

WORK-RELATED LEARNING EFFORTS OF SCHOOL PRINCIPALS:
AN EXPLORATORY STUDY

by

VERNON JAMES STOREY

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Department of Education

The University of British Columbia
2075 Wesbrook Place
Vancouver, Canada
V6T 1W5

Date July 15, 1978

ABSTRACT

The study was exploratory in nature, and had two major emphases. One thrust of the research was to describe the learning efforts of school principals. The other was to determine the existence and nature of relationships between learning efforts and several independent variables.

Learning efforts were described as having two major components: learning interests and learning activities. Two categories of learning interests, recent and priority, were examined. Recent interests were those relating to the previous and the then-current school year. Priority interests referred to the coming few months.

Three dimensions of a learning activity were studied: recent use, desired greater availability and preference. Respondents reported the frequency with which they had used various learning activities during the previous year. Further, they identified those activities which they probably would have used more frequently, given greater availability, and those which they would prefer to use in learning more about areas of priority interest. Learning activities were classified as formal, consultative and personal. Formal activities included workshops, conferences and similar activities. Consultative activities included various means of consultation with different categories of personnel. Personal activities were generally informal and carried out alone.

Three categories of independent variables were studied: school district, school and respondent characteristics. School district variables included urban/rural district group and individual school district. School variables studied were school location, school type and principal's relief

time. Respondents' experience and education were also examined.

The study surveyed principals in ten mid-sized British Columbia school districts. A contrasting sample design was used to obtain urban and rural districts. The data collection process utilized a questionnaire developed for this project, which was identified to respondents as the Principals' Professional Development Study. The overall response rate was 93.8 percent, and the study sample consisted of 212 principals. Generalization of the findings was limited to the population of principals in the ten districts studied.

The study found three areas to be the foci of most widespread interest: development and evaluation of the instructional program, provision of educational services to students with special needs, and supervision of the work of teachers.

Learning activities for which most frequent recent use was reported tended to be consultative in nature. Most formal activities tended to be less frequently used, but widely reported as preferred activities and as ones for which greater availability was desired.

Greatest evidence of relationships between learning efforts and independent variables occurred for the variables school district, school location, school type, relief time and experience as a principal. The first four of these might be called situational variables.

The findings of the study had theoretical, methodological and practical implications. At a theoretical level, consideration might be given to a re-conceptualization of independent variables to facilitate

further study of situational variables and experience as a principal. Further study might also involve a re-examination of the scheme for classifying learning activities and an exploration of the possibility of relationships between learning interests identified and learning activities preferred.

At a methodological level, an interview approach was suggested for further study of the importance of experience in principals' learning efforts. The case study technique might be used to study situational variables.

Recommendations at the level of practice were directed toward personnel and agencies involved in planning and delivering professional development programs for principals. The study found that local and regional activities, and those which would facilitate ongoing study of a topic, were important to principals. These activities might further facilitate such consultative activities as intervisitation, which was also seen as desirable and preferred. The need for further local research before utilization of the study's findings was also indicated.

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Chapter 1

OVERVIEW OF THE STUDY

INTRODUCTION

The professional development of teachers and administrators seems widely acknowledged among educational personnel to be an important activity. Many school districts have some individual, committee or department specifically designated to plan and coordinate in-service education programs. Provincial teacher bodies, university faculties of education and a variety of professional organizations appear to direct considerable effort toward the continuing education of their membership.

This emphasis is apparently not limited to the field of education. Nursing, medicine and business administration provide examples of vocational areas in which professional development activities seem to be the focus of attention. Goldhammer (1968:13) suggests that "every individual engaged in a professional career needs regular and continuing participation in various forms of in-service education."

This focus on professional development might particularly be expected in fields where new knowledge has resulted in frequent and perhaps rapid change in current thought and accepted practice. New techniques are developed, new information must be acquired, and upgrading or even re-training becomes necessary.

In some fields, changes in the social or political contexts within which individuals and organizations operate may have led to altered expectations and demands. In education, enrolment decline and fiscal

retrenchment may have certain implications for in-service education. Public interest in the perceived quality of teaching and administrative practice seems to be increasing. In addition, the disappearance of jobs will probably necessitate the retraining of some personnel, particularly classroom teachers (Schwartz, 1977:36-37).

In the case of the school principal, the lack of any clearly defined pre-service training requirements or programs probably contributes to a need for attention to be directed toward professional development activities. Principals are almost always selected from the ranks of successful experienced teachers. These criteria, however, seem to be among very few widely accepted qualifications. Although some advertised positions require graduate work in education administration, there appears to be a lack of any generally required academic preparation sequence, except perhaps for the extent to which preparation for teaching can be thought of as preparation for the principalship. Kelsy and Leullier report (1978:6) that in British Columbia, for example, "more than one-half of the school districts . . . have no printed policies or established procedures for the identification, selection or training of their administrators."

The development of knowledge, the problems of change and the lack of a clearly defined preparation sequence lend emphasis to the need to assist the school principal "to modify his behavior, to obtain the new knowledge which he needs, and to build new skills based upon contemporary technology" (Goldhammer, 1968:183). There appears to be, however, a relative absence of sequential, needs-based professional development opportunities for school principals attempting to

seek answers to puzzling and bothersome problems, to determine better ways of relating to clients and constituents, and to gain a more complete and comfortable grasp of the knowledge and technology. (Wagstaff and McCollough, 1962:3)

PURPOSE OF THE STUDY

In light of the foregoing discussion, it seems reasonable to suggest that on-the-job learning is an important aspect of the principal's work and a relevant topic of inquiry. An early step in such inquiry is to obtain reliable information about areas which are of interest and concern to principals and about the ways in which they attempt to learn more about their jobs.

The present study was an exploratory one which focussed on the learning efforts of principals in ten mid-sized school districts in British Columbia. There were three major dimensions to the research problem. One of these was to identify the work-related areas in which principals reported a desire for greater knowledge and skill. These areas are referred to in the study as learning interests.

A second major focus of the study was on determining the activities in which principals engaged, or wanted to engage, as they sought to learn more about job-related topics. These are referred to throughout the study as learning activities.

Learning interests and learning activities might be thought of as the components of a learning effort. It is important to recognize the possibility that relationships may exist between components of a learning effort and certain characteristics of the principal and his/her work setting. The third major dimension of this study was an exploration of

this possibility.

SIGNIFICANCE OF THE STUDY

There is a need for further information about the learning interests and activities of school principals. In particular, there is a need for reliable findings about the British Columbia scene. The present study contributes at a descriptive level by providing information based on data obtained from the principals in ten British Columbia school districts.

Information of practical value is also needed. The findings of this exploratory study may lead to further research in recommended areas. They may also facilitate local research and subsequent planning of professional development programs and activities.

Hills (1977:5) notes that "there are few occasions to 'go anywhere' in theory until one has some empirical regularities that require explanation." It would appear that, in the case of educational personnel and their professional development, the necessary preliminary work has yet to be completed. A recent study of the professional development needs of Canadian college administrators (Konrad, Long and Small, 1976:42) observes that "previous approaches have not yielded a body of generalizations or significant relationships between needs and administrator characteristics and job circumstances." This study makes what might be termed a pre-theoretical contribution to knowledge, by reporting on an investigation of possible relationships between principals' learning efforts and certain characteristics of the school, of the school district, and of the respondent. The development of knowledge in this area has implications for in-

the-field practice and for the eventual development of theory in the area of professional development.

ORGANIZATION OF THE THESIS

Chapter One has provided an introduction to the study and a general statement of the research problem. Chapter Two contains a review of some specific portions of the literature from three major areas: adult learning, education administration and professional development, or in-service education.

With regard to the literature on adult learning, the topic of adult learning projects, as conceptualized by Tough (1967) is examined. Within the broad area designated as education administration, there is a body of literature which deals with analysis of the principal's job. This material is reviewed in the second portion of Chapter Two. The third body of literature reviewed is that dealing with the professional development of educational personnel. Two major groups of personnel are discussed: teachers and principals.

The conceptual framework of the study is developed in Chapter Three. This chapter defines a learning effort and its two major components: learning interests and learning activities. Several groups of variables which were selected for study are discussed: school district characteristics, school characteristics and respondent characteristics. The conceptual framework was based primarily on the results of a literature review supported by the findings of a pilot study which was carried out after the review of the literature. The pilot study had two purposes. One of these was to aid in the development of the conceptual framework.

The findings related to this aspect are reported in Chapter Three. The other main purpose was to assist in developing the data collection instrument. This aspect, and the procedures used in the pilot study, are reported in Chapter Four.

Chapter Four deals with the research design and study procedures used in this investigation. The specific research questions and sub-questions are listed, and terms used in a specialized sense are operationally defined. The section on instrumentation reports the procedures used in the pilot study and in the development of the data collection instrument for use in the main study. Chapter Four also deals with the sampling plan and procedures used in the study, and describes the process of data collection. Data analysis procedures used in the study are delineated in this chapter, as well as the study's delimitations, assumptions and limitations.

Chapter Five describes the respondents in terms of their distribution within the total sample according to school district characteristics, school characteristics and respondent characteristics.

Chapters Six and Seven report the findings of the study. Chapter Six deals with the first four research questions, which relate to learning interests. The findings regarding learning activities are reviewed in Chapter Seven. The first section of each chapter presents the overall findings regarding learning interests (Chapter Six) or learning activities (Chapter Seven). The remaining three sections of each chapter deal in chronological order with the questions and sub-questions related to

school district, school and respondent characteristics.

Chapter Eight, the concluding chapter of the thesis, summarizes the findings, states the conclusions of the study and presents recommendations and considerations for action and for further research.

Chapter 2

REVIEW OF THE LITERATURE

INTRODUCTION

At a very general level, the professional development interests and activities of a school administrator might be thought of simply as the efforts of an adult to learn. In the context of this literature review, the term "adult" refers to one specific category of educational personnel, the school principal. "Efforts" applies to learning interests and activities which are directly related to the individual's work as a principal. The school principal who engages in work-related efforts to learn is one member of a group whose interests and activities may vary in a manner which is related to certain characteristics of the job or of the person.

With these considerations in mind, three distinct areas of the literature were reviewed. The first of these is discussed under the heading Adult Learning Projects. This section examines a particular body of research which has sought to identify some regularities associated with ways in which adults to about trying to learn.

An attempt to conduct inquiry into aspects of a particular job, in this case the school principalship, requires some useful conception of that job. The second major portion of this review, Tasks of the Principal, examines several attempts to conceptualize the principal's work.

The third section of the literature review is titled Professional Development of Educational Personnel. It examines previous research in this area, in an attempt to ascertain the current state of knowledge and to determine useful directions for research.

The chapter concludes with a summary of the findings reported in these three sections. This review of the literature provided material which was of value in conceptualizing the efforts of principals to learn. This conceptual framework is outlined in Chapter Four.

ADULT LEARNING PROJECTS

This section of the literature review examines the research on the adult's learning projects. The concept of a learning project, and a precise definition of the term, were developed by Tough (1967; 1968; 1971). Related research was carried out by McCatty (1975) and others whose work is reported by Tough (1971).

Tough (1971:13) defines a learning project as "a series of clearly related episodes" comprising a total of at least seven hours in a six-month period, during which "more than half of the person's intention is to gain and retain certain definite knowledge and skill" (1971:17). In a series of in-depth interview studies, Tough and other researchers examined the learning projects of adults from a wide variety of backgrounds, and found that an overwhelming majority of their respondents engaged in highly deliberate efforts to learn. McCatty, in a study of the learning projects of fifty-four professional men, discovered that each had participated in learning projects during the previous twelve months; the range was from

two to thirty-one projects, with an average of approximately eleven (1975:121).

Tough (1971:33-34) found that "a great many learning projects are related to the person's job or occupation." He suggests that these projects are necessary for entering an occupation, obtaining a promotion, maintaining and upgrading competence, keeping up with new knowledge and procedures, and dealing with immediate problems, cases or tasks. McCatty found that over fifty percent of learning projects were work-oriented and that they were frequently related to keeping current in the field or responding to specific problems (1975:122). This confirmed Tough's suggestion (1971:51) that

When a person's central concern is a task or decision, he will not be very interested in learning a complete body of subject matter. Instead, he will want just the knowledge and skill that will be useful to him in dealing with the particular responsibility of the moment.

Knowles (1967) cited by Tough (1971:38) comments that

adults engage in learning largely in response to pressures they feel from current life problems . . . they tend to centre any activity in a problem-centred (not subject-centred) frame of mind.

Pursuing these ideas, Tough (1971:49) notes that the need to gain certain knowledge and skill in order to perform a task or responsibility at a higher level was the strongest reason given, in the studies he cites, for undertaking a learning project.

McCatty (1975:124-125) found that three-quarters of the learning projects of professional men were learner-planned. Tough, citing his 1970 survey, reports a similar figure (sixty-eight percent). The learners in

McCatty's study, when embarking on a self-planned learning project, most frequently chose to learn by reading. The second most common method was discussion with one or more other individuals.

Tough has defined a learning project in highly specific terms. This seems a necessary step if data are to be gathered about the phenomenon. It seems doubtful, though, that a person would always be able to recall his/her learning practices in a way which would permit fractional values, such as "more than one-half of the person's intention" (Tough, 1971:17) to be accurately assigned.

One other drawback of Tough's definition of a learning project is associated with the requirement (1971:13) of a minimum of seven hours of attempted learning. This restriction might have ruled out the study of areas in which the individual had desired to learn but was unable to locate suitable resources, or for some other reason did not allocate sufficient time to allow the effort to be termed a learning project.

There do appear to be, however, some major contributions in Tough's work and in the studies which grow out of his investigations of the adult's learning projects. First, learning projects were precisely defined in terms which appear to have been readily understood by respondents. This is particularly useful when one considers the possibility that individuals may not be accustomed to thinking about some of their activities as efforts to learn.

Second, Tough's findings regarding the steps taken by adults seeking to learn are of interest. These steps are:

1. Deciding what detailed knowledge and skill to learn . . . the learner might try to detect specific errors in his current knowledge, or specific weaknesses in his current skill or style.

2. Deciding the specific activities, methods, resources or equipment for learning. (Tough, 1971:94-96)

A further value of Tough's work is that it constitutes an attempt to take a basic look at the ways in which adults learn. As such, it appears to be relatively unencumbered by predispositions about, for example, the effectiveness of various learning activities, or by the limitations of a special-purpose needs assessment. This factor, coupled with the in-depth interview approach, appears to have generated some reliable findings which have been substantiated by the research efforts of others.

TASKS OF THE PRINCIPAL

The research carried out by Tough (1967; 1968; 1971) and McCatty (1975) supports the idea that definite efforts to learn are very widespread among adults, and that a large proportion of these efforts are work-related.

Attempts to explore the learning interests and activities of a specific vocational group require that the researcher have some usable conception of the nature of the job being studied. Numerous schemes of description and classification have been applied to the work of the school principal, and four of these are reported below. They include: administrative skills, operational areas, managerial activities, and combined approaches which use elements from two or more other schemes.

Administrative Skills

Katz (1955) identified three basic requirements of an effective administrator: technical skills, which involve methods, processes, procedures or techniques; human skills; and conceptual skills, or the ability to see the whole enterprise and plan and act accordingly. Downey (1961:12) applied this scheme to education administration, and postulated four sets of skills:

1. technical-managerial: an efficient business manager.
2. human-managerial: an influential leader of people.
3. technical educational: a knowledgeable curriculum developer.
4. speculative-creative: a sensitive agent of organizational change and improvement.

Operational Areas

Numerous classifications of tasks and responsibilities according to operational areas of school administration have been developed over the past twenty or more years. Because of their prevalence, and the similarity of various lists of descriptors, it is difficult to establish the origin of this means of classification, but some examples are shown in Table I. Few of these writers indicate sources for the terms used, although some cite previous authors in the list. Newberry (1975:118) states that his categories were developed from "the free responses of the respondents" in his study.

These systems of classification deal with the substantive aspects of the principal's job, or the topics which might be the focus of learning efforts related to the acquisition of knowledge. They do not, however,

provide any indication of what the principal actually does in each operational area. This aspect is dealt with by the two categorization systems outlined below.

Managerial Activities

Administrative processes. Miklos (1968:3) outlines Gregg's scheme, developed in the late 1950's, describing Gregg's work as "eclectic; he includes components which have been included since the earliest analyses as well as those which have been included only recently." Gregg (1957), cited by Miklos (1968:3-5), lists the components of the administrative process as planning, decision-making, organizing, coordinating, communicating, influencing and and evaluating.

Managerial skills. Both Gregg's scheme and that developed by Mintzberg (1973 in his report of an intensive study of five senior managers, emphasize the actions performed by managerial or administrative personnel. This approach might allow the combination of these activities with operational areas for use in description, training and evaluation. Miklos (1968) used such a two-dimensional approach. This is discussed in greater detail in a subsequent section of this chapter which deals with studies of the professional development needs of school principals (Robertson, 1975; Pawliuk and Pickard, 1976).

Combined Approaches

Miklos (1968:6) combined Gregg's operational areas and components of the administrative process to develop a two-dimensional conception of the tasks of the principal, while Robertson (1975), as a means of describing a skill in more detail, assigned each of Gregg's operational areas to

Table I

Operational Areas of School Administration

Author		Operational Area				
Gregg (1957)	School program	Staff personnel	Pupil personnel	School management	Physical facilities	School- community relations
Griffiths (1962)	Improving the educational program	Selecting and developing personnel		Managing the school		Working with the community
Bargen (1963)	Improving the educational program	Selecting and developing personnel	Pupil personnel problems	Managing the school		Working with the community
Campbell et al (1966)	Curriculum and instruction	Staff personnel	Pupil personnel	Finance and business management	Physical facilities	School- community relationships
Hencley et al (1970)	Instruction and curriculum development	Staff personnel	Pupil personnel	Finance and business management	School plant and services	School- community relations
Lipham and Hoeh (1974)	Instructional program	Staff	Students	Financial- physical resources		Community
Newberry (1975)	Instructional leadership	Motivation of staff	Sound interpersonal relations	Efficient school administra- tion		Effective home-school community relations

one of the skills postulated by Downey. An unanswered question is whether operational areas such as curriculum development can be neatly assigned to an administrative skills category. It would appear that most, if not all of the administrative skills would be used in each of the categories.

Summary

At the outset, it should be noted that no one scheme described above is entirely appropriate for analysis of the work of the school principal. This is not to suggest that the schemes reviewed lack accuracy or relevance. In fact, many of them appear to have reasonable substantiation in the literature. They are, however, for the most part quite limited in scope and applicability.

Miklos' two-dimensional scheme of classification, which was also used by Robertson (1975), provides for two discrete dimensions of the principal's job: operational areas and administrative processes. This appears to be a potentially useful approach, in that it facilitates the generation of statements about what principals actually do.

PROFESSIONAL DEVELOPMENT OF EDUCATIONAL PERSONNEL

The first two major sections of this review of the literature have dealt with the conceptualization of adult learning, and with schemes for analyzing the work of school principals. The third major portion of the review examines previous research into the professional development of educational personnel.

This section of the review focusses on attempts to conceptualize principals' professional development interests and activities, on the specific findings of previous research, and on possible areas for further study. It is divided into two parts. The first of these deals with studies of the professional development needs of administrators. The second examines two studies of the professional development of teachers.

Professional Development Needs of Educational Administrators

Although an examination of the educational literature revealed a substantial body of information about in-service training and professional development, little of this material appeared to have been based on the results of research. Konrad, Long and Small (1976:42) suggest that there has been, at least in the field of higher education, "a general failure to develop research-based programs which meet the needs identified by administrators."

There are, however, a number of studies which contribute knowledge about topics related to professional development: areas of need, learning activities and variations among administrators on the basis of specified variables, such as education. These studies may be divided into three sub-categories: studies of combined groups of administrators, studies of administrators in higher education and studies of school principals.

Professional development needs of combined groups. One study which examined professional development needs of administrators from various types of educational institutions was an Ontario Council for Leadership in Educational Administration needs assessment (Musella and Joyce, 1975:12-15). The primary purpose of this study was "to identify professional development

need priorities as indicated by the members" (1975:15), who represented all areas and levels of education administration. The OCLEA study is examined first, as a general introduction to several other studies, each of which focussed on a specific category of educational personnel.

Musella and Joyce directed their data collection efforts toward obtaining "information concerning content areas of future workshops." Their findings are of interest, since forty-six percent of the respondents (446 of 992) were elementary and secondary principals, and because their report is one of very few which provide information based on data from Canadian sources. A difficulty in using these findings, though, is that no indication is given of relationships between position held and priorities identified. Without this information, it would seem to be a difficult task to plan activities for a particular group, or to advance hypotheses about relationships which may exist between variables such as position held, and learning interests and activities.

Musella and Joyce (1975:13-14) report that the five areas most frequently identified as important were: selection, supervision and evaluation of staff; curriculum development, implementation and evaluation; identification and solution of external relations problems; understanding of leadership, supervision and administration functions; and human relations. The authors suggest that staff selection, supervision and evaluation, and curriculum development are likely to continue to be important areas of need.

It is also of interest to note that the OCLEA study found (1975:13) that "the preferred length of time of workshops was two days, with one

and three days showing high preference. The two-week workshop received least preference." The purpose of the OCLEA study, which was to increase the effectiveness of workshop planning, may have restricted the scope of exploration of possible learning activities. However, the results do indicate one group's preference, within a single category of activity, for a particular learning activity format.

Because of its restricted purpose, the OCLEA study offers a narrower range of useful information than do some of the others examined. The authors note (1975:13) that before local in-service programs can be developed, it is necessary that "the needs of the organization and the individuals within it" be identified. These findings might be more generally useful if they could be used in identifying patterns of need and preferred learning activities which appear to be related to characteristics of the job or the individual. Such findings might provide some basis for the eventual development of theory in the area of professional development.

Professional development needs of higher education administrators.

Two of seven higher education research projects commissioned by the University Council for Educational Administration (Konrad, Long and Small, 1976; Sweitzer, 1976) are examined here. Sweitzer (1976:4) sought to identify "the most significant performance-related learning needs" of state college administrators, and to ascertain "key factors that should be taken into account when designing ways to address these learning needs." The emphasis in Sweitzer's study was clearly on the first aspect of the investigation.

Konrad, Long and Small (1976:43) stated an aim similar to the first purpose noted by Sweitzer; determination of the "most important professional development needs." In addition, they attempted to determine the existence and nature of any relationships between these needs and independent variables which specified "job circumstances, personal characteristics and professional background."

The study done by Konrad, Long and Small is of particular interest, for three reasons. First, the authors treated more extensively than did Sweitzer the question of relationships between needs and independent variables, which may also be applicable to school principals. Second, although the data were obtained from college administrators, the study dealt with a sample drawn from institutions in western Canada. This is of particular interest when the findings related to British Columbia are examined. The third reason for the usefulness of this study is the authors' clearly stated intention to develop a "research-based approach to professional development programs" (1976:41). This purpose may have contributed to the operational usefulness of the study's findings.

Sweitzer (1976:4) defined need as a "responsibility or an aspect of an assigned or assumed task felt by the administrator to be important . . . and which also tends to be a problem to the administrator." The definition of need developed by Konrad, Long and Small (1976:46) had three dimensions: importance, urgency and occurrence. These authors found that "the importance respondents attached to any need statement was strongly indicative of the measures of its urgency and occurrence." This suggests that although there may be some value in a multi-dimensional description of what constitutes a professional development need, particular-

ly to assist respondents in answering questions, there is perhaps limited value in further exploration of each dimension separately.

Each of these studies used a questionnaire which listed areas of possible need. Sweitzer does not indicate the means by which specific areas were selected or general categories developed. Konrad, Long and Small (1976:47) report a three-stage pilot study and data collection process, indicating that the needs reported by respondents in the first stage of data collection were used to develop a list for use in later stages.

Sweitzer sought to identify areas which were both important and difficult. He found that university training in higher education or in administration seldom affected the perceived level of difficulty of a task, or the respondent's interest in a particular learning activity. Sweitzer's study found the most widespread interest to be in short regional seminars (1976:30). However, he presented a closed list of fairly standard delivery means, which may have caused some activities to have been omitted from consideration. Konrad, Long and Small did not explore ways of meeting needs, although their two-dimensional conceptualization of types of learning activities does provide a basis for one potentially useful way of thinking about this aspect of professional development.

The respondent-generated list of needs used by Konrad, Long and Small appears to be fairly generally applicable to other groups of educational administrators. The authors found the most important needs to be evaluation of programs, program planning, evaluation of teaching and learning, motivation of staff and staff evaluation (1976:48). They also

found statistically significant relationships between needs and several independent variables, including province, previous position, years of administrative and teaching experience and level of education, and the absence of any such relationships involving years in previous position.

