was too idealistic; it can not be taught and he rated it 2. The other two, who rated it 3, thought that too much emphasis on this matter made the staff feel that they were blamed for not having order, discipline and morals; another rater who rated it 3 gave a reason which seemed to support this topic. He said that staff should have this kind of knowledge as much as possible.

> Statement 16
> Item 3. Educational research methods enabling school
> administrators to develop educational quality.
> S.D. = .45, consensus = 4, higher rater = 3,
> lower rater = 4.

Higher ratings were given to this statement by three persons and lower by four. All three higher raters agreed that educational research methods were very useful and administrators needed to acquire this knowledge in order to upgrade the educational quality and effectiveness. The lower raters thought that most of the research was not worth utilizing. "Research findings are not helpful to administrators and besides this subject is too difficult to understand." "School principals have to spend most of their time on administrative tasks; research should come later."

Statement 17
Item 23. Decision making. S.D. = .45; consensus = 5, higher rater = 0, lower rater = 5.

The five individuals who rated this lower than consensus stated almost the same reason: this competency was not necessary to be rated as high as 5 because these schools did not have such a problem in decision making. They already had good decision making in the school.

Statement 18
Item 30. Virtue and morality of administrators. S.D. = .45, consensus = 4, higher rater = 5, lower rater = 2.

Individuals rating this statement higher and lower numbered five and two respectively. Those rating virtue and morality of administrators higher based their reasoning around the effect on the staff if the administrators had virtue and morality. The administrators would be more accepted by their staff. Staff would be motivated to work as well as have higher morals.

Respondents giving the statement a lower rating said that this topic was boring and repetitive. One said that he already had a very good environment in his school and, "staff and administrator work together like a family so we don't need such knowledge."

Statement 19
Item 41. Psychology of adult learning. S.D. = .44, consensus = 4, higher rater = 2, lower rater = 5.

Seven persons disagreed with the consensus rating. Two of them rated this statement higher and the rest rated it lower. Only one vague statement was submitted on behalf of the higher rating, "in order to adjust themselves."

Two of the lower raters said that this knowledge was very generalized and acquired no special emphasis. One mentioned that psychology could be utilized in some cases but not all. The other added that the administrators had already studied a lot on this topic.

Statement 20
Item 4. Survey and analysis of staff development problems and needs. S.D. = .43, consensus = 4, higher rater = 4, lower rater = 2.

Four respondents rated this statement higher and two lower. The supportive statements to the higher rating were

- Need analysis is the first step in program planning.

- Staff should be developed according to their needs.

- Staff are the most important resources.

Those favoring a lower ranking wrote that this job had been done by central organization.

Statement 21
Item 28. Management of meetings and seminars.

S.D. = .43, consensus = 4, higher rater = 4, lower rater = 2.

Higher-than-consensus rating came from four persons and lower from two. The higher rating group indicated that this knowledge and skill can be utilized by administrators to handle staff meetings and also to create mutual understanding as well as harmony in work among the staff.

The two lower raters gave indefinite reasons like, "it is a boring activity," and "it causes too much trouble."

Statement 22
Item 37. Group dynamics. S.D. = .43, consensus = 4, higher rater = 4, lower rater = 3.

Minority opinions for this statement were evenly split, with three persons rating it higher and three rating it lower than consensus. One of the higher respondents indicated that this activity builds unity among the staff and develops effective teamwork. The other two gave no reason for rating it 5.

Lower rating opinions most often conceded that group dynamics were hardly used in the school, and besides, administrators have already attended this type of program run by so many educational organizations that they understood this topic.

Statement 23
Item 2. Rules, regulations acts and laws for school administrators. S.D. = .42, consensus = 5, higher rater = 0, lower rater = 7.

Although there were seven dissenting ratings for this item, logical arguments were few. Dissenting statements included

- We don't know enough about this.

- We need more knowledge about this.

- Rules, regulations, acts and laws are essential for working.

- Everything in school was already well-organized.

- Rules, regulations, acts and laws would be the guideline for working.

The one lower rater did not agree to place emphasis on this matter; "teachers are doing a fair job."

Statement 24
Item 43. Problem solving and analysis to improve student learning S.D. = .42, consensus = 4, higher rater = 5, lower rater = 1.

Five persons rated this statement as being higher than consensus and only one rated it lower. The reasons given by both sides centered on students' achievement. Supportive statements to this item indicated the followings:

- This is the most important job of a school.

- Understanding students' problems leads to suitable activities.

- In order to solve the urgent problems and develop the quality of students this topic is necessary.

- Teachers and students' relationships will be improved.

The one lower rater did not agree to place emphasis on this matter because, "teachers are doing a fair job."

Statement 25
Item 25. Techniques to stimulate and motivate staff to maximum performance. S.D. = .40, consensus = 4, higher rater = 3, lower rater = 2.

Three persons rated this statement as "highest priority" while two others marked it lower than consensus. Higher raters' reasons show the conclusions that motivation is the key to all changes, successes and effectiveness.

The lower raters gave the following reasons

- Promotion is already a motivational technique.

- Principal is knowledgeable about this.

- Good morale is enough.

Statement 26
Item 11. Training techniques and in-service planning for staff development to improve competence. S.D. = .37, consensus = 4, higher rater = 5, lower rater = 2.

Higher non-consensus ratings numbered five and lower, two. Arguments in favor of a higher rating included the following:

- Expansion of knowledge is so rapid that staff personnel need to acquire this knowledge in order to keep abreast with change and administrators need to know how to develop their own staff.

- Administrators need to keep track of technological and scientific progress in order to perform their jobs as staff developers.

Those who rated this statement lower than consensus argued that this job belongs to the central office. One said that he already had meetings every month and that was a part of training and educating his staff.

Statement 27
Item 14. Staff evaluation: techniques for accessing staff performance. S.D. = .37, consensus = 4, higher

rater = 3, lower rater = 3.