Konrad, Long and Small found that both "first-time" administrators and British Columbia administrators perceived their needs to be greater (more important, urgent and frequently-occurring) than did others. This finding, as it relates to beginning administrators, suggests the need for further exploration of the importance of length of administrative experience in the identification of work-related learning interests.

The second aspect of this finding suggests the need for further study of the professional development scene in British Columbia, to see whether there are in fact some identifiable regularities.

In summary, it should be pointed out that the findings of these studies of higher education administrators are based on data collected from target groups only. Sweitzer, in acknowledging the limitations imposed by this restriction, draws attention to the fact that there are at least "two ways of defining a need," and that "a second way is to compare (subjects') perceptions of need with those of other observers" (1976:15). Konrad, Long and Small also acknowledge this restriction, and suggest that "the most promising way to bring about a matching of administrator needs and in-service topics is through collaborative planning and programme implementation" (1976:57).

The findings of these two studies of need provide a partial basis for research-based planning. They are particularly useful in terms of their descriptions of research methods used, and of some potentially important study variables.

Professional development needs of school principals. Little research appears to have been done on the nature of principals' perceived needs for greater work-related knowledge and skill. Two recent Alberta studies were located (Robertson, 1975; Pawliuk and Pickard, 1976). In addition, principals' views were reflected to a certain extent in the previously cited study carried out by Musella and Joyce (1975).

Robertson (1975) sought to identify principals' perceptions of their present and needed levels of skill in specified areas, and the degree of importance which they attached to skill development in these areas. Further, he attempted to relate these findings to certain characteristics of the respondents (1975:3). Pawliuk and Pickard, in a later study of the same population, also sought to identify the areas in which principals felt they needed greater knowledge and skill. Their study also gathered data about certain characteristics of principals. It extended Robertson's work by examining preferred means of delivery, or learning activities, and the structures seen as desirable for organizing and administering in-service programs. Pawliuk and Pickard also attempted to identify variations in policy and practice among school jurisdictions, although no significant differences were found.

Robertson (1975:7) identified an administrative skill as the "ability to perform the components of the administrative process" which

had previously been identified by Gregg (1957). Need was seen by Robertson as a function of the gap between actual and optimum skill level and the priority attached to skill development in a given area.

Pawliuk and Pickard (1976:7-8) developed a modified version of the three-dimensional conception of need outlined by Konrad, Long and Small, substituting "willingness to participate" for "occurrence." The rationale for this change was not stated in the report of the study. Despite this change, the authors found that "importance is indicative of the measures of urgency and willingness to participate" (1976:35). This finding matches closely a previously cited finding by Robertson, and supports the suggestion that further examination of the separate components of need may be of limited usefulness.

The studies done by Robertson and by Pawliuk and Pickard offer somewhat more complete descriptions of the item generation process than do either of the higher education studies (Konrad, Long and Small, 1976; Sweitzer, 1976). Robertson drew on the work of Miklos for a two-dimensional model showing administrative processes and the operational areas of school administration. Pawliuk and Pickard (1976:11) developed a framework which included as a third dimension the managerial skills identified by Mintzberg (1973).

Robertson's two dimensions are discrete, in that one represents operational areas and the other administrative processes. The rationale for the introduction by Pawliuk and Pickard of Mintzberg's managerial skills as a third dimension is more difficult to ascertain. Although the authors suggest (1976:10) that "the paradigm can serve as a guide in

the generation and selection of needs," managerial skills and administrative processes do not appear to be mutually exclusive. It would appear to be an extremely difficult task to develop a discrete item for each of the 336 cells created by this model.

Robertson found (1975:92) that principals "tend to consider the skills involved in school administration in terms of operational areas rather than the components of the administrative process which may be involved." Further, he found (1975:59-60) that the operational areas which were assigned generally higher priority were staff personnel, school management and pupil personnel, and that evaluation was the administrative process allocated highest priority. Pawliuk and Pickard (1976:30) listed evaluation of the teaching-learning process, evaluation of instructional programs, school program planning, staff evaluation and curriculum development as the most important items, pointing out that "a synthesis of these items would indicate that the principals' professional development needs centre around effective evaluation and curriculum development." The similarity of these findings to those of other studies reviewed suggests the existence of widespread perceived needs in the areas of personnel evaluation and development and evaluation of the instructional program.

Findings reported by Pawliuk and Pickard (1976:36) support those of Sweitzer (1976:30) and Musella and Joyce (1975:13) that the short, intensive workshop was a highly preferred learning activity. This may be at least partly related to the principal's work setting, load and schedule. Pawliuk and Pickard also found reading and short courses to be highly desirable, but of these three activities, only reading was seen by principals as being readily available.

Some findings should be noted regarding variables which are descriptive of respondents. Robertson (1975:79) stated that "urban principals perceive that in general they have a higher level of skill than their rural counterparts." This may be attributable to such factors as the rural principal's isolation from consultative opportunities, or perhaps his/her education or experience. Although Robertson collected data about experience, he did not report any analysis of these data. He rather assumed (1975:83) that age implied the length of teaching and administrative experience. Further analysis of the available data might have helped to establish whether or not the "ruralness" of the school was actually associated with this finding, and if so, to what extent.

Robertson (1975:96) found that post-graduate education may be associated with higher perceived levels of skill. Pawliuk and Pickard, however (1976:36,40,42), found that education was not significantly related to either perceived need or preferred learning activity. It is difficult to make a precise statement about the importance of education or experience on the basis of the information obtained from these studies, and further examination of these variables may be warranted.

The approximately fifty percent return rate reported for these studies seems relatively low, in view of the fact that the focus was professional development. There may have been important differences between respondents, as acknowledged by Robertson, who notes that "persons who are willing to respond in a questionnaire study may have perceptions which differ from those who did not reply" (1975:9).

As was the case with the studies of administrators in higher education, each of these two projects involved a study of the perceptions of a group which was to be the focus of professional development efforts. As such, they provide information about needs from one perspective, that of the target group. However, assuming that the respondent's need, as perceived by himself/herself, is both a legitimate and an important consideration in planning, it would seem important to gain as complete a picture as possible. Greater provision for respondent input of additional interests and desirable learning activities might have been useful. It may be, for example, that in addition to the standard delivery formats specified by Pawliuk and Pickard, there are other, perhaps less formal approaches to professional development which are widely utilized and which are seen by principals as helpful.

Probably the most important findings of these studies are those having to do with the identification of areas of need. The similarity of results in the studies reviewed has definite implications for professional development planning, particularly if further study confirms these findings.

It also seems important to attempt to establish more clearly the importance of certain variables related to the job and to the individual in that job. It may be that interests vary significantly among principals classified on the basis of such variables. It may also be the case that professional development activities should be more diversified, particularly if preference for certain activities is related to such factors as experience or school location.

Professional Development of Teachers

The studies in this section differ in two important respects from the material examined previously: first, the data were gathered from classroom teachers rather than from school administrators, and second, the studies were based on reported actual behavior rather than on perceived need.

The relevance of these studies derives primarily from the fact that principals, almost without exception, have had experience as classroom teachers. It seems plausible to suggest that patterns of behavior practiced as a teacher may, particularly if the outcomes were perceived by the teacher as positive, continue to be practiced when that individual becomes a principal.

Haughey (1976) studied consultative practices in elementary schools. She found that most of the teachers sampled sought consultative help, and that actual proportions ranged from 11.3 percent to 85.0 percent of the total sample, depending on the task area surveyed (1976:49). Furthermore, although Haughey found that teachers were generally satisfied with the consultative assistance they received, "dissatisfaction . . . increased with years of post-secondary education and years of teaching experience" (1976:188).

Haughey also found that "teachers consider colleagues to be a major source of consultative assistance" (1976:191), and that "principals were consulted in almost all task areas, and especially those in curriculum, and special students' needs" (1976:192).

Although Haughey's research was limited to eighty classroom teachers in a three-school sample, her findings may permit speculation about certain aspects of professional development. It may be, for example, that successful consultative experiences with colleague teachers and with principals will increase the likelihood of continued use of peer consultation. Dill, Crowston and Elton, for example (1971:170), found that in a sample of seventy managers "choices of approach tended to rest on a man's ability, his personal preference, and his experience with different methods in the past." This aspect of on-the-job training has seldom been included in studies of utilized or preferred learning activities.

Haughey's findings are of further interest when it is noted that curriculum and program, and some pupil personnel topics, were identified as important subjects for teacher-principal consultation. Similar topics were reported as important professional development needs in the previously reviewed studies of school administrators.

It would appear that experience and education may have some relationship with consultative practices. If this is the case, it is possible that lessening satisfaction with consultation, and perhaps a resulting shift to other means of learning, might be part of an identifiable sequence of professional growth. Kass and Wheeler (1975:19) postulate

A three phase developmental sequence of teacher professional concerns...such a view of professional development is based on the premise that subdivision into empirically established stages serves as a useful basis for identifying procedures which will promote the developmental process in both pre-service and in-service teachers.

These phases are identified (1975:4) as

Stage I - concern over self (teacher-centred period)

State II - concern over instructional matters (content structure period)

Stage III - concern over individual learning problems (student-centred period)

The Stage I concerns of teachers involve

assessment of the teacher's adequacy by himself, his students, his colleagues and others...the ability...to "survive" in the classroom ...the establishment of working relationships with school personnel and...gaining acceptance as a professional within the social organization of the school. (1975:4-5)

In Stage II,

the emphasis is clearly on teaching and teaching efficiently. However, there is a willingness to experiment, to try various instructional approaches, and to be less text-oriented than in the initial stage....Stage II teachers tend to view further education as primarily a means of increasing proficiency. (1975:6)

While Stage I is seen by Kass and Wheeler as primarily a first-year phase, Stage II "likely lasts for several years, and may persist for the remainder of the teacher's career" (1975:6).

In Stage III, which applies to the experienced teacher,

concerns clearly centre on the student, with conscious effort ...to understand individual student capabilities, to assess individual performance, and to separate his contributions to the student's successes and failures from those of the student. (1975:6)

Kass and Wheeler acknowledge that these stages may not be entirely discrete, and that growth levels and transition times may vary among individuals. They suggest that there may also be a fourth phase of development, during which

teacher concerns shift from his classes and his students to a wider view of the educational enterprise both in terms of the curriculum in his field and a search for interrelationships among the various facets of the school experience. (1975:18)

The study carried out by Kass and Wheeler has been quoted at some length. Although it was based on relatively small samples, and the topic invites further study, it does represent an attempt to develop an empirically based conceptual scheme for description, analysis and planning in the area of professional development. It has been noted previously in this literature review that experience may be an important variable in the study of professional development concerns and activities. The need for further study of such variables as teaching and administrative experience seems clearly indicated. Findings in this area might strengthen considerably the empirical basis of knowledge about professional development interests and activities.

SUMMARY

Three areas of the literature have been reviewed: adult learning projects, tasks of the principal and professional development of educational personnel.

The work of Tough (1976; 1968; 1971), McCatty (1975) and others cited by Tough (1971) has made important contributions to knowledge about adult learning. Three major findings from this body of research seem particularly relevant to the study of professional development of educational personnel.

The first of these findings is that efforts to learn appear to be widespread among adults. Tough's precise definition for respondents of

the term "learning project" probably assisted the researchers in obtaining the data which led to this finding.

Another finding of particular interest is that a large proportion of adults' efforts to learn are directed toward work-related topics. It would appear that the effort to gain increased knowledge and skill which can be directly applied to the work situation is an important activity of many adults.

A third finding of importance points out the need for a broader conception of what constitutes a learning activity. Most studies seem to have examined only the traditional and standard in-service education delivery formats, such as workshops and short courses. McCatty found, however, that a sample of professional men, when engaging in self-planned learning, preferred reading, discussion and trial-and-error doing as ways of learning. A view of learning activities is needed which will be more inclusive of non-standard ways of learning. This may contribute, at the operational level, to an approach to planning which avoids the problems noted by Davis (1976:3):

With the exception of their topics, most in-service programs fall into a handful of distinct categories -- workshops, seminars or conferences -- and exhibit few differences in procedure. This observation seemingly supports the notion that all individuals have the same preferred style of learning and that this style is known -- a notion unsupported by research.

As noted above, the research on adult learning suggests that many efforts to learn are work-related. Before any attempt is made to apply this finding to a specific type of work, some concept of the nature of that work is necessary. A review of the literature dealing with the

analysis of the principal's job, and of some studies which utilized this literature, revealed numerous classification systems. It would seem that a multi-dimensional scheme, which would allow description of both the substance and the processes of the principal's work, would be more useful than a single set of descriptors. Of the systems examined, Miklos' two-dimensional scheme, which combines administrative processes and operational areas, seemed to be potentially the most useful in determining work-related learning interests.

The third area reviewed, professional development needs, offers some potentially useful findings regarding the learning efforts of several categories of educational personnel, and specifically of school principals. With regard to administrators, three sets of findings bear review: areas of interest, learning activities and the importance of situation-related and respondent-related variables.

Clearly, administrators have perceived important professional development needs in the areas of educational program, staff personnel and pupil personnel. Within these areas, many of their concerns have been related to planning, communication and evaluation.

The area of principals' learning activities requires further study. There are scattered findings in the administrators' professional studies which suggest a preference on the part of principals for some of the traditional delivery means. However, both the adult learning projects literature and the studies of teachers' professional development suggest widespread use of, and perhaps some preference for, such non-standard activities as trial-and-error and informal consultation.

The professional development studies also suggest that certain characteristics of the principal and of the job may be related to learning interests and the selection of learning activities. The findings, however, are neither conclusive nor consistent. Several variables would appear to warrant further study: principal's education, length of teaching and administrative experience, and school type and location.

From the point of view of research design, it appears that the research into administrators' professional development has focussed primarily on respondents' own direct perceptions of need. Attempts to gather data have generally used closed questionnaires. A productive shift of emphasis might be to investigate reported actual learning behavior, rather than stated need, and to attempt to capture as much relevant data as possible. This might be done by providing for a greater degree of respondent input to questionnaire returns, perhaps by allowing for additional items to be contributed, or by using an interview approach to data collection.

There is also a need for information about the British Columbia scene. There is a lack of research literature based on data obtained from principals in this province, and there is some evidence in the literature (Konrad, Long and Small, 1976) to suggest that the in-service education picture in this province may be quite different from that found elsewhere. As noted previously, Kelsey and Leullier (1978:6) point out that less than half of the school districts in British Columbia have any formalized policies or procedures for the identification, selection and training of principals.

Findings related to this province may have substantial descriptive value, and may also aid in developing a viable base for professional development planning.

The findings of the study carried out by Kass and Wheeler represent a potentially valuable contribution, given further development and substantiation, to the eventual development of theory in the area of professional development. There appear to be at least two important questions which warrant further research. The first relates to whether further evidence can be found to support the concept of a concern-based developmental sequence of teacher professional growth. The second and perhaps more important question concerns the extent to which the idea of such a sequence is generalizable to other groups, particularly school principals.

The research literature in the area of principals' professional development is not extensive. Several studies might be considered contributory and related, but there is no substantial research base to offer either tested conceptions of principals' characteristics as learners or specific findings related to their learning interests and activities. Both of these aspects are fundamental to the effort to develop a view of work-related learning on which further research, planning and the eventual development of theory might be based.

The literature reviewed in this chapter was used as the major basis for the development of the conceptual framework for the present study. This framework is outlined in Chapter Three.

Chapter 3

CONCEPTUAL FRAMEWORK

INTRODUCTION

The major purpose of this chapter is to present the conceptual framework on which the present study was based. This framework was developed primarily from the review of the literature, supported by a pilot study, the results of which are also outlined in this chapter.

Two points about the principal's job were noted in Chapter One. First, with the exception of one's experience as a teacher, there is no generally required sequence of preparation for the position of school principal. Second, major changes in the socio-political context of education, such as general retrenchment and associated problems, may have important implications for the principal. These factors may be contributory to what appears to be a growing interest in work-related learning.

Learning is considered in the present study to be the process of gaining work-related knowledge and skill. The learning efforts of principals are described in this chapter as having two major components: learning interests and learning activities. Variations in these components may be related to certain characteristics of the school district, the school or the principal.

Prior to using the conceptual framework as the basis for the present study, the concepts developed from the review of the literature were tested and extended through the use of a pilot study. This pilot study was also used in the development of a data collection instrument for the

main study.

PILOT STUDY FINDINGS

The procedures followed in the pilot study, which consisted of interviews with principals, are reported in Chapter Four. Several of the outcomes of this pilot study bore directly on the attempt to develop a useful conceptualization of principals' learning efforts. These included information about the prevalence of learning efforts, about the specific interests and activities identified, and about the ways in which principals tended to express their interests. There also appeared to be some differences among principals with varying amounts of experience.

Principals were interviewed using the schedules tabled in Appendix A. Responses indicated that each interviewer had, during the previous few months, directed effort toward some identifiable interests or concerns, and that each had in mind some priorities for learning in the near future.

The learning interests reported by pilot study participants reflected, in a general way, some of the findings of earlier professional development studies. Considerable interest was expressed in topics related to the development and evaluation of instructional programs and the supervision of teachers. The participants generally described their learning interests in terms of the operational areas of school administration, a finding which is consistent with that reported by Robertson (1975:92). The specific interests which were identified by pilot study participants are listed in Appendix A, Table LX.

The principals who were involved in this phase of the research appeared to view various types of consultation, particularly consultation with peers, as valuable learning activities. They reported having applied such criteria as perceived expertise and personal regard to a potential consultant before any discussion took place. It was also of interest to note that some principals appeared not to have previously considered some of their consultative efforts to be learning activities.

Experience appeared to bear some relationship to consultative practices. The pilot study sample was small (seventeen respondents). However, it appeared that the relatively inexperienced principals in the group tended to consult very frequently with a wider range of persons than did their more experienced colleagues. More experienced principals seemed to have a small group of consultants, reportedly selected on the basis of such criteria as trustworthiness, friendship and perceived expertise in the area of interest. Highly experienced principals seemed to prefer other ways of learning, unless the consultant was perceived to be an expert in the field of inquiry. Haughey's finding that teachers' satisfaction with consultative assistance tended to decrease with experience is of interest when these pilot study results are considered.

The pilot study appeared to support some of the findings reported in the review of the literature. It also aided in the development of the conceptual framework on which the present study was based.

THE NATURE OF LEARNING EFFORTS

Previously cited research reports indicated that a large proportion of adults engage in highly deliberate efforts to learn, and that their attempts to gain knowledge and skill for on-the-job use constitute a major segment of these efforts (Tough, 1967, 1971; McCatty, 1975).

A learning effort, for purposes of the present study, consists of two phases: the process of identifying an area in which learning is to take place, and the selection and attempted utilization of appropriate learning activities.

The first phase, identification of interests, consists of knowing which work-related areas will be the focus of efforts to gain work-related knowledge and skill. Depending upon the individual and the situation, this interest in learning may initially be expressed as a problem, a need, a requirement, an interest or a desire. The critical criterion is that the individual wants to learn.

In the learning activity phase, the learner attempts to identify, select and utilize appropriate ways of learning more about a certain topic, or of gaining skill. Some emphasis should be placed on the word "attempt." An unsuccessful or partly successful learning effort is, for purposes of this study, as important as a successful attempt, since the focus of the intended learning and, in some instances, the preferred ways of learning, are identified. In addition, an unsuccessful learning effort may provide useful information about preferred ways of learning and about the perceived suitability of available learning resources.

The essential elements of a learning effort are depicted in Figure I. It should be noted that although the left-right progression indicated by the solid arrows is probably a logical sequence which is frequently followed, the order may be different for some learning efforts (broken arrows). For example, the learner may discover that an article located by chance and read because of general interest is actually relevant to a previously identified learning interest. In another instance, such an article may have the effect of arousing a new interest, as a result of which the learner may decide to seek further knowledge and skill.

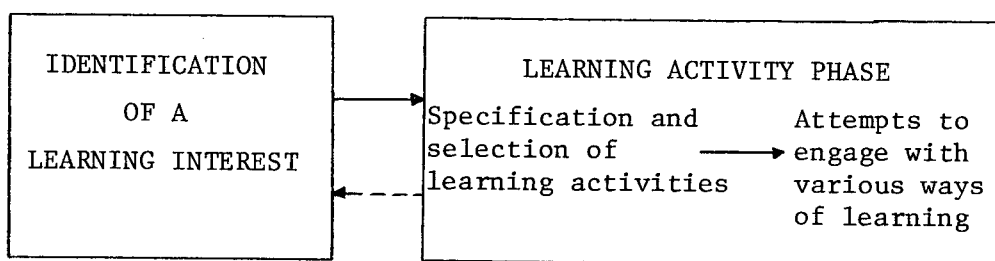


Figure 1

Basic Components of a Learning Effort

Regardless of sequence, the critical elements of a learning effort remain: the identification of an interest, or a focus for learning, and specification and attempted utilization of learning activities. Principals who participated in the pilot study, for example, were almost always able to state what they had done, had tried to do, or had wanted to do, in their efforts to learn more about some aspect of their work.

Learning Interests

A modification of Miklos' two-dimensional framework for describing the work of the principal was used to identify areas of focus for learning

Table II
Operational Areas and Administrative Processes

Components of the Administrative Process	Operational Areas of School Administration
Planning	Educational Program
Decision-making	Pupil Personnel
Organizing	Staff Personnel
Coordinating	External Relations
Communicating	General Management
Influencing	
Evaluation	

efforts (Table II).

Two modifications were made to Miklos' scheme. For purposes of clarity and ease of organization, the terms "school program" and "community relations" were changed to "educational program" and "external relations." The two terms "physical facilities" and "management" were combined into "general management" to make the categories more applicable to the work of the principal.

Learning Activities

The need for a broader conception of what constitutes a learning activity has been noted. To this end, the activities listed by Musella and Joyce (1975), Pawliuk and Pickard (1976) and Robertson (1975) were examined, as were the statements obtained from pilot study respondents.

Learning activities appeared to be of several types (Appendix A, Table LXI). In some cases, the activity was typically planned by someone other than the learner, although the learner may have had some influence on the plans. This category included such standard in-service delivery formats as workshops and annual conventions, which might be termed formal activities.

In other cases, the learner talked with someone else about a learning interest, usually on an informal basis. This type of activity was generally learner-planned, although it may have taken place in the context of a formal activity. For example, the principal may have used his/her attendance at a regional conference as an opportunity to discuss a concern with a group of colleagues. This category might be termed consultative activities.

A third category of learning activities might be termed personal in nature. In these instances, the principal worked alone on some activity, such as reading, for the purpose of gaining work-related knowledge and skill. In most cases, principals reported having engaged in more than one activity, and often in more than one category of activity, in their efforts to learn.

SCHOOL DISTRICT, SCHOOL AND RESPONDENT CHARACTERISTICS

The literature on the professional development of teachers and principals does not yet offer a large body of reliable findings about the importance of independent variables in relation to learning efforts. There is, however, sufficient information in the literature to suggest that investigation of certain characteristics of the school district, the school

and the principal may yield some useful findings and may also suggest some directions for further research.

It has long been held by teachers and principals, although there appear to be few supporting data in the literature, that major differences exist between urban and rural schools and school districts, and that professional development opportunities in more remote districts are much more limited than in those with easy access to large urban centres and university facilities. These assertions, if valid, have important implications for professional development funding and planning. A distinction was made in the present study between urban and rural groups of districts on the basis of criteria outlined in Chapter Four. This distinction reflected an effort to determine whether there were observable differences between these two types of districts. It also seemed plausible to suggest that findings might vary among individual school districts, possibly indicating the presence and importance of other, perhaps unidentified variables.

The previously cited finding (Robertson, 1975) of differences between principals who identified their schools as rural and the principals of urban schools left open the question of whether or not these differences could be attributed to the ruralness of the school. Rural schools are typically small, and such factors as amount of relief time available, school type or a view of oneself as primarily a classroom teacher may have affected this finding. It seems reasonable to suggest further examination of school location in terms of availability of consultative opportunities and school type in terms of grades enrolled. The amount of time allocated for administrative and supervisory responsibilities might be a useful measure of school size.

The research findings with regard to relationships between principals' learning efforts and their experience and education are inconclusive at this point. As noted earlier, the results of the present pilot study indicated varying patterns of consultative interaction which may have been related to experience. The preliminary findings by Haughey (1976) and by Kass and Wheeler (1975) about teacher professional growth also raise the question of whether the characteristics of principals' learning efforts vary on the basis of experience. If this were found to be the case, the need for investigation into the possibility of an identifiable developmental sequence of principals' professional growth would be indicated. The existence of such a sequence could have important implications for the development of theory.

For purposes of the present study, distinctions were made between principals who had graduate level education and those who did not. The principals with graduate education were further divided into two groups: those whose academic background was in education administration and those from some other field of study. This distinction was seen as potentially helpful in determining the existence of any relationships between education and the major components of learning efforts. Findings in this area would be of particular interest, in view of the increasing frequency with which a master's degree, or work towards one, is being stipulated as a job requirement for principals.

SUMMARY

The conceptual basis for the present study is depicted in the model shown in Figure 2. Intrusion of the boxes labelled school district charac-

teristics, school characteristics and respondent characteristics into the rectangle which depicts a learning effort indicates that these variables may be related to learning efforts. Differences in these variables may be related to variations in one or both of the major components of a learning effort.

The present study sought information about the learning interests and learning activities which were reported by the overall group of respondents. In addition to obtaining this descriptive information, a major emphasis of the study was on determining the existence and nature of any relationships between items specified and the independent variables studied.

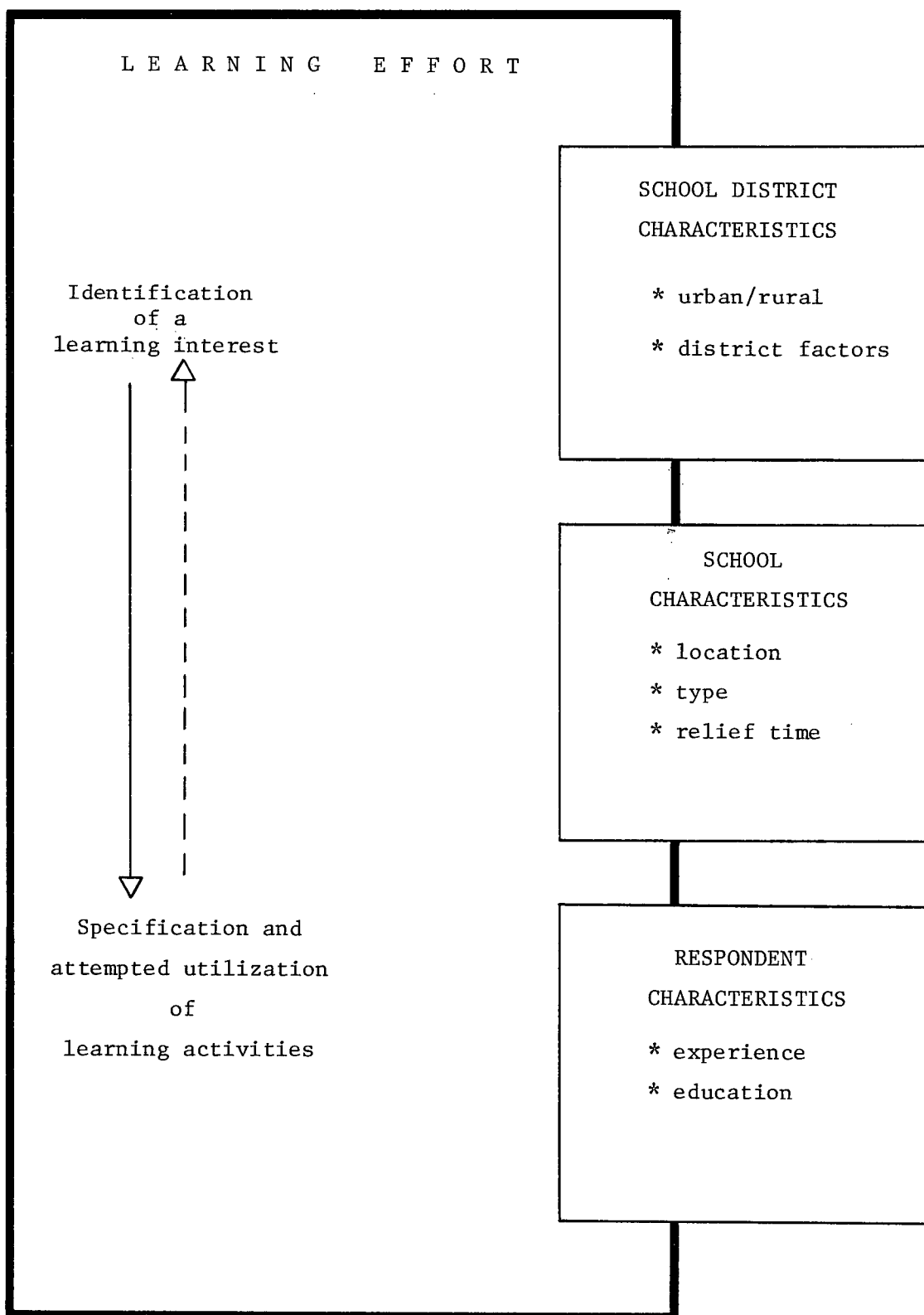


Figure 2

Learning Efforts of School Principals

Chapter 4

RESEARCH DESIGN AND STUDY PROCEDURES

INTRODUCTION

The present study may be categorized as descriptive field research (Helmstadter, 1970:28) of an exploratory nature. In contrasting descriptive research with an experimental approach in which there is a small number of controllable variables, Blalock (1970:35) raises the following question:

But what if there appear to be a much larger number of potential variables of interest, with little previous knowledge or theory that would tell one where to begin? In these kinds of situations, . . . a much more flexible and exploratory approach will be needed.

The review of the literature indicated that there was not a great deal of reliable knowledge about the learning efforts of school principals, or about variables which may be of importance in the study of these learning efforts. Findings were limited to some fairly general patterns, and there was no information available about the learning efforts of British Columbia principals. Moreover, a new conception of learning efforts was developed for the present study, and its usefulness required assessment.

The situation-related and respondent-related variables selected for study appeared to have some substantiation in the literature as being potentially important. However, the lack of any firm base of knowledge indicated the need for an exploratory study. The present study attempted to gather data which would permit the reporting of descriptive findings about the occurrence of learning interests and activities. The statistical

hypotheses tested sought to determine the existence of any relationships between learning efforts and the independent variables studied.

This chapter lists the specific research questions and sub-questions formulated for the study, and offers operational definitions of terms which are used in a specialized sense in the study. Five major sections follow the research questions: operational definitions of terms, a description of the instrumentation process, a discussion of sampling, a description of the data collection process and details of the analysis of data. The chapter concludes with a statement of delimitations, assumptions and limitations.

RESEARCH QUESTIONS

The present study sought to identify the work-related learning interests and activities of principals in ten British Columbia school districts. The study also attempted to determine whether there were any statistically significant variations in response patterns among groups of principals classified on the basis of characteristics of the school district, the school or the respondent.

The eight research questions below are in two parallel groups. The first group of four questions examines learning interests, and the second group deals with learning activities. Questions 1 and 5 examine the overall findings, and Questions 2 and 6 deal with the returns by school district characteristics. Questions 3 and 7 consider school characteristics, and Questions 4 and 8 focus on respondent characteristics. The research questions are related to the conceptual framework as shown in Figure 3.

Question 1

What work-related learning interests are reported by principals?

Question 2

What learning interests are reported by principals grouped according to school district characteristics?

Sub-question 2.1. Do reported learning interests vary between groups of principals classified by district group?

Sub-question 2.2. Do reported learning interests vary among groups of principals classified by school district?

Question 3

What learning interests are reported by principals grouped according to school characteristics?

Sub-question 3.1. Do reported learning interests vary among groups of principals classified by school location?

Sub-question 3.2. Do reported learning interests vary among groups of principals classified by school type?

Sub-question 3.3. Do reported learning interests vary among groups of principals classified by the amount of relief time allocated to them?

Question 4

What learning interests are reported by principals grouped according to respondent characteristics?

Sub-question 4.1. Do reported learning interests vary among groups of principals classified by years of experience?

Sub-question 4.2. Do reported learning interests vary among groups of principals classified by level of formal education?

Question 5

What learning activities are reported by principals as being used or preferred for use in their work-related learning efforts?

Question 6

What learning activities are reported by principals grouped according to school district characteristics?

Sub-question 6.1. Do reported learning activities vary between groups of principals classified by district group?

Sub-question 6.2. Do reported learning activities vary among groups of principals classified by school district?

Question 7

What learning activities are reported by principals grouped according to school characteristics?

Sub-question 7.1. Do reported learning activities vary among groups of principals classified by school location?

Sub-question 7.2. Do reported learning activities vary among groups of principals classified by school type?

Sub-question 7.3. Do reported learning activities vary among groups of principals classified by the amount of relief time allocated to them?

Question 8

What learning activities are reported by principals grouped according to respondent characteristics?

Sub-question 8.1. Do reported learning activities vary among groups of principals classified by years of experience?

Sub-question 8.2. Do reported learning activities vary among groups of principals classified by level of formal education?

OPERATIONAL DEFINITIONS OF TERMS

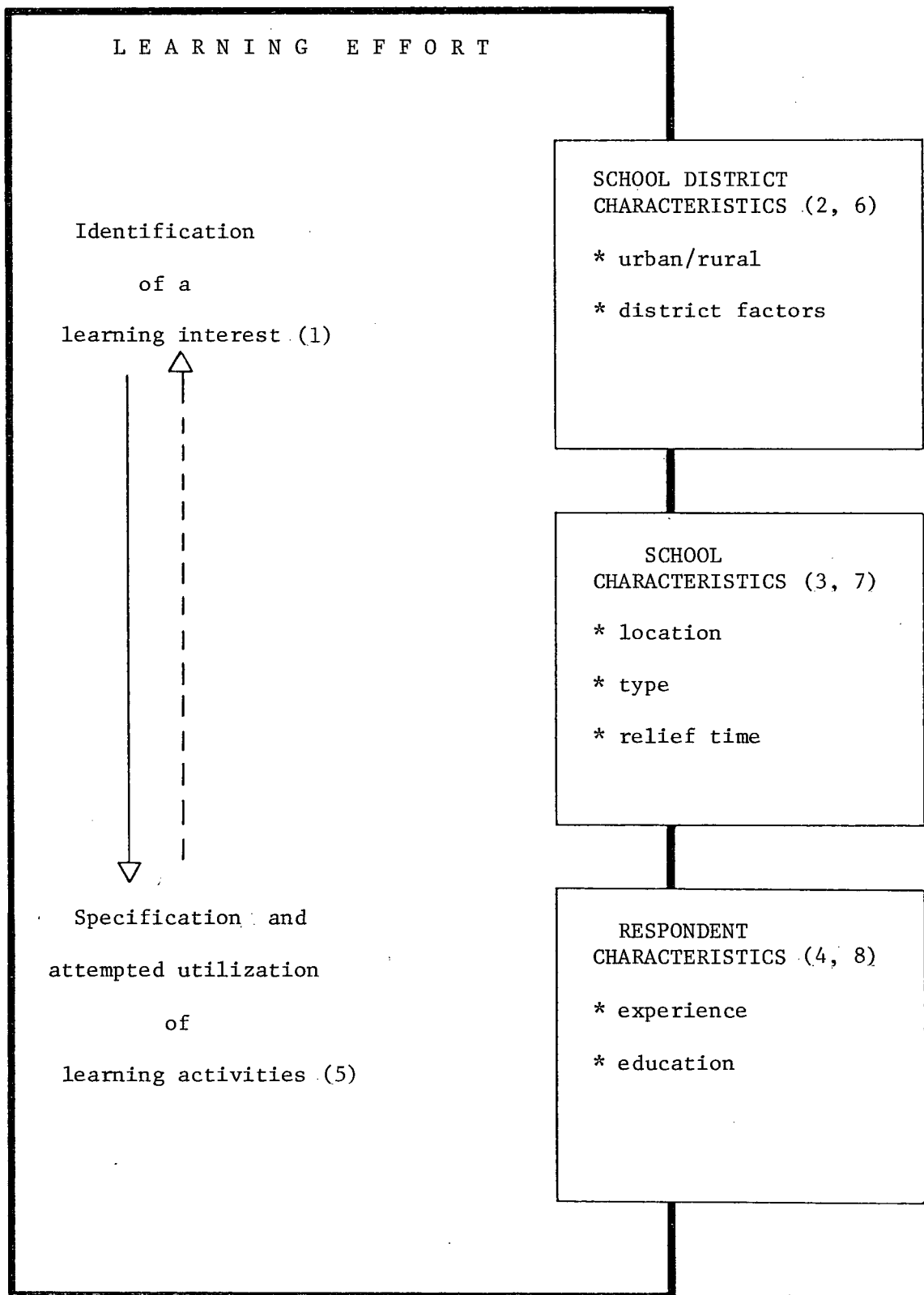
Terms used in a specialized sense in the research questions are defined as follows:

Principal

An elementary or secondary teacher who is assigned as a principal and who is released from twenty percent or more of a fulltime teaching load to carry out administrative and supervisory responsibilities.

District Group

A number of school districts which are designated as either urban or rural on the basis of pupil population and proximity to a large metropolitan area with a university. The specific criteria for group designation are discussed in the section of this chapter which deals with sampling procedures. (Pages 59-64).



N.B. Numbers in this figure refer to research questions.

Figure 3

Research Questions Related to Learning Efforts

School Location

An ordinal measure of the availability of consultative opportunities, based on the number of other schools of all types in that school district which can be contacted through a local telephone call from the respondent's school.

School Type

Classification of a school according to grades enrolled:

Elementary. Kindergarten through grade seven, or any grade or grades within that range.

Secondary. Grade eight through grade twelve, or any grade or grades within that range.

Elementary-secondary. Any combination of grades which includes at least one from each of the elementary and secondary categories.

Relief Time

The percentage of time during regular school hours during which the principal is released from teaching duties to carry out administrative and supervisory responsibilities.

Experience

The number of school years for which the respondent occupied a specified teaching or administrative position.

Education

The university degree most recently completed or in progress.

INSTRUMENTATION

Pilot Study

The pilot study had two main purposes: to apply and further develop the conceptual framework for the study, and to assist in the development of a data collection instrument. The pilot study's function with regard to the first of these purposes was to allow preliminary use and refinement of the concepts developed from the literature review and outlined in Chapter Three.

As a part of the instrumentation process, the pilot study served two purposes. It aided in the generation of lists of learning interests and activities for use in the study. It also assisted in the initial phrasing of questionnaire items in a manner which was appropriate to the respondent group.

Phases one and two. Following a review of the literature, a loosely-structured set of questions was developed. In the first phase of the pilot study, five principals attending an in-service function participated with the researcher in an informal discussion of these questions. Following this discussion, a set of five questions was prepared (Appendix A) for interviews to be held during the second phase of the pilot study.

During the second phase, five principals from one school district were asked to participate in an individual interview based on these questions which they chose to discuss. Most responded to all of the questions.

Data from these interviews were tabulated with respect to the learning interests and activities identified by the pilot study participants.

Questions were rephrased and clarified as necessary during the individual interviews. This process assisted in preparing an interview schedule (Appendix A) for use in the third phase of the pilot study.

Phase three. The responses of principals to the questions asked in the first two phases, and their requests for clarification and amplification, assisted in the development of an interview schedule for use with a self-selected group of principals attending a university summer session. These principals volunteered to participate in response to a memo circulated to summer session instructors. Seven principals were interviewed.

The third-phase interviews focussed on principals' experiences during the previous school year. This line of questioning proved to be more useful than the more general questions used during the first two phases of the pilot study.

Phases one and two yielded substantial lists of work-related areas in which principals reported having sought to increase their knowledge and skill, and of the types of activities used in their search for this knowledge and skill (Tables LXI and LXII). These items were presented to third-phase interviewees after their initial responses had been obtained, in an effort to encourage a more in-depth review of their learning interests and activities. Third-phase interviews involved more systematic examination of each area identified, the specific questions and concerns of the learner, and the learning activities specified, than had the first two phases.

Development of the Questionnaire

Initial development. One purpose of the pilot study was to assist in the development of a data collection instrument for the main study. Specifically, the pilot study was used to help generate appropriate questionnaire items and to phrase questions in a suitable manner. This process included the development of a question sequence which would be likely to stimulate reflective and honest responses, and which would allow common interpretation by the respondents.

The major source of assistance in this item-generation process, in addition to pilot study results, was the two-dimensional framework developed by Miklos (1968) and modified as outlined in Chapter Three.

Pilot study participants generated eighty-two statements identifying the topics of their recent learning efforts. These were most frequently stated in terms of the operational areas of school administration. This finding was similar to Robertson's (1975:92) that principals "tend to consider the skills involved in school administration in terms of operational areas rather than the components of the administrative process which may be involved."

These statements, and as a further reference the items contained in the questionnaires designed by Robertson and by Pawliuk and Pickard, were used to develop statements of learning interests for the questionnaire administered in the present study. These statements were classified according to the operational areas specified in Table II (page 41) and generally used the descriptors which specified the components of the administrative process. The operational areas were used as headings for the learning in-

terests section of the questionnaire (Appendix B). Space was provided at the end of each category for additional learning interests specified by individual respondents.

The pilot study also yielded a substantial list of learning activities which were then classified as formal, consultative and personal, as defined in Chapter Three. These non-standard headings were not printed in the questionnaire, although the items in the learning activities section were grouped on the page according to this classification scheme.

An attempt was made in the questionnaire to provide a frame of reference and a logical sequence which would encourage a reflective approach to completion of the instrument by the respondent. This was seen as essential to the attempt to gather data which would represent as full and complete a picture as possible of principals' learning efforts.

After having provided data relevant to the situation-related and respondent-related variables examined, respondents were asked to indicate their recent learning interests. Following this, they indicated the frequency with which they had used various learning activities in the recent past, and identified those activities which they probably would have used more frequently, had they been more readily available. The final section of the questionnaire directed respondents to indicate their emerging priorities in various areas of interest, and to match each of these priorities with a set of preferred learning activities.

The focus throughout the questionnaire was on actual interests and activities, past and proposed, rather than on a direct attempt to elicit perceptions of learning needs and suitable activities. A specified time

frame and an emphasis on actual or contemplated action had appeared, in the pilot study, to make it easier for respondents to think about their learning efforts in a way which would facilitate identification of their interests and activities. For this reason, the final version of the questionnaire instructed respondents to consider their recent learning efforts in terms of the previous and the then-current school years, and their proposed efforts in terms of the coming few months.

Revision process. The final version of the questionnaire was produced as the sixth in a series of revisions. The first four versions were subjected to criticism and modification by the researcher, the research committee members and others who were asked to examine and comment upon various drafts. The fifth draft was administered at a meeting of twenty principals from school districts across British Columbia. This group also completed a written evaluation of the questionnaire (Appendix A). The comments provided on the evaluation sheets were used in preparing the final version of the data collection instrument.

Field trial. The data collection process for the main study involved the researcher's attendance at a regular principal's meeting in each district contained in the sample, to introduce the study and to distribute the questionnaire. A preliminary field trial was carried out, using forty-four administrators from a school district not included in the study sample. This field trial assisted in the development of an adequate set of instructions and a standard presentation for use at principals' meetings in sample districts.

Validity of the questionnaire. Face and content validity of the instrument were enhanced by the correspondence of the items generated to pilot study findings and the results of previous research, and by the fact that the items generated were compatible with the proposed two-dimensional framework of operational areas and administrative processes (Table II). An effort was made to enhance the sampling validity of the instrument by

1. attempting to define clearly a learning effort,
2. developing schemes of categorization for areas of interest and learning activities, and
3. careful screening of items for mutual exclusiveness.

SAMPLING

Sampling Plan

A review of the literature on professional development needs, and the responses of pilot study participants, suggested that a school district's urbanness may be an important variable affecting the learning efforts of school principals. In the present study, urbanness was defined in terms of proximity to a large metropolitan area with a university. It was also felt to be important that the districts sampled provide adequate cell sizes for the analysis of data.

School district selection was controlled in the manner described in the following section of this chapter. Since school district urbanness was felt to be a potentially important variable, a contrasting sample design was selected.

The rationale of the contrasting sample design is that the effects or correlates of a variable thought to be important can be most clearly seen if situations are studied which provide the greatest extremes in the presence of this independent variable. Presumably factors which do not vary even under these contrasting conditions are not being influenced by the variable in question. (Campbell and Katona, 1953:23-24)

Sampling Procedures

School district pupil enrolment was seen as another criterion in designating a district as either urban or rural. Enrolment alone, however, is not necessarily indicative of the number of schools available for data collection, and further examination of specific characteristics of various districts was necessary.

A graph was prepared showing British Columbia school district pupil populations in relation to numbers of schools (Figure 4). In effect, this gave an indication of average school size. It also illustrated certain other characteristics of the districts as a group. Some of these characteristics have been noted by Kelsey and Leullier (1978:1):

Most of the seventy-five school districts in British Columbia are small in terms of pupil enrolment. The modal district is one enrolling approximately 7,000 students. . . .

The districts also show a marked rural/urban split. At the southern tip of Vancouver Island and in the densely populated lower mainland areas are some 12 to 15 districts which might be termed 'metropolitan.' Apart from a few city districts elsewhere in the province, the other school jurisdictions serve rural areas with populations of less than 50,000 people.

The authors also point out that "the three universities which offer programs in educational administration are located in metropolitan areas" (1978:1). It may be noted that, owing to the location of these metropolitan areas in the southwestern corner of the province, the number of school dis-

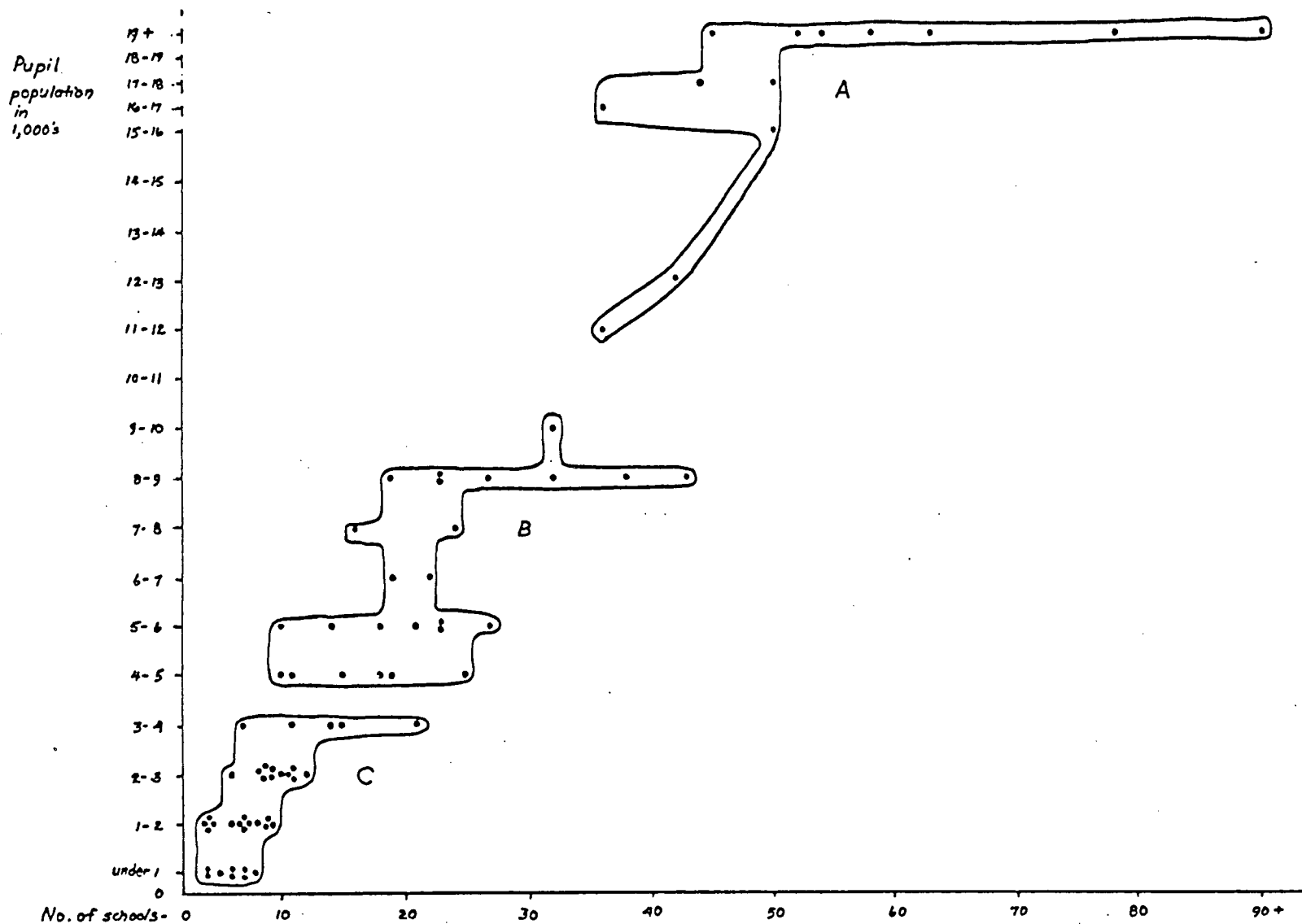


Figure 4
Pupil Populations and Numbers of Schools
in British Columbia School Districts

tricts within easy reach of large cities is quite limited.