One person who rated this statement higher than consensus said that it was necessary to have a criterion for staff evaluation. The other three persons who rated it lower than consensus gave the following reasons:

- The central office has already set the criteria for staff evaluation.

- The criteria that have been used were not a good model for staff evaluation.

- The school is very small so it is very easy to control.

Statement 28
Item 10. Educational planning methods. S.D. = .36, consensus = 4, higher rater = 6, lower rater = 1.

Higher ratings for this statement numbered six and lower, one. The lower rater thought that a lot of administrative work needed to be done. If the most emphasis has been placed on this topic, the principals will not be able to do some other things. The higher raters perceived this competence as a key to effective programs in school. Good planning will lead to a successful program. However, planning has something to do with the budget as well.

Statement 29
Item 6. Personnel administration: how to plan personnel within school. S.D. = .34, consensus = 4, higher rater = 5, lower rater = 5.

Only one person rated this lower than consensus. He stated that this should be the central offices' job. The other four higher raters have almost the same idea about the

importance of personnel administration: that staff were the most important resources who need to be put into the right place for the right position. Personnel administration is basic to the effective utilization of human resources.

Statement 30
Item 5. Knowledge of information systems and planning. S.D. = .33, consensus = 5, higher rater = 0, lower rater = 6.

Six respondents rated this statement lower than the top priority rating. Some of them gave very vague reasons, for example:

- It is far too complicated for top priority.

- Our school is doing a fair job already.

- Most of the information is not worth utilizing.

- This should be a concern but not a top priority.

One gave a reason that seemed to be against his rating. He mentioned that information was basic to effective administration and he rated it 4.

Statement 31
Item 21. Administrative leadership. S.D. = .32, consensus = 4, higher rater = 1, lower rater = 1.

Only two persons rejected the consensus in their rating. One rated it higher than consensus and one rated it lower. The higher rater gave no reason for his rating, but the lower one said that the principal already knew about this topic.

Statement 32
Item 8. Job analysis. S.D. = .30, consensus = 4, higher rater = 5, lower rater = 0.

None of the respondents rated this statement lower than consensus; five non-consensus respondents ranked it higher. Those individuals were primarily concerned with utilizing job analysis to improve the quality of the job. "Job analysis will help staff to understand the goals of school and this is directly administrators' function; besides, to work effectively, one needs this knowledge."

Statement 33
Item 9. The art of putting the right person in the right job. S.D. = .30, consensus = 5, higher rater = 0, lower rater = 5.

Five persons rated this statement lower than "highest priority." They gave the following reasons:

- It is important but not top priority.

- Administrators already know all about this.

- Staff know their responsibilities.

- If staff are put into the right position we will get quality job.

One said that what they do now was not good enough. This probably implied that they need more training to improve their ability; however, he rated it 4.

Statement 34
Item 13. Primary school curriculum management. S.D. = .30, consensus = 5, higher rater = 0, lower rater = 5.

Six of the non-consensus respondents rated this statement lower than consensus but three of them gave reasons which seemed to support a higher rating. For example,

- It is the main function of school.

- It is the principal's job to study this topic.

- It is necessary to manage curriculum in accordance

   with academic administration.

The other two lower raters related that the curriculum

had been changed all the time, thus administrators needed to

keep up with curriculum change.

Statement 35
Item 17. Application of knowledge, technology and
innovation in managing school. S.D. = .30,
consensus = 4, higher rater = 5, lower rater = 0.

All five higher responses indicated that technology and

innovation are necessary for administrators to use as a tool

to:

- improve the quality of education

- develop new delivery systems

- keep track with the changing environment

- provide the most effective learning experience

   for staff

- have better management

Statement 36
Item 12. Academic administration (curriculum and
instructional planning). S.D. = .27, consensus = 5,
higher rater = 0, lower rater = 4.

Less than highest priority ratings came from four

participants on this statement. Their viewpoints were:

- Academic administration is not the only major concern,

   we have to develop other things too.

- This matter has already received too much attention

   from administrators.

- Academic administration is a very important matter but

it is not well managed.

Statement 37
Item 32. Guidance and counseling knowledge. S.D. = .27, consensus = 4, higher rater = 4, lower rater = 0.

Minority opinions were all centered on a higher rating of this statement with four supportive opinions, including:

- Guidance and counseling will help staff to work into the right direction.

- They create good morale and motivation among staff.

- They build good relationships between administrators and staff.

Statement 38
Item 18. Team development. S.D. = .24, consensus = 5, higher rater = 0, lower rater = 3.

Three study participants maintained that this statement should be rated less than top priority. Additional clarification was given through statements such as:

- School is so small that it has a low frequency of use.

- Administrators have been trained about this already.

- We already have good team work in our school.

Statement 39
Item 42. Communication development for coordination within school. S.D. = .24, consensus = 4, higher rater = 3, lower rater = 0.

The reasons given by the three higher raters indicated that good communication will bring about cooperation and coordination within a school. It was a tool for public relations.

Statement 40
Item 16. Organizational theory and development. S.D. = .20, higher rater = 1, lower rater = 1.

There were two non-consensus raters for this statement. The one who rated it higher gave no reason. The lower rater mentioned that his school is now well organized.

Statement 41
Item 19. Staff quality-control techniques. S.D. = .20, consensus = 4, higher rater = 2, lower rater = 0.

Two persons who rated this statement as 'a highest priority' said this knowledge was very important because there was no staff follow-up in their school.

Statement 42
Item 20. Stimulating and providing opportunities for professional growth of staff personnel. S.D. = .14, consensus = 4, higher rater = 1, lower rater = 0.

This is the statement given by one respondent who rated this statement as highest priority, "teachers need to develop themselves all the time by acquiring new knowledge in order to improve their instruction."

Statement 43
Item 31. Administrative theories. S.D. = .14, consensus = 4, higher rater = 1, lower rater = 0.

Only one respondent did not want to join the consensus in this statement and he indicated that this knowledge was very necessary for administrators.

It can be observed from the items generated by the principals, as well as the reasons given for some of their ratings, that the principals' conceptions of staff development are very broad and all encompassing. It seems that the principals were searching for a framework in which to place all their staff development activities and

competencies. It would be more appropriate to utilize qualitative methodology regarding this topic in order to allow the principals to describe their role responsibilities and activities in which they are involved in the area of staff development. However, it is not surprising that the principals had difficulty identifying the staff-development competencies because, as was stated earlier in the review of literature, there was a similar difficulty among the experts in this area. It was the researcher's impression that the principals in the study had not given a great deal of concentrated thought to staff development and their philosophies as related to their responsibilities in this area.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Findings and Conclusions

The major findings of this study were derived from (a)
the review of literature and related research presented in
Chapter II; and (b) the analysis of the data gained through
perception of primary school principals as stated in Chapter
IV.

These conclusions are drawn from review of literature
and related research;

1. Staff development is an important domain or
responsibility for school principals but there is no clearly
defined or universally accepted role of the school principal
as a staff developer.

2. There was no evidence of any research studies in
Thailand that had been done on either pre-service or
in-service education of primary school principals regarding
their skills and knowledge in the area of staff development.

3. There was no evidence that the principals are
currently serving in this role. In fact, they are not
trained for this role, and more importantly, they may not
understand the need for it. Of the required courses
analyzed, none dealt specifically with staff development;

pre-service and in-service administrative training for primary school principals in the area of staff development in Thailand seems to be nonexistant.

4. The role responsibilities of the primary school principal in the area of staff development seem to be perceived as one part of the role of the principal as an administrator.

5. Principals need more opportunities in the area of staff development so they can become more systematic and deliberate in the performance of this role responsibility.

The conclusions drawn from research findings are:

1. Forty-three skills and the knowledge an individual must possess to be a competent staff developer were generated by primary school principals in the first round of the Delphi (see chapter 4, pp. 64-66). Of those forty-three statements, fourteen (32.56%) were rated highest priority and twenty-nine (67.44%) were rated second-highest priority (see Table 9, pp. 68-69). None of the respondents' consensus rated 3 (average priority of importance), 2 (below average priority of importance), or 1 (lowest priority of importance). Since most of the statements were rated in the two top priority categories, it was concluded that Questionnaire I, which origi..ally elicited the statements, served as a screening instrument in that only statements thought to be important were solicited. Therefore, the skills and knowledge statements generated were already high

in priority in the opinion of the particular respondent.
Otherwise, the panel of experts was too homogeneous, thus
producing a skewed data set. This leads to the conclusion
that the panel of experts should have included people with
varied skills and status. The high level of agreement in
competency rankings was apparent after the first round. At
this point, the trend was obvious but beyond the control of
the researcher.

2. In the analysis of Questionnaire I, it was found
that some items generated by principals were very broad.
Some of them did not concern staff developer skills and
knowledge. These unspecific items were probably due to a
lack of understanding of the first-round questionnaire's
definition of staff development. The broadest statements
drawn from these principals showed that they did not have a
clear focus on or definition of staff development. They
seemed to lack a clear knowledge base in staff development
and perceive the principal's staff developer role as a part
of the administrative role, where most emphasis was placed.
In order to help respondents contribute knowledge and skill
statements, the original framework should have been formed
as a controlled guideline.

3. In Table 9, five statements rated as second highest
priority were found to have higher mean scores than the
lowest mean of the top-priority statement. These statements
were:

1. Techniques to stimulate and motivate staff to maximum performance;

2. Arrangement of learning environment and improving climate for working;

3. Virtue and morality of administrators;

4. Administrative theories;

5. Time management.

This "overlap of means" illustrates a limitation of the use of modal consensus in Delphi technique. One statement--# 30 on virtue and morality of administrators--was found to have a bimodal consensus.

4. The overall rate of consensus increased from 53.4 percent in Questionnaire II to 88.3 percent in Questionnaire III. Most respondents to Questionnaire III joined the consensus. The non-consensus respondents (11.7 percent) wrote minority opinions which were rather indefinite. The most common minority opinions stated either that they already possessed a sufficient level of knowledge in that task area or this competency was necessary for administrators. At this point, competency ambiguity was a problem for some respondents. More field studies need to be conducted to investigate how school principals perceive their roles, and more importantly, how effective their roles and behaviors are.

Recommendations

The following recommendations, based on insights gained through this study, are presented in two areas: (1) some implications for future administrative training programs, and (2) further research study.

Some implications for further administrative training programs

1. The information obtained from this research should provide guidelines in the planning and implementation of administrative training requirements as well as appropriate content for workshops and conferences for primary school principals.

2. Some of the high consensus statements in this study should be considered important educational objectives in administrative training programs in Thailand. Those statements indicate as important:

1. Academic administration (curriculum & instructional planning);

2. Rules, regulations, acts and laws for school administration;

3. The art of putting the right person in the right job;

4. Developing human relationships;

5. Supervision and follow-up within school;

6. Procedures for improving school-community relations;

7. Development and maintenance of good staff

morale;

8. Conflict-resolution techniques;

9. Team development;

10. Decision making;

11. Primary school curriculum management;

12. Information system and planning;

13. Power delegation: how to delegate authority and responsibility;

14. School budgeting and financial management: how to prepare a school budget; procurement and management of funds in accordance with the Ministry of Education regulations.

Recommendations for further research study

1. This study was confined to the primary school principals in Education Region I. It would be helpful to determine whether there would be similar agreement among principals in other regions and at other levels.

2. Similar needs assessment could be made in areas other than staff development. The resulting findings could be compared and combined to make a comprehensive plan for national administrative training programs.