The school districts shown in Figure 4 were divided into three population groups. Summary information about each of these groups is provided in Table III.

Group B, the mid-sized school districts, includes the modal district. This group contains one-third of all the school districts in British Columbia, approximately thirty percent of the total pupil population and thirty-five percent of all the public schools in the province. The research sample was selected from this group on the basis of the criteria outlined below.

A list was made of the twenty-five districts in Group B, showing total enrolments and numbers of schools. Since principals with less than twenty percent relief time would be excluded from the sample, and it would be necessary to obtain adequate cell sizes for the analysis of data, twenty was selected as the minimum number of schools in a sample district. The enrolments of the fourteen districts which met this criterion were examined, and it was found that eight districts of twenty or more schools also enrolled over 7,000 pupils, the approximate size of the modal district. Six districts of twenty or more schools were found to have enrolments of fewer than 7,000 pupils.

The criterion of relative proximity to a large metropolitan university area was applied to the high enrolment group, and six districts were found to be within three hours driving time of such a centre. One district was eliminated from further consideration because of the impending retirement of the superintendent, a factor which might have affected both participation and outcomes.

Table III
Pupil Population¹ Groups of School Districts
in British Columbia

Group	Number of districts	Population category	Total pupil population	Number of schools range	Total number of schools
A	13	10,000 +	311,963	36 to 116	724
B	25	4,000 to 9,999	162,568	10 to 43	552
C	37	under 4,000	68,157	4 to 21	306
Totals	75		542,688		1,582

1. Source of population figures: Ministry of Education, 1976

None of the school districts in the low enrolment group was within easy reach of a large metropolitan university area. The nearest district to the lower mainland area was some seven hours driving time away. One district was eliminated from this group because of the researcher's social and employment connections with it.

These procedures yielded two groups of five districts each. Rather than drawing a random sample from among these districts, or from the principals in the districts, all were included in the present study. This resulted in a contrasting rural/urban sample, and a sample of over two hundred principals.

One group of districts, which might be called the mid-sized urban group, had pupil populations ranging from 7,586 to 9,130 (Ministry of Education, 1976). Each district in this group was relatively accessible to a large metropolitan university area.

The other group of districts might be termed the mid-sized rural group. These districts had pupil populations ranging from 5,550 to 5,932. They were all relatively remote in terms of accessibility to a large metropolitan university area.

DATA COLLECTION

Data were collected during late October, November and early December, 1977. Permission to conduct research was requested by letter to each district superintendent (Appendix C) following a preliminary telephone call.

The process of data collection began with visits by the researcher to a principals' meeting in each district. At these meetings, the study was explained, questionnaires were distributed, and questions were answered. The researcher agreed at this time to return to the district after completion of the study, on request, to review the findings.

Returns were anonymous, and stamped, self-addressed envelopes were provided. A numbering system was designed to facilitate follow-up through a contact person in each district. This numbering system identified both the school district and the respondent, but the matching respondent names were known only to the local contact person, who did not have access to completed questionnaires. This system was explained at the principals' meetings and through a letter to absentees (Appendix C) to attempt to ensure

awareness of the fact that anonymity of returns would be preserved. The local contact person was nominated by the principals at the meeting.

A standard presentation, which had been developed during the previously reported field trial, was used to explain the study to each group of principals. No irregularities were noted during any of the principals' meetings, and the responses in each district appeared to be similar.

Returns from most districts were substantially complete within three weeks of the principals' meetings. An instruction sheet (Appendix C) had already been left with each local contact person to describe a follow-up procedure which would be used if necessary. One follow-up letter was sent to the contact in each district where questionnaire responses required clarification or where individual questionnaires had not been received within four weeks. Specific details regarding return rates are reported in Chapter Five.

ANALYSIS OF THE DATA

This section describes the data collected by the research instrument (Appendix B) and specifies the procedures used to analyze the data. The first part of the section deals with the types of data collected. The next three parts describe the major aspects of data analysis. These included: tabulation of response rates, identification of variations among response categories and the location of major contributors to these variations. The section concludes with a brief summary.

Types of Data Collected

Table IV shows that two levels of data were collected: nominal and ordinal. Within these levels, three kinds of information were gathered. These were, information about situation-related and respondent-related independent variables, and information about learning interests and learning activities.

Table IV indicates that nominal-level data were collected about district group and school district. Each questionnaire was numbered in a manner which identified the specific district from which it had been returned. Identification of the school district allowed the questionnaire to be categorized as having come from either the urban or the rural group of districts. The specific response categories for each independent variable are tabled in Chapter Five and in the appropriate sections of Chapters Six and Seven.

Data were gathered about two types of learning interests. Recent interests were those in which, at some time during the previous or the then-current school year, the respondent has wanted to increase his/her knowledge and skill. Priority interests specified the areas in which the respondent most wanted to learn more over the next few months.

Three types of data were collected about learning activities. Respondents were first asked about their rate of recent use of each activity, on a four-point scale. These ordinal response categories were: never, seldom (once or twice), occasionally (three or four times) and frequently (five or more times). Respondents were then asked to identify those activities which they probably would have used more frequently, had they

Table IV
Classification of Data Collected in the Present Study

Information related to	Data collected, classified by level and questionnaire section			
	Nominal-level data about	data source ¹	Ordinal-level data about	data source ¹
Work situation and respondent	District group	Identifica- tion number	Experience	A1
	School district	Identifica- tion number	School location	A3
	Education	A2	Relief time	A4
Learning interests	Recent interests	B		
	Priority interests	D1		
Learning activities	Desired greater availa- bility	C2	Recent use of learning activities	C1
	Preferred learning activities	D2		

1. "Source" refers to the section of the questionnaire (Appendix B) from which the data were obtained.

been more readily available. Finally, respondents were asked to identify the activities which they would prefer to use in their efforts to learn more about their priority learning interests.

Tabulation of Responses

Nominal and ordinal data were gathered on situation-related and respondent-related variables. These were tabulated according to the number

and percentage of principals in each response category for a given variable. This information was used in Chapter Five to describe the respondent group.

The data on learning interests (all nominal-level) and the nominal-level data about learning activities were analyzed for the total sample. These data were also analyzed for the various response categories of each situation-related and respondent-related variable. These analyses consisted of tabulations of the numerical frequency and percentage with which each item was selected as an interest or activity. Designation of rank in descending order of reporting frequency was also recorded. Ranks ranged from one through thirty-seven for learning interests and from one through twenty-four for learning activities.

The ordinal-level data on rate of recent use of each learning activity were tabulated by response categories for each situation-related and respondent variable. The number of respondents who reported each rate of use (never, seldom, occasionally, frequently) was used to determine the mean rank on the previously discussed four-point scale. Values assigned to the various use rate categories were one (never), two (seldom), three (occasionally) and four (Frequently).

Variation Among Response Categories

The tabulation of response rates provided descriptive information about the reported learning interests and activities of the respondents. Another major purpose of the study was to determine whether there was any statistically significant variation among groups of principals. These groups were established on the basis of variables which described the school district, the school and the respondent.

Nominal data. All data on the situation-related and respondent-related variables noted above were analyzed as nominal-level data. This treatment is appropriate where a conservative statistical test, such as the chi-square test, is used.

For the nominal-level data about learning interests and learning activities (Table IV), the chi-square goodness-of-fit test was used. The chi-square test seeks to establish whether returns are distributed among response categories in a manner which is proportionate to some hypothesized distribution. For purposes of this study, the hypothesized proportional distribution was the actual distribution of principals among the response categories of the variable being studied. In each case, it was hypothesized that:

H_1 : There is a statistically significant difference among the sample populations represented by the k response categories of the variable.
($\alpha = 0.10$)

H_0 : There is no statistically significant difference among the sample populations represented by the k response categories of the variable.
($\alpha = 0.10$)

The null hypothesis (H_0) was rejected where the observed value of chi-square was such that the probability of its occurrence under H_0 for the appropriate number of degrees of freedom was less than 0.10. In other words, the probability of making a Type I error, or of mistakenly rejecting the null hypothesis, is 0.10. Selection of this level of significance was based on the exploratory nature of the study and on the fact that chi-square is a conservative test which is sensitive to any systematic variation in a

contingency table. The chi-square test requires no assumptions about underlying distributions.

For the district group variable, there were only two response categories: urban and rural. Yates' corrected chi-square (Hays, 1973:724) is an appropriate test for treatment of the data in these cases, and was the one used in the present study.

Ordinal data. The data generated by part C1 of the questionnaire resulted from a forced-choice question asking respondents to indicate the frequency of their recent use of each learning activity. Responses were in four categories, as has been noted.

Tabulation of the data for each variable resulted in large numbers of ties, owing to the fact that there were only four categories of response. The Kruskal-Wallis one-way analysis of variance, corrected for ties, was used to obtain a test of statistical significance for the contingency tables. Statistical hypotheses in each case were as follows:

H_1 : The k samples come from different sample populations or from populations which are dissimilar with respect to a measure of central tendency. ($\alpha = 0.10$)

H_0 : The k samples come from the same sample population or from populations which are similar with respect to a measure of central tendency. ($\alpha = 0.10$)

The null hypothesis (H_0) was rejected if a statistical significance level of 0.10 or less was obtained.

The Kruskal-Wallis test assumes at least ordinal-level data for dependent variables (in the present study, learning interests and activities), a continuous rather than a discrete scale, and k independent samples. All of these conditions were met by the data tested.

Contributions to Significance

Chi-square is a test which indicates the level of statistical significance of any observed variation in reporting patterns. It does not, however, enable the researcher to identify the source of statistically significant variation among the k groups being tested.

Where a significant chi-square value had been obtained, the chi-square test of quasi-independence (Brown, 1977) was used to carry out a step-wise elimination of cells in each contingency table. Each test began with the cell which had reduced the chi-square significance level the most. This step-wise process of elimination ended in each case when the results of the chi-square test of quasi-independence were not significant (0.10 level).

The above analysis was carried out on all items for which a statistically significant chi-square level had been obtained for recent interests or for both recent and priority interests. The test was also used where significant values were found in the priority category alone, but only in instances where expected values were large enough (Hays, 1973:736) to permit meaningful analysis. The test was not used for the variable "district group," since that variable had only two response categories.

The tables used to report the results of the chi-square test of quasi-independence show, for each interest or activity, the name of the

response category deleted at each step. The level of significance before and after testing is reported, and also the expected and observed proportions of the total responses for the item.

Summary

The study generated a great deal of data, many of which were tabulated using descriptive statistics. These included: numerical frequency, percentage rate of response and rank order of frequency of response.

The questionnaire listed thirty-seven potential learning interests and twenty-four learning activities. This, coupled with the number of separate questions and the fact that the individual item was the unit of analysis, necessitated a large number of tables. Data displayed in the test are supplemented, where necessary, with information tabled in Appendices D and E. Two aspects of the analysis of data were of primary interest: identification of those items which were most and least frequently reported as learning interests and activities, and variations among responses on the basis of characteristics of the district, the school and the respondent. Analysis and tabling of data reflect these priorities and the attempt to provide all information of direct relevance to the discussion of the findings.

DELIMITATIONS, ASSUMPTIONS AND LIMITATIONS

Delimitations of the Study

The study sample consisted of principals in ten mid-sized British Columbia school districts. The study was further delimited to include only those principals who were regularly released from teaching duties for at least twenty percent of the regular school day.

Assumptions

It was assumed that the study sample was of adequate size to permit meaningful analysis of the data as outlined in this chapter. On the basis of the findings of previous research and the results of a pilot study, it was assumed that learning interests and learning activities, as defined in the present study, were relevant concepts for school principals. It was deemed likely that respondents would be able to identify specific learning interests and also their level of involvement in learning activities.

Finally, it was assumed that respondents' interpretations were consistent throughout the sample, and that the responses represented reliable perceptions by the principals involved in the study.

Limitations

The contrasting sample design utilized for the present study resulted in a rural/urban sample. However, since the sample was not randomly drawn, generalization of the findings is limited to the population of principals in the ten mid-sized British Columbia school districts studied.

A limitation imposed by the use of a questionnaire to gather data is that respondents are unable to have face-to-face contact with the researcher at the time of completion of the instrument. An effort was made to ensure clarity and understanding by meeting with respondent groups prior to completion of the questionnaire. Respondents were also given an opportunity to add interests and activities which they perceived to have been omitted from the questionnaire.

The study obtained data about respondents' own perceptions of

their learning efforts. It is recognized that this is only one dimension of the identification of a reference group's learning interests and activities.

Chapter 5

DESCRIPTION OF THE RESPONDENTS

This chapter reviews questionnaire return rates by school district, by school district group and for the total sample. Further, percentages of total returns are tabulated for the various response categories of each situation-related and respondent-related variable. The chapter concludes with a summary which includes a generalized description of the typical respondent.

QUESTIONNAIRE RETURN RATES

Table V shows the rate of questionnaire return by school district, by school district group and for the overall sample. Rates of return by school district ranged from a low of 84.2 percent in District E to 100.0 percent in Districts C, F and J. The return rates for urban (93.4 percent) and rural (94.3 percent) district groups were very close to the 93.8 percent return rate for the total sample.

SCHOOL DISTRICT CHARACTERISTICS

Two school district-related independent variables were studied: district group and individual school district. All questionnaires were identifiable as to group and district.

With regard to district group, respondents were classified as being from either an urban or a rural school district. As Table VI shows, the two groups were of similar size. The urban group contributed 53.3 percent

Table V

Questionnaires Issued and Returned: Response Frequencies
and Percentage Rates of Return

Category	Number of questionnaires issued	Number of questionnaires returned	Percentage rate of return
Total Sample	226	212	93.8
District Group			
Urban	121	113	93.4
Rural	105	99	94.3
School District			
Urban districts			
District A	32	30	93.8
District B	24	23	95.8
District C	21	21	100.0
District D	25	23	92.0
District E	19	16	84.2
Rural districts			
District F	25	25	100.0
District G	21	18	85.7
District H	21	20	95.2
District J	20	20	100.0
District K	18	16	88.9

of overall returns, slightly more than the 46.7 percent represented by the rural returns.

The ten school districts were designated Districts A through K (with the letter "I" omitted to avoid confusion). These districts contributed from 16 to 30 responses, or from 7.6 percent to 14.2 percent of total returns.

Table VI

School District Characteristics: Response Frequencies
and Percentages of Total Returns

Variable	Response category	Number of responses (N:212)	Percentage of N
District Group	Urban	113	53.3
	Rural	99	46.7
	Total	212	100.00
School District	District A	30	14.2
	District B	23	10.8
	District C	21	9.9
	District D	23	10.8
	District E	16	7.6
	District F	25	11.8
	District G	18	8.5
	District H	20	9.4
	District J	20	9.4
	District K	16	7.6
	Total	212	100.0

SCHOOL CHARACTERISTICS

Three school-related independent variables were studied: school location, school type and allocation of relief time to the principal. All questionnaires were identifiable with respect to each of these variables.

School location was measured by respondents' indications of the number of other schools in the same district which could be contacted with a local telephone call from the respondent's school. Table VII shows that of four categories specified, a large majority (79.7 percent) reported in

Table VII

School Characteristics: Response Frequencies and
Percentages of Total Returns

Variable	Response category	Number of responses (N:212)	Percentage of N
School Location (number of other schools within local phone call range)	0	8	3.8
	1 to 3	20	9.4
	4 to 10	15	7.1
	over 10	169	79.7
	Total	212	100.0
School Type	Elementary	161	75.9
	Secondary	40	18.9
	Elem.-sec.	11	5.2
	Total	212	100.0
Relief Time (percentage of regular school hours for which principal is relieved from teaching)	under 50%	55	25.94
	50 to 75%	63	29.72
	over 75%	94	44.34
	Total	212	100.00

the highest category, indicating that more than ten other schools could be reached with a local call. Only 8 schools (3.8 percent) might be termed very isolated because of the absence of any other school within local telephone call range.

School type was designated as elementary, secondary or elementary-secondary. Predictably, elementary schools (Table VII) accounted for a large proportion of all schools (75.9 percent). Only 5.2 percent of all schools (11 of 212) were reported as combined elementary-secondary schools.

The distribution of respondents among relief time categories (Table VII) was somewhat less diverse than for other variables, although the category "over 75 percent" captured 94 responses, or 44.34 percent of the total. The lowest category, "under fifty percent," includes only principals who have at least twenty percent relief time. This category contained approximately twenty-six percent of the responses. If the two lowest relief time categories are combined, it becomes clear that slightly over one-half (55.7 percent) of the principals sampled were released from teaching for less than seventy-five percent of regular school hours.

RESPONDENT CHARACTERISTICS

The two respondent-related variables studied were experience and education. Experience was further divided into five sub-types, as shown in Table VIII. All questionnaires were identifiable by respondents' education. Some were not identifiable by certain experience categories, as explained below.

As Table VIII indicates, experience in each of five positions was measured. Responses for each position specified the number of years experience in that capacity. Respondents reported their experience as a teacher, as a "non-principal" administrator, as a principal, as a principal in their present district and as a principal in their present school. It should be noted that the designation of experience "as a principal" includes experience in the present district and in the present school. Similarly, present district experience as a principal includes present school experience.

Table VIII
Respondent Characteristics: Response Frequencies
and Percentages of Total Returns

Variable	Response category	Number of responses (N:212)	Percentage of N
Years of experience			
a) as a teacher	0 to 1	20	9.4
	2 to 5	92	43.4
	6 to 10	67	31.6
	over 10	30	14.2
	unspecified		1.4
	Total	212	100.0
b) as an administrator (non-principal)	0 to 1	76	35.8
	2 to 5	80	37.7
	6 to 10	26	12.3
	over 10	5	2.4
	unspecified	25	11.8
	Total	212	100.0
c) as a principal	0 to 1	42	19.8
	2 to 5	62	29.3
	6 to 10	42	19.8
	over 10	64	30.2
	unspecified	2	0.9
	Total	212	100.0
d) as a principal in present school district	0 to 1	56	26.4
	2 to 5	65	30.7
	6 to 10	34	16.0
	over 10	56	26.4
	unspecified	1	0.5
	Total	212	100.0
e) as a principal in present school	0 to 1	86	40.6
	2 to 5	87	41.0
	6 to 10	21	9.9
	over 10	17	8.0
	unspecified	1	0.5
	Total	212	100.0
Education			
(Degree most recently completed or in progress)			
	Bachelor's	148	69.8
	Master's (ed. admin.)	43	20.3
	Master's (not ed. admin.)	21	9.9
	Total	212	100.0

Two to five years of experience was the most common response for all kinds of experience except total experience as a principal. In this category, the respondents who reported over ten years experience (30.2 percent) slightly outnumbered the 29.3 percent in the two to five year category.

Of importance in the analysis of data was the fact that 11.8 percent of the sample (25 respondents) did not indicate their experience in administrative positions other than a principalship. Although it seems plausible to suggest that these respondents may have omitted the category because it seemed not to apply to them, a response level had in fact been specified which included zero years of experience. These respondents were omitted from this phase of the analysis.

Despite an apparently increasing emphasis on the completion of graduate-level academic work by principals, a large majority of the respondents (69.8 percent) indicated, as shown in Table VIII, that a bachelor's degree, or work towards one, was their most recently achieved educational level. Of the total sample, 30.2 percent reported having a master's degree completed or in progress. The majority of these (20.3 percent of the total sample) indicated their graduate field of study to be education administration, while 9.9 percent of the total sample indicated that they had done graduate work in some other field.

SUMMARY

The response rate for the overall sample, and for individual school districts, was relatively high. These return rates could be attributed to a number of factors, some of which might have been: respondent interest in

the topic, face-to-face presentation of the proposed study to respondent groups, the researcher's agreement to return to the district to report on the findings, and the use of a local contact person to assist with follow-up where necessary.

It is somewhat difficult to describe the typical respondent in the present study, given the number of variables and response categories and the similarity of some group sizes. It might be said, though, that he/she was likely to have been the principal of an urban elementary school (although perhaps in a rural school district) with more than seventy-five percent of his/her time allocated to administrative and supervisory responsibilities. This typical respondent was also likely to have taught for ten years or less before initial appointment to an administrative position, and would probably have completed, or have been working on, an undergraduate degree.

For most questions, all responses were usable. Some exceptions occurred with regard to the experience variable. These are further dealt with in the appropriate sections of Chapters Six and Seven.

The next two chapters examine the responses with regard to the two major components of a learning effort: interests and activities. Each chapter begins with a report of the overall findings in one of these areas, followed by a detailed review of the findings relevant to each research question and sub-question.

Chapter 6

FINDINGS OF THE STUDY: LEARNING INTERESTS

INTRODUCTION

This chapter examines the findings of the present study with regard to learning interests reported by the respondents. It deals in sequential order with the first four research questions and their associated sub-questions.

The first question sought to identify the learning interests of the total sample. Question Two examined the findings on the basis of two school district variables: district group and individual school district. Question Three considered the findings according to school district characteristics: location, type and allocation of relief time. The fourth question dealt with respondent characteristics: experience and level of formal education.

Recent and Priority Learning Interests

Two types of learning interests are examined in these questions. Topics which were reportedly of interest at some time during the then-current or the previous school year were designated recent interests. Areas in which principals indicated an interest in learning more over the next few months were designated priority interests. Part B of the questionnaire (Appendix B) focussed on recent learning interests, while part D1 dealt with priority interests.

There is an important difference between the data collected on recent interests and that dealing with priority interests. In the question-

naire section on recent interests, respondents were encouraged to identify as many items as were applicable, and to add further items if they so wished. The data generated by the responses in this section of the questionnaire permit observations to be made about the breadth of recent interest in each item, within a given response category for a specified independent variable. They do not, however, identify those items which are widely considered to be of priority importance as compared with other items. Responses to part D1 provide this information. They also allow observations to be made about similarities and differences between recent and priority interest in each item, on the basis of reporting frequency.

Frequently and Infrequently Reported Learning Interests

The reported learning interests which are most relevant to the present study are those which were most frequently and least frequently reported. In this regard, some observations may be made in advance about the data to be dealt with in this chapter.

Given school district questionnaire returns (Table V) of between 16 and 30, it might be suggested that identification of any item by at least fifty percent of the respondents in any district indicates quite widespread interest. Such a group (eight to fifteen individuals) is likely to be a large enough portion of the total number of principals in the district that, at least for planning purposes, the interest specified would be of considerable importance. Similarly, a group of fewer than twenty percent (three to five individuals) is unlikely to warrant any major planning effort.

These figures provided a useful scheme for identifying boundaries for groups of interests specified as frequently and infrequently reported.

Some items had very low response rates, particularly when the total reports were divided among the categories of an independent variable. Application of the criteria delineated above to recent interests yields the finding (Table IX, page 88) that seven items were identified by at least fifty percent of the respondents. Seven items (Table X, page 91) were reported by fewer than twenty percent of the respondents.

Examination of the list of priority interests (Table IX) indicates that no item was reported by fifty percent or more of the respondents. In fact, only six were reported by twenty percent or more.

These criteria were used as guidelines in the selection of data to be tabled and discussed. Frequently and infrequently reported recent interests were examined and tabled. In the case of priority interests, the very small frequencies often associated with these items suggested that further display and discussion would not be useful in all cases. Only those priority interests which were frequently reported are discussed.

Some percentages in tables in the text are taken to the nearest whole number. However, exact percentages may be found in Appendix D. The following types of information are reported in the text:

1. Frequently reported learning interests.

- 1.1. Recent interests which were reported by fifty percent or more of the respondents in at least one response category for a given independent variable. For example, if the variable was school type, and the only category in which fifty percent or more of the respondents in that category identified a given interest was the elementary school category, values of that variable in all response categories (secondary, elementary-

secondary) were given for comparison purposes.

1.2. Priority learning interests which were identified by twenty percent or more of the respondents in at least one response category for a given independent variable.

2. Infrequently reported recent learning interests. Recent interests which were reported by fewer than twenty percent of the respondents in at least one response category for a given independent variable.

3. Contributions to chi-square. Where a significant chi-square level or Kruskal-Wallis statistic was obtained for recent or for both recent and priority reporting patterns, the chi-square test of quasi-independence was used to identify the major contributors to significance. It was also used for priority items where expected frequencies were of sufficient size for analysis.