3. All competencies were considered important by the principals participating in this study. Similar research in future years would determine the extent to which the competencies and the consensus of importance change over time.

4. The statements formulated in this study could be utilized in the development of a questionnaire that could be used with another sample of administrators.

5. Training techniques need to be identified. It would seem that this topic would be appropriate for further investigation.

6. Research should be conducted to determine whether or not primary school administrators possess the skills and knowledge identified in the study and how effective their roles and behaviors are.

7. The research on this topic should be conducted from the staff perspective as well.

8. The qualitative methodology should be utilized for this topic in order to acquire an in-depth look at what principals are actually doing in the area of staff development, as well as to add to the understanding of the principal's role in this area.

APPENDIX A

QUESTIONNAIRE I PACKET

Department of Higher and Adult Education
College of Education

August 1, 1989

To Whom It May Concern:

This letter introduces Ms. Ranee Rajnapong, who has worked for
the Office of the National Primary Education Commission in
Thailand and who is a doctoral student in Adult Education at the
University of North Texas in Denton, Texas, U.S.A.

During the fall of 1989 Ms. Rajnapong will travel to Thailand to
collect data for her dissertation. She seeks to identify,
describe and analyze knowledge and competencies needed by
elementary school principals to conduct staff development actives
for elementary instructors in order to improve instruction.

Because such a study will be of value to educators in both
Thailand and the United States, I would greatly appreciate any
assistance that you can provide Ms. Rajnapong.

Thank you in advance for your cooperation and assistance.

Sincerely,

Ron Newsom, Ph.D.
Associate Professor and
Program Area Head for Adult Education

pg

ที่ ศธ 020701/1558   สำนักงานศึกษาธิการเขต เขตการศึกษา 1

พระราชวังสนามจันทร์ นครปฐม 73000

29   สิงหาคม   2532

เรื่อง   ขอความร่วมมือการวิจัย

เรียน

สิ่งที่ส่งมาด้วย   แบบสอบถาม

       ด้วยนางสาวราณี รัชนพงษ์ นักศึกษาปริญญาเอก สาขาวิชา Adult/Continuing Education จาก University of North Texas ประเทศสหรัฐอเมริกา มีความประสงค์จะเก็บข้อมูลเพื่อประกอบการทำปริญญานิพนธ์ เรื่อง "A Delphi Investigation of Staff Development Knowledge and Skills Needed for Primary School Principals in Thailand "

       จึงเรียนมาเพื่อขอความร่วมมือจากท่านได้โปรดกอบแบบสอบถามที่ใช้ในการทำวิจัยครั้งนี้ด้วย จักขอบคุณยิ่ง

                        ขอแสดงความนับถือ

                        (นายสวง   กาญจนากร)

                 ศึกษาธิการเขต เขตการศึกษา 1

งานบริหารทั่วไป

โทร.นครปฐม 034-254406

ROUND I CORRESPONDENCE AND QUESTIONNAIRE

Dear . . .

Under the supervision of Dr. Ronald W. Newsom, I am now conducting a research project in order to fulfill one of the major requirements of the Ph.D. program in Adult/Continuing Education at University of North Texas. The purpose of this study is to determine knowledge and skills needed for primary school principals in Thailand to perform the role of staff developer.

This letter is written to invite you to take part in this study. Your participation will be important in developing a consensus of opinion concerning skills and knowledge needed for primary school principals in Thailand in the area of staff development. It is hoped that the information gained through your expertise will be valuable in planning future training programs that would be relevant to the actual needs of the primary school principals in Thailand.

The Delphi Technique of three rounds will be applied to collect data. On Round I, you will be asked to answer an open-ended question. On Round II, you will be asked to rate the statements generated by the panel from Round I on a five-point rating scale (1 2 3 4 5). On Round III, the questionnaire which consists of the list of statements with a group modal consensus for each statement from Round II will be sent to you to rate again. You will be asked to reconsider your Round II responses and make any revisions that are called for.

Please begin the study by reacting to the Round I enclosure. Instructions are provided. In order to participate the rapid completion of this study, please return Round I responses within two weeks. Your responses will be seen only by the researcher and sources of all data will remain confidential. Your cooperation will be appreciated.

Sincerely Yours

Ranee Rajnapong

ROUND I QUESTIONNAIRE

<u>Instruction One:</u> Please answer the following question. Be brief but adequately communicate your ideas.

Staff development is an important aspect of educational management. As such it is vital that the staff development function is managed professionally. It is probably best if one individual at a high level in the organization is given the overall responsibility for staff development. This is not to say that he does all the development, but rather that he sees that it is done and done well.

As chief executive, the principal is best able to develop the strategy and coordination of teaching and learning. His formal leadership provides him with the opportunity to motivate his staff and to improve teaching standard and performance. He may maximize the different skills of his teachers and help to develop their expertise.

According to the above statements, what knowledge and skills do you think are necessary for the primary school principal to perform the role of staff developer?

```
 1.  _____
 2.  _____
 3.  _____
 4.  _____
 5.  _____
 6.  _____
 7.  _____
 8.  _____
 9.  _____
10.  _____
```

<u>Instruction Two:</u> If you wish to list more than ten areas of knowledge and skills, feel free to list addition items on the back of this page. These additions will be included in the study.

<u>Instrution Three:</u> Please mail your completed questionnaire to:

> Miss Ranee Rajnapong
> 69 Rajdamnern Rd
> Nakhon Pathom 73000

Results from all participants will be combined and returned to you for Round II consideration.

Thanks for your assistance.

APPENDIX B

QUESTIONNAIRE II PACKET

ROUND II CORRESPONDENCE AND QUESTIONNAIRE

Dear . . .

Thank you for your prompt return of the Delphi Questionnaire
Round I. For this round, I would like you to: 1) check
six items related to demographic information about the
panel. This information will be held in strictest
confidence 2) rate all items according to the priority
importance on a five-point rating scale. These items were
created from the responses that you and other panelists
contributed on Questionnaire I.

I am enclosing instructions on how to complete this Round II
Questionnaire. If you could return this to me within two
weeks, it would greatly facilitate the completion of the
study.

Thanks for your cooperation

Ranee Rajnapong

Round II Questionnaire

Part I: Demographic Information

Instruction: Please circle the appropriate answer

1. Your work place
    A Nakhon Pathom
    B Nonthaburi
    C Pathum Thani
    D Samuth Prakan
    E Samuth Sakhon

2. Your age
    A 35 or under
    B 36-40
    C 41-45
    D 46-50
    E over 50

3. Your gender
    A Female
    B Male

4. Your highest educational level
    A Less than bachelor's degree
    B Bachelor's degree

5. Total years of educational experience as a primary
    school administrators
    A Less than 5 years
    B 5-10 years
    C 11-15 years
    D More than 15 years

6. Have you ever had any kind of administrative training
    experience?
    A Yes
    B No

PART II: Staff development skills and knowledge for primary
school administrators questionnaires.

Instruction: Please read each statement carefully and rate
it by circling the appropriate number on the five-point
rating scale according to the following criteria.

            1 = lowest importance (lowest)
            2 = below average importance (low)
            3 = average importance (average)
            4 = above average importance (high)
            5 = highest importance (highest)

In order to be an effective staff developer in his/her school, a primary school principal should acquire knowledge and skills of

		Level of Importance Low to High				
1.	School budgeting and financial management, how to prepare a school budget; procurement and management of funds in accordance with Ministry of Education regulations.	1	2	3	4	5
2.	Rules, regulations, acts and laws for school administrators.	1	2	3	4	5
3.	Educational research methods enabling school administrators to develop educational quality.	1	2	3	4	5
4.	Survey and analysis of staff development problems and needs.	1	2	3	4	5
5.	Information system and planning.	1	2	3	4	5
6.	Personnel administration: how to plan personnel within school.	1	2	3	4	5
7.	Position classification: defining position and job quantity, determining roles.	1	2	3	4	5
8.	Job analysis.	1	2	3	4	5
9.	The art of putting the right person in the right job.	1	2	3	4	5
10.	Educational planning methods.	1	2	3	4	5
11.	Training techniques and in-service planning for staff development to improve competence.	1	2	3	4	5
12.	Academic administration (curriculum and instructional planning).	1	2	3	4	5
13.	Primary school curriculum management.	1	2	3	4	5
14.	Staff evaluation: techniques for assessing staff performance.	1	2	3	4	5

15. Procedure for the recruitment and
    selection of staff personnel.   1 2 3 4 5

16. Organizational theory and development. 1 2 3 4 5

17. Application of knowledge, technology
    and innovation in managing school.   1 2 3 4 5

18. Team development.   1 2 3 4 5

19. Staff quality-control techniques.   1 2 3 4 5

20. Stimulating and providing opportunities
    for professional growth of staff
    personnel.   1 2 3 4 5

21. Administrative leadership.   1 2 3 4 5

22. Power delegation: how to delegate
    authority and responsibility.   1 2 3 4 5

23. Decision making.   1 2 3 4 5

24. Development and maintenance of good
    staff morale.   1 2 3 4 5

25. Techniques to stimulate and motivate
    staff to maximum performance.   1 2 3 4 5

26. Arrangement of learning environment and
    improving climate for working.   1 2 3 4 5

27. Conflict-resolution techniques.   1 2 3 4 5

28. Management of meetings and seminars.   1 2 3 4 5

29. Orientation technique for new teachers. 1 2 3 4 5

30. Virtue and morality of administrators. 1 2 3 4 5

31. Administrative theories.   1 2 3 4 5

32. Guidance and counseling knowledge.   1 2 3 4 5

33. Procedures for improving school-community
    relations.   1 2 3 4 5

34. Developing human relationships.   1 2 3 4 5

35. Time Management   1 2 3 4 5

36. Supervision and follow-up within school 1 2 3 4 5

37. Group dynamics.   1   2   3   4   5

38. Methods of establishing and maintaining
    order, effective discipline, moral
    education of staff.   1   2   3   4   5

39. Management of the general welfare within
    school.   1   2   3   4   5

40. Administration of extra activities for
    staff personnel such as field trips and
    in-service education.   1   2   3   4   5

41. Psychology of adult learning.   1   2   3   4   5

42. Communication development for
    coordination within school.   1   2   3   4   5

43. Problem solving and analysis to
    improve student learning.   1   2   3   4   5

APPENDIX C

QUESTIONNAIRE III PACKET

ROUND III CORRESPONDENCE AND QUESTIONNAIRE

Dear . . .

Thank you for your return of the Delphi Questionnaire II
regarding skills and knowledge needed for the primary school
principal as staff developer. According to the Delphi
research procedure, it is now time for the third and final
round of this study. The questionnaire for this round
provides you with your previous responses and the summarized
ratings of all the panelists. This data is reported in
terms of the "modal consensus". The modal consensus,
however, is the response selected most often by respondents;
not necessarily a majority. The purpose of this final
questionnaire is to ask you to make any change you so desire
concerning your rating for each statement once you have seen
the summarized rating of all the other panelists. The
instructions are as well enclosed.

I hope you will continue this consideration and assist me
further by completing this final questionnaire and return it
to me within two weeks. Your participation and promptness
throughout this study are greatly appreciated.

Sincerely Yours

Ranee Rajnapong

ROUND III QUESTIONNAIRE

This questionnaire is a duplicate of Questionnaire II except that it contains both the modal consensus of all persons who scored the questionnaire (marked with a square) and your rating of each item (marked with a circle) when it was different from the "consensus".