Discussions of this aspect of the analysis of data make frequent reference to "expected" proportions of total responses for a given item. As stated in Chapter Four, it was hypothesized that the total responses for a given item would be distributed in a certain manner among the response categories of the independent variable being considered. Specifically, it was expected that the distribution of responses among response categories would be proportionate to the number of principals in each category. For example, 75.9 percent of the total sample were elementary school principals. The term "expected" refers in this instance to the fact that for each item, the elementary principals would be expected to contribute 75.9 percent of the total responses for that item.

QUESTION 1: REPORTED LEARNING INTERESTS OF OF RESPONDENTS

This section deals with the findings with regard to reported recent and priority learning interests for the total sample. The data on recent interests were obtained from part B of the questionnaire. The instructions for this part specified that each relevant item should be identified, regardless of whether the respondent had actually engaged in any learning activities related to the topic.

In section D2 of the questionnaire, respondents were asked to re-examine the total list of learning interests printed in Section B. They were then requested to identify at least three, but no more than five areas in which they would most like to learn more over the next few months. These items were classified as priority learning interests.

The findings with regard to frequently and infrequently reported learning interests are discussed below. The section concludes with an examination of the items which respondents added to the printed list of learning interests.

Frequently Reported Interests

In order to provide sufficient information for comparison purposes, the ten most frequently reported recent and priority learning interests are reported for this question only. It can be readily noted by examining Table IX which of these items were identified by the percentage of principals established as cut-off points for later tables. The numerical frequency, percentage occurrence and rank for all thirty-seven questionnaire items are specified in Appendix D, Table LXII.

Table IX

Frequently Reported Learning Interests:
Numerical Frequency, Percentage and Rank

Learning interest and operational area	Reporting as recent interest			Reporting as priority interest		
	no. (N:212)	%	rank	no. (N:212)	%	rank
Educational Program						
03 Implementing new instructional programs	106	50.0	7	32	15.1	8
05 Developing curriculum at the school level	115	54.2	6	47	22.2	6
06 Evaluating the effectiveness of the school's instructional program	166	78.3	1	104	49.1	1
Staff Personnel						
10 Evaluating and writing reports on the work of teachers	129	60.8	4	59	27.8	4
11 Developing an effective approach to the supervision of instruction	141	66.5	3	74	34.9	2
19 Stimulating teacher interest in professional growth	120	56.6	5	54	25.5	5
Pupil Personnel						
23 Providing for pupils with special needs	147	69.3	2	69	32.5	3
25 Evaluating pupil achievement and progress	102	48.1	8.5	28	13.2	10
External Relations						
32 Determining community attitudes and priorities	94	44.3	10	30	14.2	9
General Management						
44 Managing my time	*89	42.0	11	35	16.5	7
45 Legal aspects of the job	102	48.1	8.5	*20	9.4	15.5

* Not among the ten most frequently reported items for this category

Of the ten items most frequently identified in this table as recent or as priority interests, nine are on both lists. Item 06 - Evaluating the effectiveness of the school's instructional program, was the most frequently reported item in both the recent and the priority categories. In the recent interest category, 78.3 percent of the respondents selected this item, while 49.1 percent specified it as a priority interest. It can be readily seen, by examining Table IX, that percentages are generally much larger in the recent than in the priority interest category. This holds true throughout, and can be attributed to the fact that respondents were limited to identifying a maximum of five of the thirty-seven items as priority interests. No similar restriction was placed on the number of recent interests which could be identified.

In each case, item 06 is substantially ahead of the second most frequently identified item. In the recent interests category, item 06 leads item 23 - Providing for students with special needs, by nine percent. In the priority category, item 11 - Developing an effective approach to the supervision of instruction, was reported by 34.9 percent of the respondents, or approximately fourteen percent less than item 06. In each category, items 06, 11 and 23 were the three most frequently reported items.

Items 44 and 45 each appeared in only one of the two learning interest categories displayed in Table IX. Both, however, were well within the top half of all learning interests in both categories in terms of frequency of reporting.

Infrequently Reported Interests

There is slightly less commonality of items between recent and priority interests in the "infrequently reported" category, as shown in Table X. Seven items appear on both lists. The other items on the recent list (04, 13, 14) and on the priority list (34, 40, 41) are in the middle third of the list of thirty-seven learning interests in terms of reporting frequency. Item 22 - Advising students about course and program selection, ranked thirty-seventh in both categories. This item was reported as a recent interest by only 8 respondents, and only 2 of 212 identified it as a priority interest.

Percentages in the priority category are much lower than in the recent category. Item 14, with a rank of 28, was identified as a recent interest by 25.9 percent of the respondents. Items 40 and 41 had a similar rank (28.5) in the priority category, but were each reported by only 4.7 respondents.

Additional Learning Interests Specified by Respondents

An effort was made to develop as comprehensive a list of learning interests as possible, for inclusion in the questionnaire. However, it was recognized that such a list could never be all-inclusive. Also, to have presented respondents with a completely closed list of items might have resulted in the loss of some potentially valuable data. Space was provided for respondents to add up to ten additional learning interests, two in each operational area.

A total of fifty-two items were added by thirty-two of the respondents. Almost all of these items (Appendix D, Table LXII) could be con-

Table X

Infrequently Reported Learning Interests:
Numerical Frequency, Percentage and Rank

Learning interest and operational area	Reporting as recent interest			Reporting as priority interest		
	no. (N:212)	%	rank	no. (N:212)	%	rank
Educational Program						
04 Developing curriculum at the district level	46	21.7	30	*12	5.7	25
Staff Personnel						
13 Interpersonal relationships	40	18.9	32.5	*14	6.6	22
14 Handling the stresses of my job	55	25.9	28	*20	9.4	15.5
16 Conducting staff meetings	40	18.9	32.5	7	3.3	31.5
18 Supervising non-teaching personnel	39	18.4	34.5	6	2.8	33.5
Pupil Personnel						
22 Advising students about course and program selection	8	3.8	37	2	0.9	37
26 Developing a district testing program	42	19.8	31	4	1.9	35
External Relations						
34 Conducting conferences and interviews with parents	*72	34.0	24	8	3.8	30
36 Dealing with other depart- ments of the school district	35	16.5	36	6	2.8	33.5
General Management						
39 Provincial educational finance	39	18.4	34.5	3	1.4	36
40 School district budgeting procedures	*76	35.8	17	10	4.7	28.5
41 Preparing annual school budget submissions	*69	32.5	25	10	4.7	28.5
42 Allocating budgeted funds	50	23.6	29	7	3.3	31.5

* Not among the ten least frequently reported items for this category

sidered as parallel to, or special cases of, items already printed in the questionnaire. Some, such as "working with staff on special programs," were stated in very general terms, and appeared to overlap several existing questionnaire items. Most, though, were stated in terms which suggested relatively specific and possibly situational concerns, such as "Indian education" and "dealing with damage to school property."

Summary

The findings reported in this section apply to the total respondent group. Of the ten items most frequently reported in the recent learning interests category, nine re-appeared among the most frequently reported priority interests. Three items ranked as the top three in both categories. These were:

- 06 - Evaluating the effectiveness of the school's instructional program.
- 11 - Developing an effective approach to the supervision of instruction.
- 23 - Providing for pupils with special needs.

The items which ranked fourth, fifth and sixth on the recent interests list were identified in the same rank order on the list of priority interests. These were, in rank order:

- 10 - Evaluating and writing reports on the work of teachers.
- 19 - Stimulating teacher interest in professional growth.
- 05 - Developing curriculum at the school level.

Of the remaining four items in the priority interests list, each was reported by fewer than twenty percent of the respondents.

Several items were reported very infrequently. Item 22 - Advising students about course and program selection, was the least frequently reported item in both the recent and the priority interest categories. Six other items appeared in the bottom ten in both categories. These were:

- 16 - Conducting staff meetings.
- 18 - Supervising non-teaching personnel.
- 26 - Developing a district testing program.
- 36 - Dealing with other departments of the school district.
- 39 - Provincial educational finance.
- 42 - Allocating budgeted funds.

This discussion of the overall findings about reported recent and priority learning interests of respondents provides a necessary basis for the systematic examination of the findings within each of the three groups of independent variables: school district, school and respondent characteristics. The following sections of this chapter deal with these findings.

QUESTION 2: LEARNING INTERESTS AND SCHOOL DISTRICT CHARACTERISTICS

The present study examined two independent variables which described school district characteristics: district group (sub-question 2.1) and individual school district (sub-question 2.2). The second research question sought to identify the items which had been selected as recent or priority interests by principals grouped according to these characteristics. Further, an attempt was made to determine whether there were any statistically significant differences in the response patterns of various groups. The overall findings of this research question are reported in Appendix D and in the tables in this section of the research report.

Sub-Question 2.1: Learning Interests of Principals
Classified by District Group

Table XI lists the recent and priority learning interests which were most frequently reported within groups of school districts identified as either urban or rural. Table XII lists the least frequently reported interests, classified by district group. In these tables, the percentage of each district group who reported a given interest is shown to the nearest whole number. Exact percentages are tabled in Appendix D (Table LXIV). Where a chi-square value of less than 0.10 was obtained, the fact is noted in Table XI. All significant chi-square values are shown in Appendix D, Table LXIV.

Table XI shows that all of the items which were frequently reported by at least one district group as either a recent or a priority interest also appear in the total sample list (Table IX) of frequently reported items. Item 06 - Evaluating the effectiveness of the school's instructional program, is most widely reported as a recent and as a priority interest by both district groups.

Of the nine frequently reported interests in Table XI, five appear in both the urban and rural categories as both recent and priority interests. These are, in addition to item 06:

- 10 - Evaluating and writing reports on the work of teachers.
- 11 - Developing an effective approach to the supervision of instruction.
- 19 - Stimulating teacher interest in professional growth.
- 23 - Providing for students with special needs.

Table XI

Learning Interests Frequently Reported
Among Respondents Classified
According to District Group

Learning interest and operational area	Percentage reporting			
	as recent interest		as priority interest	
	urban (N:113)	rural (N:99)	urban	rural
Educational Program				
03 Implementing new instructional programs		52		
05 Developing curriculum at the school level	50	59		33*
06 Evaluating the effectiveness of the school's instructional program	80	77	51	47
Staff Personnel				
10 Evaluating and writing reports on the work of teachers	62	60	30	25
11 Developing an effective approach to the supervision of instruction	66	67	37	32
19 Stimulating teacher interest in professional growth	58	56	26	25
Pupil Personnel				
23 Providing for students with special needs	69	70	34	31
25 Evaluating student achievement and progress	50			
General Management				
45 Legal aspects of the job	50			

* Chi-square significant at the 0.10 level

N.B. Percentages in this table are taken to the nearest whole number.

Table XII

Learning Interests Infrequently Reported
Among Respondents Classified
According to District Group

Learning interest and operational area	Percentage reporting as recent interest	
	urban (N:113)	rural (N:99)
Educational Program		
04 Developing curriculum at the district level	19	
Staff Personnel		
13 Interpersonal relationships		18
16 Conducting staff meetings	18	
18 Supervising non-teaching personnel		16
Pupil Personnel		
22 Advising students about course and program selection	3	5
26 Developing a district testing program		17
External Relations		
36 Dealing with other departments of the school district	17	16
General Management		
39 Provincial educational finance		14

N.B. Percentages in this table are taken to the nearest whole number.

Item 05 - Developing curriculum at the school level, was among the frequently reported recent interests for both the urban and the rural district group. While approximately 33 percent of the rural group also identified this item as a priority interest, it was selected by only 12.4 percent (Table LXIV) of the urban group. This resulted in a chi-square significance level of 0.001 for item 04.

All of the learning interests reported infrequently within district groups (Table XII) appeared in the corresponding list (Table X) for the total sample. Item 22 - Advising students about course and program selection, was the item least frequently selected by both district groups.

The distribution of recent interest responses between district groups resulted in statistically significant chi-square values for three items which are not displayed in Tables XI and XII. These were, as indicated in Table LXIV, items 33, 41, and 44. Item 33 - Working with home-school groups and parent committees, and item 41 - Preparing annual school budget submissions, were reported as recent interests by a larger proportion of respondents in the urban district group than in the rural group. Item 44 - Managing my time, was reported as a recent interest by a larger proportion of rural group members than had been expected.

Sub-Question 2.2: Learning Interests of Principals Classified by School District

Table XIII shows all items which were frequently reported as recent interests, priority interests, or both, by the respondents in at least one school district group. Twenty-four of a possible thirty-seven items met this criterion. The list of reported interests is marked by wide variations

Table XIII
Learning Interests Frequently Reported
Among Respondents Classified
According to School District

Item	Percentage reporting																				
	as recent interest in District											as priority interest in District									
	A N:30	B 23	C 21	D 23	E 16	F 25	G 21	H 21	J 20	K 18	A	B	C	D	E	F	G	H	J	K	
Educational Program																					
01					63	52															
02		61												22							
03	53	52	57			68	56		50	63		22								25	
05	53			52	56	64	61	60	70						28	44	25	30	44	*	
06	90	78	81	70	75	76	72	70	80	88	53	57	24	57	69	44	44	45	40	63	
07				57	50		50							22			22				
Staff Personnel																					
10	67	57	71	65		60	50	65	80		30	39		35	31		22	25	50	25	
11	70	61	76	70	50	76		75	75	63	47	39	33	35	25	24	22	35	50	31	
14											23									*	
15			52		50																
17			62		50						20		29							*	
19	63		71	52	50	60	67		50	56	33		24	35		24		20	35	31	
Pupil Personnel																					
23	63	70	71	78	63	68	72	70	75	63	23	39	24	52	31	40	22	35	25	31	
25		57	52		63			50	50												
27					56								24		25						
External Relations																					
32			52		56	64			55			22			25	20			20		
33					69			50		*											
34		57																			
35			52																		
General Management																					
40								50													
41	53									*											
43	53				50										20						
44	53					56	61		65	*	40				24	28		20		*	
45	50		57		56		61	55				24						30			

* Chi-square significant at the 0.10 level.

N.B. Percentages in this table are taken to the nearest whole number.

in reporting patterns, as outlined below. Percentages in Both Table XIII and Table XIV, which deals with infrequently reported interests, are rounded off to the nearest whole number.

Item 06 - Evaluating the effectiveness of the school's instructional program, and item 23 - Providing for students with special needs, were frequently identified as both recent and priority interests in all ten school districts (Table XIII). Item 10 - Evaluating and writing reports on the work of teachers, was identified in this way in seven districts, and item 19 - Stimulating teacher interest in professional growth, in six districts.

Table XIII shows that item 05 - Developing curriculum at the school level, was fairly widely reported as a recent interest of principals. However, as a priority interest, item 05 was frequently reported only in districts E through K, the rural districts. No urban district had a priority interest reporting rate of twenty percent or greater for item 05.

Item 17 - Developing effective communication among teachers and between teacher and principals, was frequently reported as both a recent and a priority interest only by the principals in District C. Table XV indicates that in both cases, this district was responsible for a significantly larger proportion of the total responses for item 17 than had been expected.

Items 33, 41 and 44 also had significant variations in response patterns in the recent interests category. In the case of item 44, this variation also occurred for priority interests. Various districts were the major contributors to significance for these items, and no patterns were observable.

Table XIV
Learning Interests Infrequently Reported
Among Respondents Classified
According to School District

Learning interest and operational area	Percentage reporting as recent interest										
	District										
	A N: 30	B 23	C 21	D 23	E 16	F 25	G 21	H 21	J 20	K 18	
Educational Program											
04 Developing curriculum at the district level			5	13							13
Staff Personnel											
12 Managing and resolving conflict		9			19			10			
13 Interpersonal relationships	17		14	13			17	15		13	
14 Handling the stresses of my job		17					17			13	
16 Conducting staff meetings		9	19	17				15	10		
17 Developing effective communication among teachers and between teachers and principal		13									
18 Supervising non-teaching personnel			5		19		17	15	15	6	
Pupil Personnel											
22 Advising students about course and program selection	0	4	0	4	6	0	17	0	0	13	*
24 Evaluating student achievement and progress							17	10			
26 Developing a district testing program			19	9			6		10		
27 Dealing with student problems										13	
28 Developing school guidelines for pupil conduct				17						19	
29 Student-teacher relations					13						
External Relations											
33 Working with home-school groups and parent committees										19	*
34 Conducting conferences and interviews with parents				17							
36 Dealing with other departments of the school district	13		14	17	13			0	10	19	
General Management											
39 Provincial educational finance				17	19		11	5	10	13	
40 School district budgeting procedures										19	
41 Preparing annual school budget submissions								5			*
42 Allocating budgeted funds				9		16					
43 General office management routines: record-keeping, filing systems, etc.				9							
44 Managing my time				13							*

* Chi-square significant at the 0.10 level

N.B. Percentages in this table are taken to the nearest whole number.

Table XV

School Districts Identified as Contributing to
Significant Chi-Square for Learning Interests:
Chi-Square Test of Quasi-Independence

Item	α (pre) ¹	Step	District deleted	Percentage of total responses		α (post) ²
				E ³	O ³	
Recent						
17	0.092	1	C	9.9	17.6	0.452
33	0.025	1	E	7.5	14.9	0.215
41	0.029	1	H	9.4	1.4	0.233
44	0.089	1	D	10.8	3.4	0.196
Priority						
17	0.017	1	C	9.9	27.3	0.075
	0.075	2	F	11.8	0.0	0.174
44	0.003	1	A	14.2	34.3	0.088
	0.088	2	C	9.9	0.0	0.231

1. Chi-square significance level before deletion.
2. Chi-square significance level after deletion.
3. E = expected percentage. O = observed percentage.

Examination of Table XIV reveals that item 22 - Advising students about course and program selection, was selected very infrequently in all ten districts. Item 36 - Dealing with other departments of the school district, was in this category in seven districts. Three other items were among the least frequently reported learning interests in six districts:

13 - Interpersonal relationships.

18 - Supervising non-teaching personnel.

39 - Provincial educational finance.

With individual exceptions, the findings regarding learning interests of principals classified according to school district characteristics were similar to total sample findings. Several items were very frequently identified within most groups as learning interests, while several other items were seldom reported within any group. As far as reporting patterns were concerned, there did not appear to be any general trends. In fact, the overall pattern of reporting, particularly where the data with regard to individual school district were concerned, was one of wide variation, as can be seen in Tables XIII and XIV.

QUESTION 3: LEARNING INTERESTS AND SCHOOL CHARACTERISTICS

This research question sought to identify the topics selected as recent and priority interests by respondents grouped according to certain characteristics of their school. The particular variables examined were: school location in terms of ability to consult by local telephone call (sub-question 3.1), school type (sub-question 3.2) and percentage of relief time allocated to the principal. The overall findings are reported in Appendix D and in the tables in the following sections of the text.

Sub-Question 3.1: Learning Interests of Principals Classified by School Location

At the outset, it should be noted that the respondents are distributed quite unevenly among school location groups (Table VII). Only eight principals reported being unable to contact any other school with a local telephone call. This was the smallest respondent group encountered for any variable in the study, and it was not greatly exceeded by the size of the group reporting contact opportunities with from one to three other schools (twenty respondents), or by the group of fifteen respondents who

reported that they could contact from four to ten other schools. These three groups, which total forty-three respondents, are quite small in comparison with the group of 169 principals who reported being able to contact over ten other schools with a local telephone call.

These factors should be taken into account when examining returns such as those for items 07, 16, 17 and 28 (Table XVI), which were each reported by 50 percent of the group who identified themselves as being unable to contact any other school with a local telephone call. The percentage figure for each of these items represents only four respondents.

Four items were frequently reported as recent and as priority interests by all four location groups. These were:

- 06 - Evaluating the effectiveness of the school's instructional program.
- 10 - Evaluating and writing reports on the work of teachers.
- 11 - Developing an effective approach to the supervision of instruction.
- 23 - Providing for students with special needs.

Again, while the figure of 75 percent of the "zero contacts" group who reported item 11 as a priority interest seems very high, this percentage represents only six respondents of the total group of 212.

Table XVII indicates that item 22 - Advising students about course and program selection, was among the infrequently reported recent learning interests in all four location groups. Item 18 - Supervising non-teaching personnel, was in this category in three of the four groups.

Table XVI
Learning Interests Frequently Reported
Among Respondents Classified
According to School Location

Learning interest and operational area	Percentage reporting							
	as recent interest				as priority interest			
	0	1-3	4-10	11+ ¹	0	1-3	4-10	11+ ¹
N: 8 20 15 169								
Educational Program								
01 Assessing community and school needs for special courses and programs	63							
03 Implementing new instructional programs	63		53	50	25		20	
05 Developing curriculum at the school level	50	50		56		30	20	22
06 Evaluating the effectiveness of the school's instructional program	75	85	67	79	25	50	27	52
07 Learning more about specific subject areas	50							
Staff Personnel								
10 Evaluating and writing reports on the work of teachers	75	70	73	58	50	20	40	27
11 Developing an effective approach to the supervision of instruction	63	70	80	65	75	30	33	33
16 Conducting staff meetings	50							
17 Developing effective communication among teachers and between teacher and principal	50				25			
19 Stimulating teacher interest in professional growth	50			60	38	30		26
Pupil Personnel								
23 Providing for students with special needs	75	60	73	69	50	35	53	30
25 Evaluating student achievement and progress		50		50				
28 Developing school guidelines for pupil conduct	50							
External Relations								
32 Determining community attitudes and priorities	63	50	53			25	20	
33 Working with home-school groups and parent committees			53				27	
General Management								
44 Managing my time		50					27	
45 Legal aspects of the job	63	50	53		25			

* Chi-square significant at the 0.10 level

N.B. Percentages in this table are taken to the nearest whole number.

1. Groups are designated according to the number of other schools which can be contacted with a local telephone call.

Table XVII

Learning Interests Infrequently Reported
Among Respondents Classified
According to School Location

Learning interest and operational area	Percentage reporting as recent interest			
	Group ¹ 0	1-3	4-10	11+
	N: 8	20	15	169
<hr/>				
Educational Program				
04 Developing curriculum at the dis- trict level.	13			
Staff Personnel				
13 Interpersonal relationships.	13			19
16 Conducting staff meetings.			13	18
17 Developing effective communication among teachers and between teacher and principal.			7	*
18 Supervising non-teaching personnel.		15	7	19
Pupil Personnel				
22 Advising students about course and program selection.	0	10	0	4
26 Developing a district testing program.		15		
External Relations				
35 Working with agencies which provide services to students and their families.			7	*
36 Dealing with other departments of the school district.	13			15
General Management				
39 Provincial education finance.				17
41 Preparing annual school budget submissions.			7	*

1. Group designated according to number of other schools which can be contacted by a local telephone call.

* Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

Table XVIII

School Location Groups Identified as Contributing to
Significant Chi-Square for Learning Interests:
Chi-Square Test of Quasi-Independence

Item	(pre) ¹	Step	Group deleted ⁴	Percentage of total responses		(post) ²
				E ³	O ³	
Recent						
17	0.082	1	4-10	7.1	1.4	0.605
35	0.040	1	4-10	7.1	1.2	0.516
41	0.098	1	4-10	7.1	1.4	0.512
Priority						
17	0.099	1	1-3	9.4	0.0	0.182
41	0.071	1	1-3	9.4	30.0	0.308

1. Chi-square significance level before deletion.
2. Chi-square significance level after deletion.
3. E = expected percentage. O = observed percentage.
4. Group designated by number of other schools within local telephone call range.

Examination of Table XVIII, which reports the results of the chi-square test of quasi-independence, reveals that two of the response categories were always most responsible for the significance of the chi-square values obtained in the original analysis. However, examination of recent and priority categories does not reveal any repeated pattern of reporting. For neither item 17 nor item 41 was the same group chiefly responsible for the significant chi-square level in both the recent and the priority categories. In other words, the variations in response patterns across items and categories were not systematic or repeated.

In general, the lists of items most frequently and least frequently selected by respondents classified by school location were very similar to the lists (Tables IX, X) which report the overall findings of the study.

Sub-Question 3.2: Learning Interests of Principals
Classified by School Type

The overall findings related to learning interests reported by principals classified according to school type are displayed in Appendix D and in this section of the text. Three types of school were designated: elementary, secondary and elementary-secondary. As was the case in the previous sub-question, the respondents were spread rather unevenly among the response categories for the variable. A total of 161 respondents identified themselves as elementary principals, 40 as secondary principals and 11 as elementary-secondary principals. In particular, in examining the findings reported in Table XIX with regard to items 40, 41 and 43, it should be noted that the number of elementary-secondary principals is very small. The 55 percent figure shown for these items represents, in each case, six respondents.

Three items were frequently reported as both recent and priority interests by principals of all types of schools. These items were:

- 06 - Evaluating the effectiveness of the school's instructional program.
- 10 - Evaluating and writing reports on the work of teachers.
- 11 - Developing an effective approach to the supervision of instruction.

Item 05 - Developing curriculum at the school level, and item 19 - Stimulating teacher interest in professional growth, were frequently re-

Table XIX

Learning Interests Frequently Reported
Among Respondents Classified
According to School Type

Learning interest and operational area	Percentage reporting					
	as recent interest			as priority interest		
	School type ¹					
	E	S	E-S	E	S	E-S
N:	161	40	11			
Educational Program						
01 Assessing community and school needs for special courses and program.	58		55*			
03 Implementing new instructional programs.	53					
05 Developing curriculum at the school level.	55	53		22	25	
06 Evaluating the effectiveness of the school's instructional program.	79	80	64	48	58	36
Staff Personnel						
10 Evaluating and writing reports on the work of teachers.	63	50	64	28	25	36
11 Developing an effective approach to the supervision of instruction.	66	73	55	34	38	46
17 Developing effective communi- cation among teachers and between teacher and principal.				20		*
19 Stimulating teacher interest in professional growth.	57	68	*	26	28	
Pupil Personnel						
23 Providing for students with special needs.	81		*	34	28	36
25 Evaluating student achievement and progress.	51					
External Relations						
40 School district budgeting procedures.	55					
41 Preparing annual school budget submissions.	55					*
43 General office management routines: record-keeping, filing systems, etc.	55					
44 Managing my time.				20		
45 Legal aspects of the job.	50					

1. School type designated as: elementary (E), secondary (S), elementary-secondary (E-S).

* Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

ported as both recent and priority interests by elementary and by secondary principals. Tables LXIX and LXX show that 45.5 percent of elementary-secondary principals identified item 05 as a recent interest and 18.2 percent as a priority interest. Each of these values was just slightly lower than the criteria for inclusion in the "frequently reported" categories.

Although item 01 - Assessing community and school needs for special courses and programs, was not among the most frequently reported recent learning interests for the total sample, it did fall in this category for both secondary and elementary-secondary principals. The elementary group contributed an unexpectedly low proportion of the total returns for this item, and was the major contributor (Table XXI) to a chi-square significance level of 0.004.

Item 23 - Providing for students with special needs, was one of the priority learning interests most frequently identified by principals of all types of schools. In the recent category, it was reported by 81 percent of elementary principals (Table XIX). However, this item was reported as a recent interest by only 15.6 percent of secondary principals (Appendix D, Table LXIX). Table XXI shows that for this item, the elementary principals' disproportionately high proportion of the total reports was the major contributor to the significant chi-square value.

Item 17 - Developing effective communication among teachers and between teacher and principal, was frequently reported only among secondary principals as a priority interest. This group was, in this case, the major contributor to a chi-square significance level of 0.057. Table XXI indicates that the secondary principals contributed almost double their expected proportion of the total returns for this item.

Learning Interests Infrequently Reported
Among Respondents Classified
According to School Type

Learning interest and operational area	Percentage reporting as recent interest		
	School type ¹		
	E	S	E-S
	N: 161	40	11
Educational Program			
02 Choosing instructional programs from among available alternatives.			9*
Staff Personnel			
12 Managing and resolving conflict.			18
13 Interpersonal relationships.		10	9
16 Conducting staff meetings.	19	15	
17 Developing effective communication among teachers and between teacher and principal.			18
18 Supervising non-teaching personnel.	19	10	
19 Stimulating teacher interest in professional growth.			9*
Pupil Personnel			
22 Advising students about course and program selection.	1	10	18*
23 Providing for students with special needs.		16	3*
26 Developing a district testing program.		10	18
External Relations			
34 Conducting conferences and interviews with parents.		18	
36 Dealing with other departments of the school district.	15		18
General Management			
39 Provincial educational finance.	17		
42 Allocating budgeted funds.		15	

1. School type designated as: elementary (E), secondary (S), elementary-secondary (E-S).

* Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

Item 22 - Advising students about course and program selection, was infrequently reported by principals of all school types. The elementary group, in addition, was the major contributor to chi-square significance levels in both categories (Table XXI), by providing a much smaller proportion of total responses than had been expected.

Elementary principals also contributed a disproportionately large percentage of recent interest responses to item 02 - Choosing instructional programs from among available alternatives. In this case, they contributed 86.3 percent of total responses (Table XXI), rather than an expected 75.9 percent.

Several differences between frequently and infrequently reported learning interests for this sub-question and those identified by the overall respondent group have been discussed. Reporting trends for the variable "school type" are generally item-referenced, that is, no particular patterns of reporting show up across a number of items.

Sub-Question 3.3: Learning Interests of Principals Classified by Relief Time Allocation

This section examines the results of data analysis with regard to the interests of principals grouped according to the allocation of relief time. This term refers to the percentage of regular school time for which the principal is released from teaching duties to carry out administrative and supervisory responsibilities. Three relief time categories were designated. The lowest of these, in terms of time, was "under fifty percent." Because of study delimitations, all members of this group had at least twenty percent relief time. The other categories included principals who

Table XXI

School Type Groups Identified as Contributing to
Significant Chi-Square for Learning Interests:
Chi-Square Test of Quasi-Independence

Item	α (pre) ¹	Step	Type deleted	Percentage of total responses		α (post) ²
				E ³	O ³	
Recent						
01	0.004	1	Elem.	75.9	63.3	0.861
02	0.015	1	Elem.	75.9	86.3	0.256
07	0.025	1	Elem.	75.9	85.7	0.741
19	0.002	1	El.-sec.	5.2	0.8	0.233
22	0.001	1	Elem.	75.9	25.0	0.456
23	0.028	1	Elem.	75.9	81.0	0.477
Priority						
22	0.006	1	Elem.	75.9	25.0	0.319

1. Chi-square significance level before deletion.
2. Chi-square significance level after deletion.
3. E = expected percentage. O = observed percentage.

reported having from fifty to seventy-five percent relief time, and those who reported having over seventy-five percent of their time allocated to administrative and supervisory responsibilities.

All questionnaires were identifiable as to relief time category. Of the 212 total respondents (Table VII), 55 principals; or 25.9 percent, reported having less than fifty percent relief time and 63 (29.8 percent) reported having from fifty to seventy-five percent. The remaining 94 principals (44.3 percent of the total sample), reported that they were released from teaching duties for over seventy-five percent of regular school hours.

Table XXII

Learning Interests Frequently Reported
Among Respondents Classified
According to Relief Time

Learning interest and operational area	Percentage reporting					
	as recent interest			as priority interest		
	Relief time ¹					
	L	M	H	L	M	H
N:	55	63	94			
Educational Program						
03 Implementing new instructional programs.		57				
05 Developing curriculum at the school level.	51	59	53	22	30	
06 Evaluating the effectiveness of the school's instructional program.	64	84	83*	40	49	54
Staff Personnel						
10 Evaluating and writing reports on the work of teachers.	56	67	60	27	27	29
11 Developing an effective approach to the supervision of instruction.	55	71	70*	31	43	32
19 Stimulating teacher interest in professional growth.		56	62	20	30	26
Pupil Personnel						
23 Providing for students with special needs.	69	76	65	35	43	25*
25 Evaluating student achievement and progress.			50			
General Management						
43 General office management routines: record-keeping, filing systems, etc.	51		*			
44 Managing my time.					21	
45 Legal aspects of the job.			53			

1. Relief time categories designated as: under 50% (L), 50% to 75% (M), over 75% (H).

* Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

Table XXII shows that four learning interests were frequently reported as recent and as priority interests by all groups of principals classified on the basis of relief time. These were:

- 06 - Evaluating the effectiveness of the school's instructional program.
- 10 - Evaluating and writing reports on the work of teachers.
- 11 - Developing an effective approach to the supervision of instruction.
- 23 - Providing for students with special needs.

Two other items were frequently identified by all three groups as either a recent or a priority interest, and by two of the three groups in the other category. These were item 05 - Developing curriculum at the school level, and item 19 - Stimulating teacher interest in professional growth.

Items 06 and 11 were frequently reported both as recent and as priority interests by all relief time groups. In each case, however, the distribution of responses among these groups was significantly different than had been expected. The information given in Table XXIV permits the statement that this variation was caused primarily by the fact that the "under fifty percent" relief time category contributed a smaller proportion of the total responses to items 06 and 11 than their numbers would suggest.

With regard to item 43 - General office management routines, the same group was the major contributor to significance. In this case, however, the group of principals reporting less than fifty percent relief

Table XXIII

Learning Interests Infrequently Reported
Among Respondents Classified
According to Relief Time

Learning Interest and operational area	Percentage reporting as recent interest		
	Relief time ¹		
	L	M	H
N:	55	63	94
<hr/>			
Educational Program			
04 Developing curriculum at the district level.	18		19
Staff Personnel			
13 Interpersonal relationships.		18	18
16 Conducting staff meetings.	18	16	
18 Supervising non-teaching personnel.			10*
Pupil Personnel			
22 Advising students about course and program selection.	4	2	5
26 Developing a district testing program.	16		
External Relations			
36 Dealing with other departments of the school district.	9		18
General Management			
39 Provincial educational finance.	18	19	18
42 Allocating budgeted funds.			19*

1. Relief time categories designated as: under 50% (L), 50% to 75% (M), over 75% (H).

* Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

Table XXIV

Relief Time Groups Identified as Contributing to
Significant Chi-Square for Learning Interests:
Chi-Square Test of Quasi-Independence

Item	α (pre) ¹	Step	Group ⁴ deleted	Percentage of total responses		α (post) ²
				E ³	O ³	
Recent						
06	0.009	1	under 50%	25.9	21.1	0.850
11	0.091	1	under 50%	25.9	21.3	0.870
18	0.011	1	over 75%	44.3	23.1	0.677
35	0.077	1	over 75%	44.3	53.7	0.499
42	0.082	1	under 50%	25.9	38.0	0.819
43	0.072	1	under 50%	25.9	34.6	0.663
Priority						
14	0.020	1	under 50%	25.9	50.0	0.185
17	0.058	1	over 75%	44.3	68.2	0.837
23	0.051	1	over 75%	44.3	33.3	0.356

1. Chi-square significance level before deletion.

2. Chi-square significance level after deletion.

3. E = expected percentage. O = observed percentage.

4. Group designated by percentage of relief time allocated to the principal.

time contributed a disproportionately large number of the total recent interest responses.

The "over seventy-five percent" category was the major contributor to a significant chi-square value for item 23 - Providing for students with special needs. This group identified item 23 as a priority interest less frequently than had been expected.

Two items were infrequently reported as recent interests by all relief time groups. These items, 22 - Advising students about course and program selection, and 39 - Provincial educational finance, were also infrequently selected by the overall respondent group (Table X).

The following items were infrequently reported as recent interests by two of the three groups of principals classified according to relief time allocation:

04 - Developing curriculum at the district level.

13 - Interpersonal relationships.

16 - Conducting staff meetings.

36 - Dealing with other departments of the school district.

No item appeared on both the frequent and the infrequent list for this variable. With the exception of item 43, which was frequently reported as a recent interest among the "under fifty percent" group, all items appearing on either the recent or the priority list for this variable also appeared on the corresponding list for the overall respondent group.

QUESTION 4: LEARNING INTERESTS AND RESPONDENT CHARACTERISTICS

This research question examined the learning interests of principals grouped according to their experience in specified types of positions in education (sub-question 4.1). It also dealt with the variable "education," which referred to the university degree most recently completed or in progress (sub-question 4.2).

Sub-Question 4.1: Learning Interests of Principals
Classified by Experience

This sub-question was handled somewhat differently than were the other sub-questions which examined learning interests. In each of the previous questions, a single independent variable with two or more response categories was designated. School district group, for example, was classified as either urban or rural.

With regard to the principal's experience, three sets of data were gathered:

1. Teaching experience. Years of experience as a teacher, with no administrative or supervisory responsibilities.
2. "Non-principal" administrative experience. Years of experience in administrative positions, but not as a principal.
3. Experience as a principal. This information was divided into three sub-categories:
 - 3.1 Total years of experience as a principal.
 - 3.2 Years of experience as a principal in the present district.
 - 3.3 Years of experience as a principal in the respondent's present school.

The findings related to the categories "teaching experience" and "non-principal administrative experience" are reported in a similar manner to that used for each of the independent variables in the previous research questions. Reporting of the findings for the category "experience as a principal" is somewhat more complex, owing to the existence of the sub-

categories listed above. The approach taken to reporting these findings is reported in the appropriate section below.

Four response categories were provided for each questionnaire item which dealt with experience. These were designated in terms of the number of years, prior to the then-current school year, in each type of position. The response categories were: zero to one year, two to five years, six to ten years and over ten years.

In all but one of the sub-categories of experience, a small number of respondents (varying from one to three) did not provide the necessary data. In each case, their responses were excluded from that phase of data analysis.

In the "non-principal administrative experience" category, twenty-five respondents omitted experience data. It seems plausible to suggest that these individuals may have ignored the item because they had had no experience as a non-principal administrator. However, to have designated them as having had zero to one year of experience in this capacity would probably have been inappropriate, since a suitable response category had been provided on the questionnaire. These questionnaires were also excluded from analysis for this portion of the investigation. Even so, the group of respondents who reported zero to one year of experience as a non-principal administrator was of sufficient size to permit meaningful analysis of the data.

The following sections report the findings of the study with regard to the learning interests of principals classified on the basis of years of experience in various positions.

Teaching experience. Of the 212 questionnaires returned, 209 (Table VIII) were identifiable by principals' experience as a teacher. Twenty respondents, or 9.6 percent of the analyzed portion of the returns, reported zero to one year of experience as a teacher. Ninety-two, or 44.0 percent, reported in the two to five year category. Sixty-seven principals (32.1 percent) reported having had from six to ten years of experience as a teacher, and 30 respondents, or 14.4 percent, reported in the "over ten years" category. Three questionnaires were not identifiable as to experience as a teacher, and were eliminated from this phase of the analysis.

Three items were frequently reported both as recent and as priority interests among principals in all teaching experience categories. These were:

- 06 - Evaluating the effectiveness of the school's instructional program.
- 11 - Developing an effective approach to the supervision of instruction.
- 23 - Providing for students with special needs.

Item 19 - Stimulating teacher interest in professional growth, was frequently reported as a recent interest in three of the four teaching experience categories, and as a priority interest, in all four categories. Item 10 - Evaluating and writing reports on the work of teachers, was frequently reported as a recent interest in three experience categories. The same was true in the priority classification, although the actual categories showed some change, as shown in Table XXV.

Analysis of the data for these widely reported items revealed some significant variations in the distribution of responses among categories

Table XXV

Learning Interests Frequently Reported
Among Respondents Classified
According to Teaching Experience

Learning interest and operational area	Percentage reporting							
	as recent interest				as priority interest			
	Years of experience							
	0-1	2-5	6-10	11+	0-1	2-5	6-10	11+
N:	20	92	67	30				
Educational Program								
04 Developing curriculum at the district level.				*	30			*
05 Developing curriculum at the school level.	65	60		60		34		*
06 Evaluating the effectiveness of the school's instructional program.	80	83	70	80	60	54	42	43
Staff Personnel								
10 Evaluating and writing reports on the work of teachers.		70	54	60*	25	33		33
11 Developing an effective approach to the supervision of instruction.	50	76	57	67*	25	37	30	40
19 Stimulating teacher interest in professional growth.	75		61	57	30	27	21	27
Pupil Personnel								
23 Providing for students with special needs.	70	71	64	73	35	26	40	43
25 Evaluating student achievement and progress.	50		51					
External Relations								
33 Working with home-school groups and parent committees.				50				
34 Conducting conferences and interviews with parents.				53*				
35 Working with agencies which provide services to students and their families.				*				20*
General Management								
44 Managing my time.								20
45 Legal aspects of the job.	60	51			20			

*Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

of experience. For items 10 and 11, the principals who reported having had from two to five years of experience as a teacher were the major contributors to significant chi-square levels (Table XXVII). In each case, this group contributed a disproportionately high proportion of total responses for item 10 or 11.

Item 04 - Developing curriculum at the district level, appears on the infrequently reported interests lists for several of the independent variables examined in this study. The only instance in which this item is frequently reported as a learning interest is shown in Table XXV. Six of the twenty principals in the lowest experience category identified item 04 as a priority learning interest. This accounted for 20.0 percent of the total responses for item 04, compared with an expected contribution by the "zero to one year" group of 9.6 percent. Item 04 does not appear as a frequently reported recent interest in any response category for this variable. It was, however, more sidely reported by principals in the lowest teaching experience category (45.0 percent) than by any other group (Appendix D, Table LXXIII). Again, the disproportionately high proportion of total reports contributed by this group of principals was primarily responsible for a significant variation in reporting patterns for item 04.

Item 22 - Advising students about course and program selection, appears in the "infrequently reported interests" classification for all teaching experience categories (Table XXVI). No item appears on the list which was not also included among the least frequently reported learning interests for the total sample (Table X).

Table XXVI

Learning Interests Infrequently Reported
Among Respondents Classified
According to Teaching Experience

Learning interest and operational area	Percentage reporting as recent interest			
	Years of experience			
	0-1	2-5	6-10	11+
N:	20	92	67	30
<hr/>				
Educational Program				
04 Developing curriculum at the district level.			16	17*
Staff Personnel				
13 Interpersonal relationships.			18	17
14 Handling the stresses of my job.	15			
16 Conducting staff meetings.	15		12	
18 Supervising non-teaching personnel.			9	*
Pupil Personnel				
22 Advising students about course and program selection.	0	4	2	10
26 Developing a district testing program.	15	17		
External Relations				
36 Dealing with other departments of the school district.		14	16	
General Management				
39 Provincial educational finance.		16		10
42 Allocating budgeted funds.				17

*Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

Table XXVII

Teaching Experience Categories Contributing to
Significant Chi-Square for Learning Interests:
Chi-Square Test of Quasi-Independence

Item	α ¹ (pre)	Step	Category ⁴ deleted	Percentage of total responses		α ² (post)
				E ³	O ³	
Recent						
04	0.046	1	0- 1 yr.	9.6	20.0	0.656
10	0.091	1	2- 5 yr.	44.0	50.4	0.581
11	0.029	1	2- 5 yr.	44.0	50.7	0.473
35	0.011	1	6-10 yr.	32.1	18.5	0.990
Priority						
04	0.000	1	0- 1 yr.	9.6	50.0	0.155
05	0.002	1	2- 5 yr.	44.0	66.0	0.090
	0.090	2	over 10 yr.	14.4	2.1	0.329

1. Chi-square significance level before deletion.

2. Chi-square significance level after deletion.

3. E = expected percentage. O = observed percentage.

4. Category designated by years of teaching experience.

Non-principal administrative experience. This section deals with reported learning interests classified by respondents' years of experience as a non-principal administrator.

As has been noted, twenty-five respondents omitted any designation of their experience in this type of position, and their responses were deleted from this phase of analysis.

Of the remaining 187 respondents (Table VIII), 76, or 40.6 percent of the responses analyzed, indicated zero to one year of experience as a

non-principal administrator. Eighty respondents (42.8 percent) reported having had from two to five years, and 26, or 13.9 percent, indicated six to ten years in this capacity. It is important, in examining the findings related to non-principal administrative experience, to note that only five of 187 respondents (2.7 percent) reported having had over ten years of experience as a non-principal administrator.

Five items were frequently reported both as recent and as priority interests among all experience groups. These were:

- 05 - Developing curriculum at the school level.
- 06 - Evaluating the effectiveness of the school's instructional program.
- 11 - Developing an effective approach to the supervision of instruction.
- 19 - Stimulating teacher interest in professional growth.
- 23 - Providing for students with special needs.

Item 10 - Evaluating and writing reports on the work of teachers, was widely reported as a recent interest in three of four experience categories, and as a priority interest in all four.

Nine of the frequently reported learning interests listed in Table XXVIII do not appear on the corresponding list (Table IX) for the total sample. In all but two cases, these items appear in Table XXVIII only because return rates in the "over ten years" category met the criteria for designation as a frequently reported interest. As noted previously, there were only five respondents in this category. The effect of this can be clearly seen in several cases where a response by two principals resulted in inclusion of an item in the recent interests list (Table XXVIII). In

Table XXVIII

Learning Interests Frequently Reported Among
Respondents Classified by Experience as a
Non-Principal Administrator

Item	Percentage reporting							
	as recent interest				as priority interest			
	Years of experience							
	0-1	2-5	6-10	11+	0-1	2-5	6-10	11+
N:	76	80	26	5				
02				80				40*
03		51						
05	59	51	58	60	22	20	31	20
06	75	81	69	80	47	51	46	40
10	62	63	62		30	28	27	20
11	66	74	54	80	38	38	23	40
15								20
17				50				20
19	53	58	58	100	24	23	31	20
23	75	65	62	80	34	36	23	20
25		53						20
28								20
32			50					
33			50					
35		50						
36				60*				20*
41				60				
43				60				*
44			54				35	*
45	54			60				

Table XXIX

Learning Interests Infrequently Reported Among
Respondents Classified by Experience as a
Non-Principal Administrator

Learning interest and operational area	Percentage reporting as recent interest			
	Years of experience			
	0-1	2-5	6-10	11+
N:	76	80	26	5
<hr/>				
Staff Personnel				
12 Managing and resolving conflict.				0
13 Interpersonal relationships.	17		12	0
14 Handling the stresses of my job.				0
16 Conducting staff meetings.		18	19	0
18 Supervising non-teaching personnel.	16	19	19	
Pupil Personnel				
22 Advising students about course and program.	1	3	12	0*
26 Developing a district testing program.		19	12	
External Relations				
34 Conducting conferences and interviews with parents.				0
36 Dealing with other departments of the school district.	11			*
General Management				
39 Provincial educational finance.		15	15	
43 Allocating budgeted funds.			19	0*

*Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

the priority category, only one response was needed to obtain the twenty percent rate which would qualify that item for inclusion.

Two items were frequently reported as recent interests by other experience categories. Item 33 - Working with home-school groups and parent committees, was identified by 50.0 percent of the respondents in the six to ten year category. Item 35 - Working with agencies which provide services to students and their families, was identified by 50.0 percent of the principals in the two to five year category.

Item 36 - Dealing with other departments of the school district, was reported as a recent and as a priority interest by the "over ten years" group to the extent that it was included in Table XXVIII. Again, it should be noted that there were only five respondents in this category. This fact should be taken into consideration when examining the results of the chi-square test of quasi-independence (Table XXX) carried out on this item. The addition or deletion of one response from this experience category makes a major difference in the proportion of principals reporting or of total returns for an item.

Item 22 - Advising students about course and program selection, was infrequently selected by all experience groups as a recent interest (Table XXIX). Item 16 - conducting staff meetings, appears for three groups. The small number of respondents in the "over ten years" category was responsible for the inclusion of items 12, 14, 34 and 42 in the infrequently reported recent interests classification.

Table XXX

Non-Principal Administrative Experience Categories
Contributing to Significant Chi-Square
for Learning Interests

Item	α ¹ (pre)	Step	Category ⁴ deleted	Percentage of total responses		α ² (post)
				E ³	O ³	
Recent						
36	0.022	1	over 10 yr.	2.7	9.1	0.174
Priority						
36	0.090	1	over 10 yr.	2.7	20.0	0.710

1. Chi-square significance level before deletion.
2. Chi-square significance level after deletion.
3. E = expected percentages. O = observed percentages.
4. Category designated by years of experience as a non-principal administrator.

With the exception of item 12, all items appearing in Table XXIX also appeared in Table IX, which identifies items infrequently reported within the total sample.

Experience as a principal. Tables XXXI and XXXII identify the frequently and infrequently reported learning interests of respondents classified according to their experience as a principal. These tables provide essentially the same types of information as did the corresponding tables for other types of experience discussed in previous sections. There is, however, an additional dimension in these tables. The outcomes of analysis are reported in each table for all three classes of experience as a principal: total, in the district and in the school.

Each of these classes of experience is considered as a separate entity in terms of its effects on learning interest response frequencies. However, when the question of variations in reporting patterns is discussed, a closer look is taken at the interrelatedness of these experience groups.

Four items are widely reported for all types of experience. Of twenty-four opportunities (Table XXXI) to appear in the "frequent" category, these appeared in all twenty-four instances. These items were:

- 06 - Evaluating the effectiveness of the school's instructional program.
- 11 - Developing an effective approach to the supervision of instruction.
- 23 - Providing for pupils with special needs.

Item 10 - Evaluating and writing reports on the work of teachers, appeared in twenty-three of a possible twenty-four.