Instruction: If you wish to remain outside the consensus, please state the primary reason by writing that reason directly below the particular item. For any item where your priority rating is outside the consensus and for which you do not list a reason, your rating will automatically be changed to a consensus rating.

                your response   consensus

Sample
1. Human Relations   1 2 3 4 5
    Reason . . . .

2. Training Techniques   1 2 3 4 5
    Reason . (for not joining the consensus) . . . .

3. Planning   1 2 3 4 5
    Reason . . . .

Explanation
    1. In statement #1 the respondent's rating was the same as the consensus rating so no consideration was necessary.
    2. In statement #2 the respondent's rating differed from consensus; he indicated he did not wish to join the consensus by stating the reason in the space provided.
    3. In statement #3 the respondent's rating differed from consensus; however, he wished to join consensus and indicated so by leaving the "reason" space blank.

In order to be an effective staff developer, the primary principal should acquire skills and knowledge of

                                Level of
                             Importance
                       Low to High
1. School budgeting and financial management, how to prepare a school budget; procurement and management of funds in

accordance with Ministry of Education
regulations.   1   2   3   4   5
Reason . . . .

2. Rules, regulations, acts and laws for
    school administrators.   1   2   3   4   5
    Reason . . . .

3. Educational research methods enabling
    school administrators to develop
    educational quality.   1   2   3   4   5
    Reason . . . .

4. Survey and analysis of staff development
    problems and needs.   1   2   3   4   5
    Reason . . . .

5. Information system and planning.   1   2   3   4   5
    Reason . . . .

6. Personnel administration: how to plan
    personnel within school.   1   2   3   4   5
    Reason . . . .

7. Position classification: defining
    position and job quantity, determining
    roles.   1   2   3   4   5
    Reason . . . .

8. Job analysis.   1   2   3   4   5
    Reason . . . .

9. The art of putting the right person
    in the right job.   1   2   3   4   5
    Reason . . . .

10. Educational planning methods.   1   2   3   4   5
    Reason . . . .

11. Training techniques and in-service
    planning for staff development to
    improve competence.   1   2   3   4   5
    Reason . . . .

12. Academic administration (curriculum
    and instructional planning).   1   2   3   4   5
    Reason . . . .

13. Primary school curriculum management.   1   2   3   4   5
    Reason . . . .

14. Staff evaluation: techniques for
    assessing staff performance.   1   2   3   4   5
    Reason . . . .

15. Procedure for the recruitment and
    selection of staff personnel.   1   2   3   4   5
    Reason . . . .

16. Organizational theory and development. 1   2   3   4   5
    Reason . . . .

17. Application of knowledge, technology
    and innovation in managing school.   1   2   3   4   5
    Reason . . . .

18. Team development.   1   2   3   4   5
    Reason . . . .

19. Staff quality-control techniques.   1   2   3   4   5
    Reason . . . .

20. Stimulating and providing opportunities
    for professional growth of staff
    personnel.   1   2   3   4   5
    Reason . . . .

21. Administrative leadership.   1   2   3   4   5
    Reason . . . .

22. Power delegation: how to delegate
    authority and responsibility.   1   2   3   4   5
    Reason . . . .

23. Decision making.   1   2   3   4   5
    Reason . . . .

24. Development and maintenance of good
    staff morale.   1   2   3   4   5
    Reason . . . .

25. Techniques to stimulate and motivate
    staff to maximum performance.   1   2   3   4   5
    Reason . . . .

26. Arrangement of learning environment and
    improving climate for working.   1   2   3   4   5
    Reason . . . .

27. Conflict-resolution techniques.   1   2   3   4   5
    Reason . . . .

28. Management of meetings and seminars.   1 2 3 4 5
    Reason . . . .

29. Orientation technique for new teachers. 1 2 3 4 5
    Reason . . . .

30. Virtue and morality of administrators. 1 2 3 4 5
    Reason . . . .

31. Administrative theories.   1 2 3 4 5
    Reason . . . .

32. Guidance and counseling knowledge.   1 2 3 4 5
    Reason . . . .

33. Procedures for improving school-community
    relations.   1 2 3 4 5
    Reason . . . .

34. Developing human relationships.   1 2 3 4 5
    Reason . . . .

35. Time Management   1 2 3 4 5
    Reason . . . .

36. Supervision and follow-up within school 1 2 3 4 5
    Reason . . . .

37. Group dynamics.   1 2 3 4 5
    Reason . . . .

38. Methods of establishing and maintaining
    order, effective discipline, moral
    education of staff.   1 2 3 4 5
    Reason . . . .

39. Management of the general welfare within
    school.   1 2 3 4 5
    Reason . . . .

40. Administration of extra activities for
    staff personnel such as field trips and
    in-service education.   1 2 3 4 5
    Reason . . . .

41. Psychology of adult learning.   1 2 3 4 5
    Reason . . . .

42. Communication development for
    coordination within school.   1 2 3 4 5
    Reason . . . .

43. Problem solving and analysis to
    improve student learning.   1 2 3 4 5
    Reason . . . .

APPENDIX D

MEAN, FREQUENCY, AND STANDARD DEVIATION OF

RESPONSES TO QUESTIONNAIRE II

MEAN FREQUENCY AND STANDARD DEVIATION OF
RESPONSES TO QUESTIONNAIRE II

Rank	Item No.	SKILLS AND KNOWLEDGE	MEAN	FREQUENCY OF PRIORITY RESPONSES					SD
				1	2	3	4	5	
1	12	Academic administration (curriculum & instructional planning)	4.66	0	0	2	15	38	.55
2	2	Rules, regulations, acts, and laws for school administrators	4.64	0	0	3	14	38	.59
3	9	The art of putting the right person in the right job	4.56	0	0	4	16	35	.63
4	34	Developing human relationships	4.53	0	0	3	20	32	.60
5	36	Supervision and follow-up within school	4.51	0	0	5	17	33	.66
6	33	Procedures for improving school-community relations	4.51	0	2	3	15	35	.77
7	24	Development and maintenance of good staff morale	4.49	0	0	4	20	31	.64
8	27	Conflict-resolution techniques	4.47	0	0	2	25	28	.57
9	18	Team development	4.44	0	0	3	25	27	.60
10	23	Decision making	4.44	0	0	6	19	30	.69
11	13	Primary school curriculum management	4.40	0	0	4	25	26	.63
12	25	Techniques to stimulate and motivate staff to maximum performance	4.35	0	1	3	27	24	.67
13	30	Virtue and morality of administrators	4.35	0	1	4	25	25	.70
14	5	Information system and planning	4.33	0	0	8	21	26	.72
15	22	Power delegation: How to delegate authority and responsibility	4.33	0	2	5	21	27	.80
16	31	Administrative theories	4.31	0	0	5	28	22	.64
17	35	Time management	4.29	0	1	5	26	23	.71
18	26	Arrangement of learning environment and improving climate for working	4.29	1	0	3	29	22	.74
19	19	Staff quality-control techniques	4.27	0	0	6	28	21	.65
20	1	School budgeting and financial management: how to prepare a school budget, procurement and management of funds in accordance with Ministry of Education regulation	4.27	1	1	9	15	29	.93
21	10	Educational Planning methods	4.26	0	1	5	28	21	.70
22	21	Administrative Leadership	4.24	0	1	6	27	21	.72
23	43	Problem solving and analysis to improve student learning	4.24	0	1	10	19	25	.82
24	20	Stimulating and providing opportunities for professional growth of staff personnel	4.20	0	0	7	30	18	.65

Rank	Item No.	SKILLS AND KNOWLEDGE	MEAN	FREQUENCY OF PRIORITY RESPONSES					SD
				1	2	3	4	5	
25	28	Management of meetings and seminars	4.16	0	1	7	29	18	.71
26	6	Personnel administration: how to plan personnel within school	4.16	1	0	8	26	20	.81
27	32	Guidance and counseling knowledge	4.15	0	0	8	31	16	.65
28	17	Application of knowledge, technological and innovation in managing school	4.15	0	1	9	26	19	.76
29	38	Methods of establishing and maintaining order, effective discipline, moral education of staff	4.11	0	2	8	27	18	.79
30	14	Staff evaluation: techniques for assessing staff performance	4.04	0	1	8	34	12	.67
31	11	Training techniques and in-service planning for staff development to improve competence	4.02	0	0	10	34	11	.62
32	8	Job analysis	4.00	0	0	11	33	11	.64
33	37	Group dynamics	3.98	0	2	8	34	11	.71
34	42	Communication development for coordination within school	3.98	0	2	9	32	12	.73
35	16	Organizational theory and development	3.86	0	1	15	30	9	.71
36	39	Management of general welfare within school	3.86	0	2	12	33	8	.71
37	7	Position classification: defining position and job quantity, determining roles	3.86	0	2	16	25	12	.80
38	4	Survey and analysis of staff development problems and needs	3.84	0	2	15	28	10	.76
39	29	Orientation techniques for new teachers	3.78	0	2	17	27	9	.76
40	3	Educational research methods enabling school administrators to develop educational quality	3.73	0	2	17	30	6	.71
41	40	Administration of extra activities for staff personnel such as field trips and in-service education	3.67	0	3	19	26	7	.77
42	41	Psychology of adult learning	3.66	1	1	21	25	7	.80
43	15	Procedure for the recruitment and selection of staff personnel	3.56	5	1	15	26	8	1.07

APPENDIX E

MEAN, FREQUENCY, AND STANDARD DEVIATION OF

RESPONSES TO QUESTIONNAIRE III

MEAN FREQUENCY, AND STANDARD DEVIATION OF
RESPONSES TO QUESTIONNAIRE III

Rank	Item No.	SKILLS AND KNOWLEDGE	MEAN	FREQUENCY OF PRIORITY RESPONSES					SD
				1	2	3	4	5	
1	18	Team development	4.94	0	0	0	3	46	.24
2	12	Academic administration (curriculum and instructional planning)	4.92	0	0	0	4	45	.27
3	9	The art of putting the right person in the right job	4.90	0	0	0	5	44	.30
4	13	Primary school curriculum management	4.90	0	0	0	5	44	.30
5	5	Information system and planning	4.88	0	0	0	6	43	.33
6	23	Decision making	4.86	0	0	2	3	44	.45
7	34	Developing human relationships	4.86	0	0	3	1	45	.50
8	2	Rules, regulations, acts and laws for school administrators	4.84	0	0	1	6	42	.42
9	36	Supervision and follow-up within school	4.84	0	0	2	4	43	.47
10	22	Power delegation: how to delegate authority and responsibility	4.82	0	1	1	4	43	.56
11	33	Procedures for improving school community relations	4.78	0	2	1	3	43	.68
12	27	Conflict-resolution techniques	4.76	0	0	2	8	39	.52
13	24	Development and maintenance of good staff morale	4.74	0	0	4	5	40	.60
14	1	School budgeting and financial management: how to prepare a school budget; procurement and management of funds in accordance with Ministry of Education	4.63	0	1	4	7	37	.72
15	8	Job analysis	4.10	0	0	0	44	5	.30
16	17	Application of knowledge, technology and innovation in managing school	4.10	0	0	0	44	5	.30
17	10	Educational planning methods	4.10	0	0	1	42	6	.36
18	32	Guidance and counseling knowledge	4.08	0	0	0	45	4	.27
19	6	Personnel administration: how to plan personnel within school	4.08	0	0	1	43	5	.34
20	42	Communication development for coordination within school	4.06	0	0	0	46	3	.24
21	11	Training techniques and in-service planning for staff development to improve competence	4.06	0	0	2	42	5	.37
22	43	Problem solving and analysis to improve student learning	4.06	0	1	0	43	5	.42
23	35	Time management	4.06	0	1	1	41	6	.47
24	19	Staff quality-control techniques	4.04	0	0	0	47	2	.20
25	30	virtue and morality of administrators	4.04	0	1	1	42	5	.45