Only item 28 - Developing school guidelines for pupil conduct, appeared both as a frequently and as an infrequently reported interest. This item appeared only in the "present school" classification as a recent interest, and only in the "present district" classification as a priority interest. Also, in each instance it appeared only in one response category. As a recent interest, item 28 was frequently identified by principals who reported having been in their present schools for more than ten years. This group (Table XXXIV) was responsible for almost twice as many responses on item 28 as had been expected.

Ten items reported in Table XXXI as frequently reported interests do not appear on the corresponding list for the total sample. These items occur in Table XXXI in only a few places, and several of them will be

Table XXXI
Learning Interests Reported Frequently
Among Respondents Classified
by Experience as a Principal

Item	Cl. ¹	Years of experience	Percentage reporting								
			as recent interest				as priority interest				
			0-1	2-5	6-10	11+	0-1	2-5	8-10	11+	
		N _p ¹	42	62	42	64					
		N _d	56	65	34	56					
		N _s	86	87	21	17					
01	P			50		*					
	s					53					
02	P								21		
03	P			52		58					
	d			54		57					
	s			52		59			24		
05	P		60	57		58	24	29		20	
	d		57	54	50	55	21	26	24		
	s		54	60		53	21	25	24		
06	P		79	66	79	89*	55	37	48	59*	
	d		79	65	85	89*	60	32	53	57*	
	s		83	74	71	88	55	46	43	47	
10	P		76	65	57	50*	36	34	24	20	
	d		71	65	53	50*	36	31	21	21	
	s		64	61	52	59	33	28	24		
11	P		69	63	64	69	52	29	31	30*	
	d		71	62	65	68	52	31	27	27*	
	s		72	60	62	77	44	30	24	24*	
15	s					53					
17	s									24	
19	P			60	67	53		26	26	28	
	d			65	71	*		34	24	25	
	s			66		65*	22	33		*	
23	P		69	66	67	73	36	29	36	31	
	d		70	66	65	75	34	29	32	26	
	s		69	70	71	65	33	31	38	29	
25	P			53		50					
	d			55		56			24		
	s			51		53			24		
27	d									20*	
	s									24	
28	s					65*					
29	s				53	*					
32	P		50				24				
	d		52				23				
	s					53					
35	s					53					
41	P		55			*					
	d		52			*					
43	P		55			*					
44	P					50				22	
	d								24	*	

1. Experience classification (cl.) designated as:

- p = total experience as a principal
- d = experience as a principal in present district
- s = experience as a principal in present school

* Chi-square significant at 0.10 level

N.B. All percentages taken to nearest whole number.

Table XXXII

Learning Interests Infrequently Reported
Among Respondents Classified
by Experience as a Principal

Learning interest	Cl. ¹	Reporting as recent interest			
		Years of experience	0-1 yr.	2-5 yr.	6-10 yr. over 10 yr.
		N _p ¹	42	62	42 64
		N _d	56	65	34 56
		N _s	86	87	21 17
04	p				19 16
	d				14
	s				19 6
12	s				14
13	p		14		14
	d		14		18 18
	s		19		10
16	p		12		19 16
	d		16		18 18
	s		13		19 18
18	p		19		14 11*
	d		14		12 13*
	s		17		14 18
22	p		5	7	0 3
	d		4	6	0 4
	s		2	5	0 2
26	p				19 17
	d		18		18
	s		6		5 18*
28	d				15 *
33	s				14
36	p		10		14
	d		13		18 13
	s		13		10
39	p				14 14
	d				18 13
	s			16	14 18
42	p				19 14*
	d				9 16*
	s				14

1. Experience classification (cl.) designated as:

p = total experience as a principal

d = experience as a principal in present district

s = experience as a principal in present school

* Chi-square significant at 0.10 level

N.B. All percentages taken to nearest whole number

examined in the discussion which follows.

The chi-square test of quasi-independence was carried out for two sets of items. Items which were frequently reported as both recent and priority interests for at least one type of experience, and for which the chi-square level was significant at the 0.10 level, were tested. The other items analyzed were any which, although they did not qualify on the basis of reporting frequency, reflected a pattern of statistically significant chi-square values.

A pattern was considered to exist when chi-square was significant for both recent and priority interests in a given experience classification, such as "present school." A pattern was also considered to exist when chi-square was significant for either recent or priority interests in two or three classes of experience, such as "present district" and "present school."

The major emphasis of this phase of the investigation was on the location of variations in reporting patterns according to experience as a principal. For this reason, the discussion of the findings displayed in Tables XXXIII and IIIIV focusses mainly on those instances where chi-square was statistically significant for total experience as a principal. In other words, discussion centres on variations in reporting patterns among groups of respondents categorized according to their total experience as a principal.

In six cases, a significant chi-square for experience as a principal was primarily caused by principals in the "zero to one year as a principal" category. In each case, the proportion of total responses contributed by this group was unexpectedly high. The specific items were:

Table XXXIII

Principal's Experience Categories Identified as Contributing
to Significant Chi-Square for Recent Learning Interests

Learning interest	Class. ¹	(pre) ²	Step	Category deleted	Percentage of total responses		
					E ³	O ³	(post) ²
06	p	0.077	1	2- 5 yr.	29.5	22.1	0.493
	d	0.011	1	2- 5 yr.	30.8	20.2	0.855
11	p	0.053	1	0- 1 yr.	20.0	30.6	0.978
	d	0.017	1	0- 1 yr.	26.5	39.7	0.855
	s	0.096	1	0- 1 yr.	40.8	52.1	0.777
19	s	0.091	1	2- 5 yr.	41.2	54.7	0.500
25	d	0.076	1	6-10 yr.	16.1	28.6	0.162
27	p	0.069	1	11+ yr.	30.5	50.0	0.226
	d	0.071	1	2- 5 yr.	30.8	12.5	0.346
41	p	0.001	1	0- 1 yr.	20.0	70.0	0.945
	d	0.001	1	0- 1 yr.	26.5	80.0	0.747
	s	0.009	1	2- 5 yr.	41.2	0.0	0.124
42	p	0.000	1	0- 1 yr.	20.0	85.7	0.423
	d	0.004	1	0- 1 yr.	26.5	85.7	0.498
44	d	0.073	1	0- 1 yr.	26.5	8.8	0.833
45	s	0.093	1	6-10 yr.	10.0	0.0	0.164

1. Experience classification (class.) designated as:
 p = total experience as a principal
 d = experience as a principal in present district
 s = experience as a principal in present school

2. pre = chi-square significance level before deletion
 post = chi-square significance level after deletion

3. E = expected percentage. O = observed percentage

Table XXXIV

Principal's Experience Categories Identified as Contributing
to Significant Chi-Square for Priority Learning Interests

Learning interest	Class. ¹	(pre) ²	Step	Category deleted	Percentage of total responses E ³	O ³	(post) ²
01	p	0.041	1	2- 5 yr.	29.5	39.7	0.331
06	p	0.021	1	11+ yr.	30.5	34.8	0.244
	d	0.007	1	2- 5 yr.	30.8	25.5	0.293
10	p	0.048	1	0- 1 yr.	20.0	25.0	0.258
	d	0.083	1	0- 1 yr.	26.5	31.3	0.237
18	p	0.058	1	2- 5 yr.	29.5	46.2	0.504
	d	0.023	1	2- 5 yr.	30.8	51.3	0.932
19	d	0.039	1	6-10 yr.	16.1	20.2	0.083
		0.083	2	2- 5 yr.	30.8	35.3	0.850
	s	0.081	1	2- 5 yr.	41.2	47.9	0.427
27	d	0.064	1	11+ yr.	26.5	37.0	0.575
28	s	0.015	1	11+ yr.	8.1	15.1	0.207
29	s	0.070	1	0- 1 yr.	40.8	29.7	0.540
41	p	0.008	1	0- 1 yr.	20.0	33.3	0.739
	d	0.003	1	0- 1 yr.	26.5	42.0	0.540
	s	0.011	1	2- 5 yr.	41.2	27.5	0.228
42	p	0.002	1	0- 1 yr.	20.0	38.0	0.465
	d	0.004	1	0- 1 yr.	26.5	44.0	0.136
43	p	0.035	1	11+ yr.	30.5	21.0	0.234
45	s	0.018	1	11+ yr.	8.1	13.7	0.467

1. Experience classification (class.) designated as:

p = total experience as a principal

d = experience as a principal in present district

2 = experience as a principal in present school

2. pre = chi-square significance level before deletion

post = chi-square significance level after deletion

3. E = expected percentage. O = observed percentage.

- 10 - Evaluating and writing reports on the work of teachers (as a recent interest).
- 11 - Developing an effective approach to the supervision of instruction (as a priority interest).
- 41 - Preparing annual school budget submissions (as a recent and as a priority interest).
- 42 - Allocating budgeted funds (as a recent and as a priority interest).

The value of chi-square was statistically significant for a large number of the items analyzed by respondents' total experience as a principal. Only where this significant value was primarily attributed to the group of respondents with zero to one year of experience as a principal was there a consistent pattern of response. In each of these cases, the percentage of total responses contributed by this group of principals was disproportionately high. The specific learning interests reported in this manner by the minimally experienced group are those discussed above (10, 11, 41, 42).

In many cases, variations in reporting patterns within the "total experience as a principal" category are repeated for other classifications (Tables XXXIII, XXXIV). This may be partially accounted for by the fact that this group is a subset of the two other experience classifications. The group of principals who reported zero to one years total experience is a sub-group of those who, regardless of their total experience as a principal, have zero to one year of experience in the district. This group, in turn, is a subset of the principals who reported having been in their present school for zero to one year.

Respondents in the "two to five years as a principal" category contributed a disproportionately large percentage of recent interest responses for two items. These were item 01 - Assessing community and school needs for special courses and programs, and item 18 - Supervising non-teaching personnel.

Respondents with six to ten years of experience as a principal were responsible for a significant chi-square value in one instance only. For item 02 - Choosing instructional programs from among available alternatives, this group contributed 42.9 percent of total responses in the priority category (Table XXXIV). Their expected contribution was 20.0 percent, less than one-half of the observed value.

The group of respondents with the greatest number of years of experience as a principal (over ten years) made disproportionately large contributions to the total responses for two items. In the recent interests category, their total contribution was higher than expected for item 06 - Evaluating the effectiveness of the school's instructional program. The same was true for item 27 - Dealing with student problems, in the priority category. However, for item 43 - General office management routines, the highly experienced group contributed a smaller percentage of total recent interest responses than expected, based on their group size.

Many of the variations among response categories for experience were item-referenced. However, there did appear to be a pattern of variation for several items. In a number of cases, these variations could be attributed to the group of respondents with from zero to one year of ex-

perience as a principal. In each case, the pattern was repeated when returns for the same item were considered in the light of experience as a principal in the present district.

The items which were widely reported among groups of principals classified by types and years of experience were generally the same as those which had been frequently identified (Table IX) within the overall respondent group. The same statement may be made about infrequently reported items.

Sub-Question 4.2: Learning Interests of Principals Classified by Education

This section reports the findings of the study with regard to the learning interests identified by groups of principals classified according to their most recently achieved educational level. Three categories were designated: Bachelor's degree (148 respondents), Master's degree in education administration (N:43) and Master's degree, but not in education administration (N:21). In each case, the degree specified could either have been completed or in progress.

Five items were frequently reported both as recent and as priority interests among all groups of principals classified according to level of formal education. These were (Table XXXV):

- 06 - Evaluating the effectiveness of the school's instructional program.
- 10 - Evaluating and writing reports on the work of teachers.
- 11 - Developing an effective approach to the supervision of instruction.

Table XXXV

Learning Interests Frequently Reported
Among Respondents Classified
by Level of Formal Education

Learning interest and operational area	Percentage reporting					
	as recent interest			as priority interest		
	Degree ¹					
N:	Bach.	Admin.	Other	Bach.	Admin.	Other
	148	43	21			
<hr/>						
Educational Program						
03 Implementing new instructional level.	51					
05 Developing curriculum at the school level.	53	56	62	22	23	
06 Evaluating the effectiveness of the school's instructional program.	76	84	81	46	58	52
Staff Personnel						
10 Evaluating and writing reports on the work of teachers.	62	56	62	29	23	29
11 Developing an effective approach to the supervision of instruction.	66	65	76	35	30	43
19 Stimulating teacher interest in professional growth.	51	70	67*	23	35	24
Pupil Personnel						
23 Providing for students with special needs.	72	63	67	34	23	43
25 Evaluating student achievement and progress.	50					
External Relations						
32 Determining community attitudes and priorities.			67*			24
General Management						
44 Managing my time.			52		33	*
45 Legal aspects of the job.		38				

1. Level of formal education designated by university degree most recently completed or in progress: Bachelor's (Bach.), Master's in administration (Admin.), Master's in some other field (Other).

* Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

Table XXXVI

Learning Interests Infrequently Reported
Among Respondents Classified
by Level of Formal Education

Learning interest and operational area	Percentage reporting as recent interest		
	Degree: ¹		
	Bach.	Admin.	Other
N:	148	43	21
<hr/>			
Educational Program			
04 Developing curriculum at the district level.	18		
Staff Personnel			
13 Interpersonal relationships.		14	19
16 Conducting staff meetings.		16	19
18 Supervising non-teaching personnel.	16		19
Pupil Personnel			
22 Advising students about course and program selection.	3	5	5
26 Developing a district testing program.	18		19
External Relations			
36 Dealing with other departments of the school district.	13		
General Management			
39 Provincial educational finance.	13		*
42 Allocating budgeted funds.		16	

1. Level of formal education designated by university degree most recently completed or in progress: Bachelor's (Bach.), Master's in administration (Admin.), Master's in some other field (Other).

* Chi-square significant at 0.10 level.

N.B. All percentages taken to nearest whole number.

Table XXXVII

Education Categories Identified as Contributing to
Significant Chi-Square for Learning Interests:
Chi-Square Test of Quasi-Independence

Item	α (pre) ¹	Step	Category ⁴ deleted	Percentage of total responses		α (post) ²
				E ³	O ³	
Recent						
12	0.081	1	Other	9.9	17.2	0.634
19	0.062	1	Bach.	69.8	63.3	0.802
27	0.063	1	Admin.	20.3	12.2	0.357
32	0.095	1	Other	9.9	14.9	0.997
39	0.006	1	Bach.	69.8	48.7	0.802
Priority						
44	0.004	1	Admin.	20.3	40.0	0.255

1. Chi-square significance level before deletion.

2. Chi-square significance level after deletion.

3. E = expected percentage. O = observed percentage.

4. Bach. = bachelor's degree

Admin. = Master's degree in education administration.

Other = Master's degree, not in education administration.

19 - Stimulating teacher interest in professional growth.

23 - Providing for students with special needs.

Item 32 - Determining community attitudes and priorities, was among the most frequently reported interests for the total sample (Table IX), but was frequently reported for this variable only by the principals with a master's degree in education administration completed or in progress. For this item, and for item 12 - Managing and resolving conflict (Table XXXVII), this group contributed a disproportionately large number of the total responses in the recent interests category.

As Table XXXVII shows, there were two other items for which a pattern of variation from expected reporting patterns was observed. These were items 19 and 39, for which the group of principals reporting education at the Bachelor's degree level were responsible for a smaller proportion of total contributions than had been expected.

Only item 22 - Advising students about course and program selection, was placed in the "infrequently reported recent interests" category by all three education groups. No item appeared in both lists, and all items identified for this variable either as frequently or as infrequently reported interests also appeared in the corresponding list for the total sample.

SUMMARY

This chapter has examined the findings of the present study with regard to the learning interests identified by respondents. These interests were classified as recent and priority items. Discussion focussed on those learning interests which were frequently reported and on those which were only infrequently reported in terms of the number of principals who identified them.

The chapter began with a report of the findings for the total sample. This section was followed by examination of the data for three research questions which focussed on characteristics of the school district, the school and the principal.

The findings were examined in two ways. First, the extent to which each item had been identified as a recent and as a priority interest

was ascertained. Second, an attempt was made to ascertain whether reporting patterns for each item showed significant variation across the response categories of a given independent variable.

The total of all response categories for all variables was forty-five. A record was kept of the categories within which each item was frequently reported as a recent and as a priority interest, and of the categories in which it was infrequently reported as a recent interest. Figure 5 highlights this information by showing the number of response categories for which each item was identified in one of the three ways listed above.

The learning interests which most often met the criterion of having been reported as recent interests by at least fifty percent of the principals in various response categories were:

- 05 - Developing curriculum at the school level.
- 06 - Evaluating the effectiveness of the school's instructional program.
- 10 - Evaluating and writing reports on the work of teachers.
- 11 - Developing an effective approach to the supervision of instruction.
- 19 - Stimulating teacher interest in professional growth.
- 23 - Providing for students with special needs.

Item 11 was frequently reported both as a recent and as a priority interest in all response categories of all variables. The other items listed above were also widely reported as priority interests. In this case, the criterion for inclusion was that at least twenty percent of the principals in a category had identified the item as a priority interest.

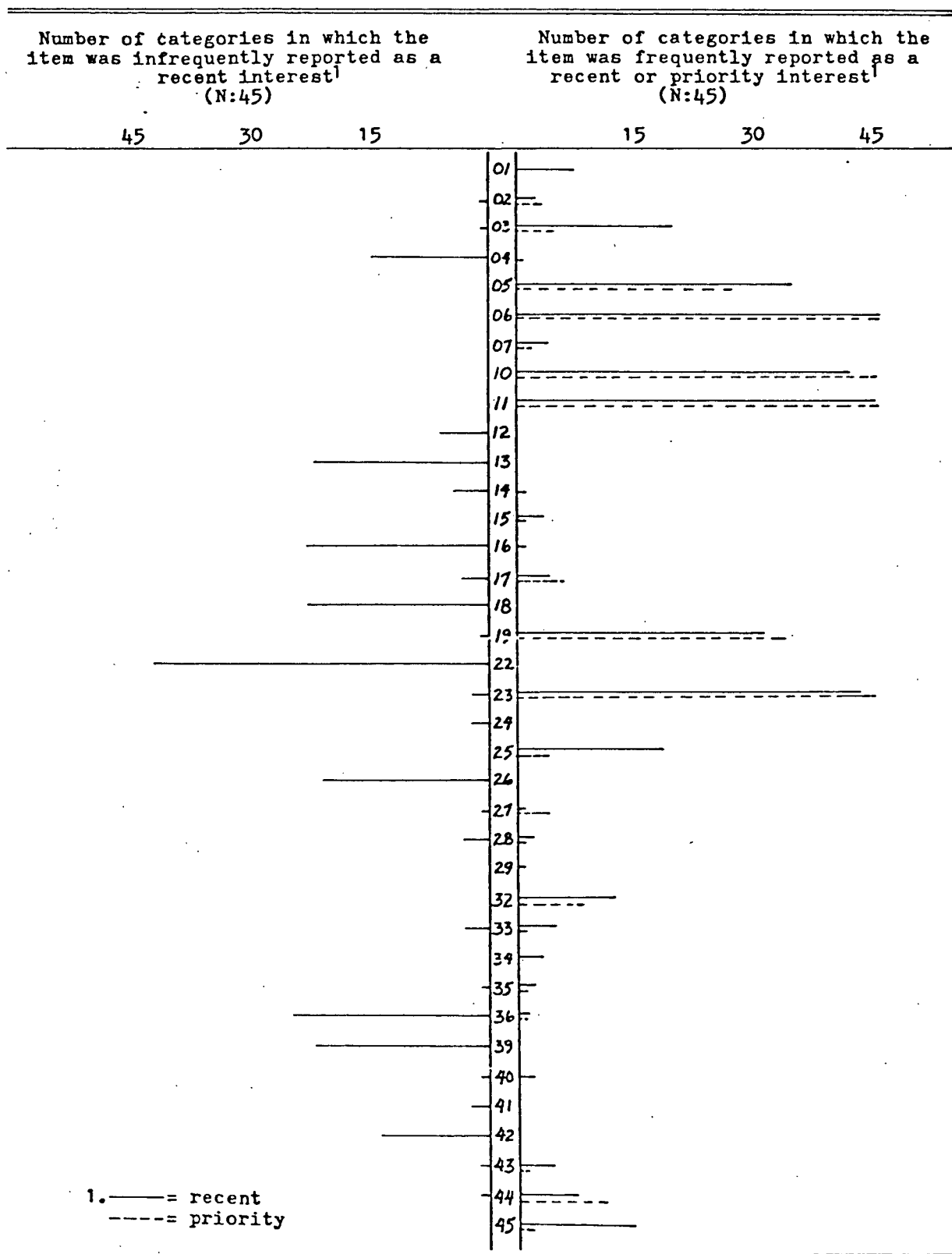


Figure 5
Frequent and Infrequent Reporting of Learning
Interests Across all Response Categories

Items which were reported by fewer than twenty percent of the principals in a given response category were classified as infrequently reported interests. Several recent interest items were designated in this way for numerous categories, as shown in Figure 5:

- 13 - Interpersonal relationships.
- 16 - Conducting staff meetings.
- 18 - Supervising non-teaching personnel.
- 22 - Advising students about course and program selection.
- 26 - Developing a district testing program.
- 36 - Dealing with other departments of the school district.
- 39 - Provincial educational finance.

Item 22 was in the "infrequently reported recent interest" category for all response categories of all independent variables.

While the above summary gives an indication of the breadth of interest in various items, it does not deal with variations in reporting patterns among the response categories of each variable. Generally, variations in reporting patterns were related to specific single items in the list of potential learning interests. These variations permit some discussion of the specific learning interests of various groups of principals, and how these might be related to the independent variables studied. This discussion appears in Chapter Eight.

Response rates among principals separated into urban and rural district groups were generally quite consistent between groups and with the total sample. Reporting patterns varied significantly for several items, but no repeated patterns were observed.

There was wider variation among individual school districts. Approximately two-thirds of the items listed in the questionnaire qualified for inclusion in the list of frequently reported learning interests. The same was true for infrequently reported items. Although widespread variation in reporting patterns was observed, there was no repeated pattern in which these variations could be attributed to a particular district or group of districts.

A similar summary statement may be made about the variables which represented school characteristics: location, type and relief time. In general, lists of frequently and infrequently reported learning interests were similar among response categories to those identified by the overall respondent group. Numerous examples of disproportionate reporting patterns were identified. In some cases, one group was the primary cause of significant variation for several items. However, no consistent patterns were observed, such as a repeatedly high proportion of responses being contributed by one group over several items.

Two respondent-related independent variables were examined: experience in various positions, and level of formal education. In some instances, variations in reporting patterns appeared to be related to education, although not in any systematic or repeated manner.

There were some definite patterns of variation among groups of principals classified on the basis of experience. This was particularly noticeable for the sub-categories related to teaching experience and to experience as a principal. Patterns were of two types. In some cases, a particular group was the major contributor to significant variations in

reporting patterns for both recent and priority interests and because the same reporting patterns occurred (i.e. disproportionately high or low) in both instances. In other instances, one group was mainly responsible for variation over several items as either a recent or a priority interest. Again, the reporting trend was consistently either high or low. Often, these patterns were first noticed in considering total experience as a principal and were repeated for experience in present district.

In summary, there was considerable agreement among respondents grouped according to several different variables that several items were of widespread interest, and that several others were of interest to very few principals. There were numerous examples of statistically significant variations in reporting patterns. Many of these variations permit discussion and speculation about the interests of groups of principals.

The specific findings with regard to the learning interests of respondents have been reported in this chapter. Further discussion, including some conclusions, implications and recommendations, is presented in Chapter Eight. Chapter Seven deals with the findings related to learning activities.

Chapter 7

FINDINGS OF THE STUDY: LEARNING ACTIVITIES

INTRODUCTION

This chapter reports the findings of the present study with regard to the learning activities identified by respondents. It deals in chronological order with Research Questions Five through Eight, and with the sub-questions which focus on specific independent variables. The general organization of the chapter is similar to that of Chapter Six, since the order of questions about learning activities parallels that of the questions which relate to learning interests.

Question Five examined the learning activities of the total sample. Question Six considered school district characteristics, and specifically, the variables designated as district group and school district. Question Seven examined the learning activities of principals grouped by school characteristics (location, type and allocation of relief time). The final research question dealt with the learning activities of principals grouped according to their experience and education.

RECENT USE, AVAILABILITY AND PREFERENCE

Three dimensions of an overall view of learning activities were studied in three types of questions on the research instrument (Appendix B). These dimensions might be termed recent use, availability and preference.

Rate of Recent Use

Principals were presented with a list of twenty-four learning activities, which became the focus of the three types of questions noted above. The first of these questions (questionnaire part C1) dealt with the reported rate of recent use of each activity. "Recent" was considered to be the previous and the then-current school year.

Respondents reported their rate of recent use of each activity, on a four-point scale, as: never, seldom (once or twice), occasionally (three or four times) or frequently (five or more times). These rates were converted to numerical values as follows: One (never), two (seldom), three (occasionally) and four (frequently). From these values, mean ranks were computed for the total sample and for the response categories of each independent variable.