Rank	Item No.	SKILLS AND KNOWLEDGE	MEAN	FREQUENCY OF PRIORITY RESPONSES					SD
				1	2	3	4	5	
26	20	Stimulating and providing opportunities for professional growth of staff personnel	4.02	0	0	0	48	1	.14
27	31	Administrative theories	4.02	0	0	0	48	1	.14
28	4	Survey and analysis of staff development problems and needs	4.02	0	1	1	43	4	.43
29	28	Management of meetings and seminars	4.02	0	1	1	43	4	.43
30	38	Methods of establishing and maintaining order, effective discipline moral education of staff	4.02	0	1	2	4:	5	.47
31	16	Organizational theory and development	4.00	0	0	1	47	:	.20
32	25	Techniques to stimulate and motivate staff to maximum performance	4.00	0	1	1	44	3	.40
33	26	Arrangement of learning environment and improving climate for working	4.00	1	0	0	45	3	.50
34	21	Administrative leadership	3.98	0	1	C	4-	:	.32
35	37	Group dynamics	3.98	0	1	2	43	3	.43
36	3	Educational research methods enabling school administrators to develop educational quality	3.96	0	1	3	42	3	.45
37	40	Administration of extra activities for staff personnel such as field trips and in-service education	3.96	0	2	1	43	3	.49
38	14	Staff evaluation: techniques for assessing staff performance	3.94	0	1	2	45	1	.37
39	7	Position classification: defining position and job quantity, determining roles	3.94	0	2	2	4:	3	.51
40	39	Management of the general welfare within school	3.94	0	2	2	42	3	.51
41	41	Psychology of adult learning	3.92	0	1	4	4:	2	.44
42	29	Orientation technique for new teachers	3.90	0	2	3	42	2	.51
43	15	Procedure for the recruitment and and selection of staff personnel	3.80	3	1	4	35	5	.88

APPENDIX F

NON-CONSENSUS RESPONSES OF QUESTIONNAIRE III

RANKING BY STANDARD DEVIATION AND FREQUENCY

NON-CONSENSUS RESPONSES OF QUESTIONNAIRE III
RANKING BY STANDARD DEVIATION AND FREQUENCY

Rank	Item No.	STATEMENTS	CONSENSUS RATING	SD	FREQUENCY OF NON-CONSENSUS RESPONSES	
					Higher	Lower
1	15	Procedure for the recruitment and selection of staff personnel	4	.88	5	8
2	1	School budgeting and financial management: how to prepare a school budget; procurement and management of funds in accordance with Ministry Education regulations	5	.72	0	12
3	33	Procedures for improving school-community relations	5	.68	0	6
4	24	Development and maintenance of good staff morale	5	.60	0	9
5	22	Power delegation: how to delegate authority and responsibility	5	.56	0	6
6	27	Conflict-resolution techniques	5	.52	0	10
7	7	Position classification: defining position and job quantity determining roles	4	.51	3	4
8	29	Orientation technique for new teachers	4	.51	2	5
9	39	Management of general welfare within the school	4	.51	3	4
10	26	Arrangement of learning environment and improving climate for working	4	.50	3	1
11	34	Developing human relationships	5	.50	0	4
12	40	Administration of extra activities for staff personnel such as field trips and in-service education	4	.49	3	3
13	35	Time management	4	.47	6	2
14	36	Supervision and follow-up within school	5	.47	0	6
15	38	Methods of establishing and maintaining order, effective discipline, moral education of staff	4	.47	5	3
16	3	Educational research methods enabling school administrators to develop educational quality	4	.45	3	4
17	23	Decision making	5	.45	0	5
18	30	Virtue and morality of administrators	4	.45	5	2
19	41	Psychology of adult learning	4	.44	2	5
20	4	Survey and analysis of staff development problems and needs	4	.43	4	2
21	28	Management of meetings and seminars	4	.43	4	2
22	37	Group dynamics	4	.43	3	3
23	2	Rules, regulations, acts and laws for school administrators	5	.42	0	7
24	43	Problem solving and analysis to improve student learning	4	.42	5	1

Rank	Item No.	STATEMENTS	CONSENSUS RATING	SD	FREQUENCY OF NON-CONSENSUS RESPONSES	
					Higher	Lower
25	25	Techniques to stimulate and motivate staff to maximum performance	4	.40	3	2
26	11	Training techniques and in-service planning for staff development to improve competence	4	.37	5	2
27	14	Staff evaluation: techniques for assessing staff performance	4	.37	1	3
2	10	Educational planning methods	4	.36	6	1
29	6	Personnel administration: how to plan personnel within school	4	.34	5	1
30	5	Information system and planning	5	.33	0	6
31	21	Administrative leadership	4	.32	1	1
32	8	Job analysis	4	.30	5	0
33	9	The art of putting the right person in the right job	5	.30	0	5
34	13	Primary school curriculum management	5	.30	0	5
35	17	Application of knowledge, technology, and innovation in managing school	4	.30	5	0
36	12	Academic administration (curriculum and instructional planning)	5	.27	0	4
37	32	Guidance and counseling knowledge	4	.27	4	0
38	18	Team development	5	.24	0	3
39	42	Communication development for coordination within school	4	.24	3	0
40	15	Organizational theory and development	4	.20	1	1
41	19	Staff quality-control techniques	4	.20	2	0
42	20	Stimulating and providing opportunities for professional growth of staff personnel	4	.14	1	0
43	31	Administrative theories	4	..14	1	0

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