It should be noted that the statistics obtained by the above procedure are means of ranks, not mean rates of use. A value of 2.5, for example, indicates that the mean of reported ranks was at the mid-point of the four-point scale, halfway between seldom (once or twice) and occasionally (three or four times). This value does not indicate that the activity tended to be used on 2.5 occasions during recent months.

The Kruskal-Wallis one-way analysis of variance, corrected for ties, was used to establish levels of significance for variations in reporting patterns among groups of respondents. The chi-square test of quasi-independence was used to locate the source of each statistically significant variation (0.10 level).

Desire for Greater Availability

In part C2 of the questionnaire, respondents were asked to identify those activities which they probably would have used more often during recent months, had these activities been more readily available. The number and percentage reporting this desire for greater availability were tabulated. The chi-square test was used to establish levels of significance for variations in reporting patterns. The chi-square test of quasi-independence enabled the major contributors to these variations to be identified.

Preferred Learning Activities

In the final portion of the questionnaire (item D2), respondents were asked to match each of their previously-identified priority learning interests with learning activities which, given ready availability, they would prefer to use. These were to be activities perceived by the respondent to be the most useful in learning more about their areas of priority interest. These data were analyzed in the same manner as those related to activities for which greater availability was desired.

These types of information provided a three-dimensional view of the learning activities of respondents. The data on these dimensions might be considered as responses to three questions, which asked how frequently the activity was reportedly used, whether that frequency of use was perceived as adequate, and whether the activity was widely considered to be very useful. The following section discusses the findings as they relate to the overall sample of principals studied.

QUESTION 5: REPORTED LEARNING ACTIVITIES OF RESPONDENTS

The findings regarding the reported learning activities of the whole sample are reported in Table XXXVIII. This table shows the mean of recent use ranks, and the number and percentage of principals indicating a desire for greater availability or a preference for a given activity.

Overall Responses

Six items had a mean recent use rank of at least 3.0:

- 08 - Consultation with teachers.
- 10 - Consultation with district central office staff.
- 12 - Consultation with other principals.
- 13 - Informal get-togethers with other administrators.
- 14 - Discussions with family or friends.
- 18 - Professional reading: books, journals, bulletins, etc.

These items had the highest mean ranks of recent use rates of the twenty-four learning activities listed in the questionnaire. It may also be noted (Table XXXVIII) that relatively few principals reported a desire for greater availability of these activities.

Three of the items listed above were widely reported as preferred learning activities. These were items 08 - Consultation with teachers, item 10 - Consultation with district central office staff, and item 12 - Consultation with other principals.

For six other learning activities, the mean of recent use ranks was less than 2.0, indicating generally infrequent use among the overall respondent group. These items were:

Table XXXVIII
Learning Activities Reported by Respondents

Learning activity	Mean of recent use	Greater availability ² desired by		Preferred by ³	
		no. (N: 212)	%	no. (N: 212)	%
01 In-district workshop (1-3 days)	2.7	82	38.7	149	70.3
02 Out-of district workshop (1-3 days)	2.2	56	26.4	70	33.0
03 Series of workshops or study sessions on a specific topic	2.1	93	43.9	152	71.7
04 Short course (1-2 weeks)	1.3	82	38.7	114	53.8
05 Annual conference or convention	2.0	25	11.8	14	6.6
06 District orientation or administrative training session	2.1	76	35.8	97	45.8
07 University course	1.6	38	17.9	53	25.0
08 Consultation with teachers	3.8	4	1.9	76	35.8
09 Consultation with vice-principal	2.3	16	7.5	13	6.1
10 Consultation with district central office staff	3.4	22	10.4	86	40.6
11 Consultation with an outside specialist	2.4	50	23.6	122	57.5
12 Consultation with other principals	3.5	28	13.2	82	38.7
13 Informal get-together with other administrators	3.2	4	11.3	47	22.2
14 Discussions with family or friends	3.0	0	0.0	10	4.7
15 Informal contacts at committee meetings	2.9	5	2.4	17	8.0
16 Visits to other schools in the district	2.5	51	24.1	52	24.5
17 Visits to schools in other districts	1.7	92	43.4	76	35.8
18 Professional reading: books, journals, bulletins, etc.	3.3	31	14.6	65	30.7
19 Reference to a personal file of collected articles	2.7	8	3.8	3	1.4
20 Reviewing university course notes	1.7	2	0.9	2	0.9
21 Writing a paper or giving a presentation	1.8	6	2.8	1	0.5
22 Purposeful trial-and-error and experimentation	2.7	2	0.9	16	7.5
23 Reviewing the results of research	2.3	37	17.5	39	18.4
24 Use of information retrieval systems, i.e. ERIC	1.6	27	12.7	8	3.8

- 04 - Short course (1-2 weeks).
- 07 - University course.
- 17 - Visits to schools in other districts.
- 20 - Reviewing university course notes.
- 21 - Writing a paper or giving a presentation.
- 24 - Use of information retrieval systems, i.e. ERIC.

Relatively few principals indicated either a desire for greater availability or a preference for four of these learning activities: items 07, 20, 21 and 24. Table XXXVIII shows, however, that both item 04 - Short course, and item 17 - Visits to schools in other districts, were frequently designated both as activities for which greater availability was desired, and as preferred learning activities.

Several other items fell in the middle range of recent use ranks, but were frequently reported both as "greater availability desired" and as preferred learning activities:

- 01 - In-district workshop (1-3 days).
- 02 - Out-of-district workshop (1-3 days).
- 03 - Series of workshops or study sessions on a specific topic.
- 06 - District orientation or administrative training session.
- 11 - Consultation with an outside specialist.
- 16 - Visits to other schools in the district.

Item 03 - Series of workshops or study sessions on a specific topic, was the item for which a desire for greater availability was most frequently reported. It was also the item which was most widely identified

as a preferred learning activity. Items 01, 04 and 06 also ranked among the top five of all twenty-four items in terms of frequency of reporting in both categories.

Table XXXVIII shows that the activities which appear to have been more frequently used tended to cluster in the consultative group of items (08 through 17). Except for items 11 and 17, the activities which were widely reported both as needing to be more available and as preferred learning activities were formal activities (items 01 through 07). In general, although there were a number of exceptions, the items for which greater availability was generally not desired, and which were not identified as preferred activities, were found in the personal group (items 18 through 24).

The data on learning activities of the total sample have provided an overall picture of reporting trends in terms of recent use, desire for greater availability and preference for each activity. Following a discussion of some additional learning activities specified by respondents are the sections dealing with school district, school and respondent characteristics. In each of these sections, the emphasis is on variations from the findings reported for the overall sample, and particularly on variations among the response categories for each independent variable. Where such variation did not occur, response patterns were not significantly different among groups of principals.

Additional Learning Activities Specified by Respondents

Provision was made in the questionnaire for principals to specify additional learning activities which were of value to them, and which they

perceived to have been omitted from the questionnaire. These items are listed in Appendix E, Table LXXVI.

Several of the added items, such as "informal get-togethers," were almost identical to learning activities which had been included in the questionnaire. Several others were variations or specific examples of listed activities. There were also some added items which appeared to be combinations of two or three listed activities.

Some of the additional items appeared not to be learning activities as defined for the present study, but activities carried out to accomplish objectives implied by certain of the learning interest statements. "Staff-community sporting activities," for example, appear to be part of a program of external relations, rather than a way of gaining increased knowledge and skill about the processes involved in developing and maintaining external relations.

QUESTION 6: LEARNING ACTIVITIES AND SCHOOL DISTRICT CHARACTERISTICS

The learning activities of respondents grouped according to two school district variables were examined in this research question. The specific variables were district group (sub-question 6.1) and individual school district (sub-question 6.2). The discussion in this section focusses on reporting trends and significant variations between district groups and among school districts.

Sub-Question 6.1: Learning Activities of Principals
Classified by District Group

In general, reporting patterns showed no significant variation between urban and rural district group. Their responses in these cases were very similar to those of the overall sample. In seven instances, however (Table XI, page 95), there was a statistically significant difference between groups for one or more of the dimensions measured.

In six of these cases, significant variation existed in the returns from which the means of recent use ranks was determined (items 03, 04, 09, 12, 23, 24). For purposes of analysis, returns in each of the four use rate categories (never, seldom, occasionally, frequently), were expected to be distributed between district groups in a manner proportionate to their size. Where this was not the case, the level of statistical significance is shown in Table XXXIX beside the mean of recent use ranks.

Disproportionate reporting patterns for five of the six items noted above resulted in lower means of recent use rates in rural than in urban school districts. In other words, the rates of recent use reported by rural group members tended to be lower than those reported by urban group members to the extent that their reporting patterns were significantly different.

These items were:

- 03 - Series of workshops or study sessions on a specific topic.
- 09 - Consultation with vice-principal.
- 12 - Consultation with other principals.
- 23 - Reviewing the results of research.
- 24 - Use of information retrieval systems, i.e. ERIC.

Table XXXIX

Learning Activities: Items Showing Significant Variation
in Reporting Patterns between District Groups

Learning activity	Mean of recent use ranks		Sig. ¹	Respondents reporting desire for greater availability				Sig. ¹	Respondents reporting as a preferred activity				Sig. ¹
	Group:			urban		rural			urban		rural		
	urban	rural		no.	%	no.	%		no.	%	no.	%	
	N: 113	99											
03	2.3	1.9	0.009										
04	1.3	1.4	0.097										
09	2.5	2.0	0.010	3	2.7	13	13.1	0.009					
12	3.5	3.4	0.072						51	45.1	31	31.3	0.055
18				11	9.7	20	20.2	0.050					
23	2.4	2.2	0.048										
24	1.7	1.5	0.081										

1. Sig. = level of significance.

Only in the case of item 04 - Short course (1-2 weeks) was the mean of recent use ranks higher in the rural than in the urban group for an item where statistical significance was shown.

Two of the items shown in Table XXXIX were reported more frequently by rural than urban group members as items for which greater availability was desired. These were items 09 - Consultation with vice-principal, and 18 - Professional reading: books, journals, bulletins, etc.

Item 12 - Consultation with other principals, was much more widely reported as a preferred activity within the urban group than within the rural group. Only about thirty-one percent of the urban group respondents identified item 12 as preferred, compared with approximately forty-five percent of the urban group.

Sub-Question 6.2 - Learning Activities of Principals Classified by School District

This sub-question examined the learning activities of principals grouped by individual school district. Tables XL and XLI show the results of analyses carried out on items for which reporting patterns varied significantly among school districts. Where a sufficient number of principals reported a desire for greater availability of an item or identified it as a preference, the chi-square test of quasi-independence was utilized to locate the major contributors to significant variation. In these cases, the major contributors are marked with an asterisk (*) in the table.

In general, principals in Districts F through K, the rural districts, reported less frequent recent use of the learning activities listed in Table XL than did the principals in Districts A through E. An exception was

Table XL

Learning Activities: Means of Recent Use Ranks
for Items Showing Significant Variation in Reporting
Patterns Among School Districts.

Learning activity	Mean of recent use ranks										Level of Significance
	District										
	A N: 30	B 23	C 21	D 23	E 16	F 25	G 18	H 20	J 20	K 16	
01	3.2	2.7	2.6	2.7	2.8	2.6	2.7	2.6	3.0	2.3	0.027
02	1.9	2.5	2.0	2.2	2.1	2.4	2.1	2.3	2.2	1.9	0.043
03	2.7	2.3	1.9	2.1	2.4	2.0	2.4	1.6	1.8	1.9	0.007
04	1.1	1.6	1.3	1.3	1.2	1.4	1.8	1.3	1.3	1.2	0.073
06	2.7	2.1	1.7	2.0	2.1	2.7	2.4	1.4	1.6	1.9	0.000
09	2.6	1.6	3.6	2.3	2.5	1.9	1.9	2.0	2.1	2.1	0.004
20	1.9	2.1	1.4	1.6	1.6	1.8	1.9	1.6	1.4	1.5	0.065

item 04 - Short course (1-2 weeks), which appeared to have been used more frequently by principals in the rural school districts. This finding was also reflected in the means of recent use ranks for district groups, which were discussed in the previous section. Over the whole group of items in Table XL, urban school district means were above total sample means in twelve instances, and below in fourteen. Rural district means were above sample means in eleven instances, and below in twenty-three.

Item 09 - Consultation with vice-principal, appears in Table XL and in both categories of Table XLI. There would seem to be a fairly definite urban/rural district split with regard to this item. Means of recent use ranks for this item are above the total sample mean in three of the five urban districts (A, C, E). The means in all five rural districts are lower than the total sample mean.

Item 03 - Series of workshops or study sessions on a specific topic, and item 06 - District orientation or administrative training session, appear in Table XL and in the "availability" portion of Table XLI. For each of these items, mean ranks of recent use rates in Districts A through E were more often below the means for the total sample than was the case in Districts F through K. In each case, the number of responses in the "availability" category permitted further analysis to locate the major contributors to significance. Both for item 03 and for item 06, a district which contributed a disproportionately small percentage of total returns was identified. For item 03, this was District A, and for item 06, District K. District A was categorized as an urban district, and District K as a rural district. In each of these districts, the desire for greater availability of the item concerned was relatively infrequently

Table XLI

Learning Activities: Items Showing Significant Variation Among
School Districts in Reporting Patterns for Availability and
Preference Indicators

Item	R ²	Percentage reporting ¹										Level of significance	
		District											
		A	B	C	D	E	F	G	H	J	K		
		N:	30	23	21	23	16	25	18	20	20	16	
		%: ³	14	11	10	11	8	12	9	9	9	8	
Availability	03	c	20	52	43	48	63	52	22	45	60	44	0.063
		i	7*	13	10	12	11	14	4	10	13	8	
	06	c	20	39	43	44	56	12	45	50	40	25	0.052
		i	8	12	11	13	12	4*	11	13	11	5	
	09	c	3	0	5	4	0	12	28	15	0	13	0.021
		i	6	0	6	6	0	19	31	19	0	13	
	18	c	20	0	10	13	0	52	6	0	20	13	0.000
		i	19	0	7	10	0	42	3	0	13	7	
	19	c	13	0	0	0	0	4	0	10	0	6	0.099
		i	50	0	0	0	0	13	0	25	0	13	
Preference	09	c	10	4	19	0	0	0	0	20	0	6	0.016
		i	23	8	31	0	0	0	0	31	0	8	

1. All percentages are taken to nearest whole number.

2. Reporting characteristics, designated as:

c - percentage of respondents in this category who reported this item.

i - percentage of total reports for this item.

3. Percentage (to nearest whole number) of total respondents.

* Category identified as major contributor to significance for this item.

reported. It is also the case (Table XL) that the mean of recent use ranks for item 03 in District A and for item 06 in District F were considerably higher than the corresponding mean for the total sample.

Items 18 and 19 showed levels of significance below 0.10 for returns indicating desired greater availability. The same was true for the returns which indicated a preference for item 09. In each instance, though, there were relatively few responses, a fact which limits the usefulness of further analysis. The most noticeable trend with regard to individual school districts is the finding that several learning activities (including six of seven formal activities) appear to have been used less frequently by principals in rural school districts than by those in urban districts.

QUESTION 7: LEARNING ACTIVITIES AND SCHOOL CHARACTERISTICS

This section examines the findings related to the learning activities of principals classified according to characteristics of their school. Three independent variables were studied. The first, school location (sub-question 7.1) was measured by the number of schools in the same district which could be contacted by a local telephone call from the respondent's school.

The second variable (sub-question 7.2) was school type, designated as elementary, secondary or elementary-secondary. The third was relief time (sub-question 7.3), or the percentage of the regular school day for which the principal reported being released from teaching to carry out administrative and supervisory responsibilities.

Sub-Question 7.1: Learning Activities of Principals
Classified by School Location

Respondents were grouped into four school location categories, based on the number of other schools in the same district which could be contacted with a local telephone call. These categories were: zero, or no other schools, one to three, four to ten and over ten other schools. The latter group was by far the largest, with 169 respondents, or 79.7 percent of the total sample. In contrast, only 8 respondents (3.8 percent of the total sample), indicated that no other school could be contacted with a local phone call.

Table XLII shows that all of the items for which reporting patterns varied significantly were in the consultative category of learning activities. Furthermore, in each of the five instances listed in the table, the mean of recent use ranks for the "zero contacts" group was substantially lower than the mean for the total sample. The difference between means was particularly wide for three items:

- 09 - Consultation with vice-principal.
- 11 - Consultation with an outside specialist.
- 13 - Informal get-togethers with other administrators.

Items 09 and 13 also appear in Table XLII. A higher-than-expected proportion of total responses for each of these items was contributed by each of the three lowest location categories. In both cases, the group who reported being able to contact over ten other schools contributed much smaller proportions of total returns than their percentage of the total sample would have suggested.

Table XLII

Learning Activities: Means of Recent Use Ranks
for Items Showing Significant Variation in Reporting
Patterns Among School Location Categories

Learning activity	Mean of recent use ranks				Level of significance
	School location group: ¹				
	0	1-3	4-10	over 10	
	N: 8	20	15	169	
09	1.0	2.2	2.2	2.4	0.082
11	1.6	2.2	2.1	2.5	0.027
12	3.1	3.4	2.9	3.5	0.051
13	2.5	3.2	2.8	3.2	0.065
16	2.0	2.2	2.3	2.6	0.068

1. Location designated by number of other schools in the same district which can be contacted with a local phone.

The "zero contacts" category was identified by the chi-square test of quasi-independence as being the major contributor to significance for two items shown in Table XLIII. These were items 04 - Short course (1-2 weeks) and 05 - Annual conference or convention. A disproportionately high percentage of responses indicating a desire for greater availability of these activities was contributed by the "zero contacts" category.

Item 03 - Series of workshops or study sessions on a specific topic, reflects a marked departure from the reporting pattern most often displayed in Table XLIII. In this case, the percentages of total responses provided by each of the three lowest contact categories were less than had been expected. This was also the only learning activity for which the "over 10" category was responsible for a larger proportion of responses than the

Table XLIII

Learning Activities: Items Showing Significant Variation
Among School Location Categories for Availability and
Preference Indicators

	Item	R ²	School location group: ¹								Level of significance
			0		1-3		1-10		over 10		
			N: 8(3.8) ³		20(9.4)		15(7.1)		169(79.7)		
			no.	%	no.	%	no.	%	no.	%	
Availability	04	c	6	75.0	11	55.0	4	26.7	61	36.1	0.044
	i		7.3*		13.4		4.9		74.4		
	05	c	3	37.5	3	15.0	3	20.0	16	9.5	0.068
	i		12.0*		12.0		12.0		64.0		
	06	c	6	75.0	5	25.0	5	33.3	60	35.5	0.094
	i		7.9		16.6	2	6.6		78.9		
	09	c	2	25.0	4	20.0	2	13.3	8	4.7	0.055
	i		12.5		25.0		12.5		50.0		
	10	c	1	12.5	4	20.0	4	26.7	13	7.7	0.065
	i		4.5		18.2		18.2		59.1		
	12	c	2	25.0	5	25.0	4	26.7	17	10.1	0.002
	i		7.1		17.9		14.3		60.7		
13	c	4	50.0	3	15.0	3	20.0	14	8.3	0.000	
i		16.7		12.5		12.5		58.3			
15	c	2	25.0	1	5.0	2	13.3	0	0.0	0.073	
i		40.0		20.5		40.0		0.0			
16	c	5	62.5	5	25.0	4	26.7	37	21.9	0.070	
i		9.8		9.8		7.8		72.5			
Preference	03	c	3	37.5	13	65.0	9	60.0	127	75.1	0.086
	i		2.0		8.6		5.9		83.6*		
	16	c	5	62.5	5	25.0	3	20.0	39	23.1	0.086
	i		9.6		9.6		5.8		75.0		

1. School location designated by number of other schools in the same district which can be contacted with a local phone call.

2. R=reporting characteristics, designated as: c-number and percentage of respondents in this category who reported this item; i-percentage of total reports for this item.

3. Figures in parentheses indicate percentage of total sample.

*Category identified as major contributor to significance for this item.

size of the group would have suggested. The "over 10" category was identified as the major contributor to significant variation among groups reporting item 03 as a preferred learning activity.

Six of the nine items shown in the "availability" section of Table XLVIII were listed in the consultative group of learning activities on the questionnaire. The reporting pattern for each of these items shows higher-than-expected proportions of total responses contributed by the principals who were able to contact ten or fewer other schools. In each instance, those who reported being able to contact more than ten other schools provided fewer responses than had been expected.

Sub-Question 7.2: Learning Activities of Principals
Classified by School Type

For this phase of the analysis, respondents were placed in one of three groups on the basis of school type. Schools enrolling any grade or grades from kindergarten to grade seven were designated elementary schools. Those enrolling grades eight through twelve, or any portion thereof, were designated secondary schools. Any school which enrolled at least one grade from each of these categories was designated elementary-secondary. There were relatively few (11 of 212) elementary-secondary school principals in the overall sample.

There were significant variations in reporting patterns for recent use rates of twelve items (Table XLIV). Eight of these items were in the consultative category of learning activities. For nine of the twelve activities which showed significant variation, a definite pattern was observable. For each of these activities (six of which were consultative in nature) the mean of recent use ranks was higher for secondary principals than for either

Table XLIV

Learning Activities: Means of Recent Use Ranks
for Items Showing Significant Variation in Reporting
Patterns Among School Type Categories

Learning activity	Mean of recent use ranks			Level of significance	
	School type:				
	N:	Elementary 161	Secondary 40	Elem. - sec. 11	
01		2.9	2.4	2.3	0.003
08		3.7	3.9	3.6	0.042
09		1.9	3.9	1.8	0.000
10		3.3	3.6	3.7	0.019
11		2.5	2.4	1.7	0.046
12		3.4	3.7	3.4	0.095
13		3.1	3.4	2.6	0.067
16		2.4	2.7	2.4	0.077
17		1.6	2.1	1.8	0.042
21		1.8	2.1	1.5	0.042
23		2.3	2.7	1.8	0.009
24		1.5	2.0	1.5	0.017

of the other two categories of respondents. Further, the means for secondary principals were in all instances higher than the means for the overall sample. For both elementary and elementary-secondary principals, they were almost always lower. The items which followed this pattern of reporting were:

- 08 - Consultation with teachers.
- 09 - Consultation with vice-principals.
- 12 - Consultation with other principals.
- 13 - Informal get-togethers with other administrators.
- 16 - Visits to other schools in the district.
- 17 - Visits to schools in other districts.
- 21 - Writing a paper or giving a presentation.
- 23 - Reviewing the results of research.
- 24 - Use of information retrieval systems, i.e. ERIC.

Only for items 01 - In-district workshop (1-3 days) and 11 - Consultation with an outside specialist, did elementary principals tend to report more frequent recent use of an activity shown in Table XLIV than did the other groups.

Item 16 - Visits to other schools in the district, also appeared in both sections of Table XLV. The secondary principals category had a higher mean of recent use ranks for this item than did the other two categories. Further, the secondary group was identified as the major contributor to significance for scores indicating desired greater availability and preference. In each case, the secondary category contributed a smaller proportion of the total responses for item 16 than had been expected. This

Table XLV

Learning Activities: Items Showing Significant Variation
Among School Type Categories for Availability
and Preference Indicators

Item	R ¹	Reported by						Level of significance	
		School Type:							
		N:	Elementary	Secondary	Elem. - Sec.				
		no.	%	no.	%	no.	%		
			161(75.9)2	40(18.9)	11(5.2)				
Availability	13	c	20	12.4	1	2.5	3	27.3	0.048
		i		83.3		4.2		12.5	
	16	c	43	26.7	4	10.0	4	36.4	0.054
		i		84.3		7.8*		7.8	
Preference	01	c	121	75.2	22	55.0	6	54.5	0.022
		i		81.2*		14.8		4.0	
	06	c	84	52.2	8	20.0	5	45.5	0.001
		i		86.6		8.2*		5.2	
	16	c	46	28.6	4	10.0	2	18.2	0.045
		i		88.5		7.7*		3.8	

1. R = reporting characteristics, designated as:
c - number and percentage of respondents in this category who reported this item.
i - percentage of total reports for this item.

2. Figures in parentheses indicate percentage of total sample.

* Category identified as major contributor to significance for this item.

was also the case for responses which identified item 06 - District orientation or administrative training session, as a preferred learning activity.

The mean of recent use ranks for item 01 - In-district workshop (1-3 days) was highest among elementary principals (Table XLIV). This group also contributed a disproportionately high percentage of the responses which identified item 01 as a preferred learning activity.

Sub-Question 7.3: Learning Activities of Principals
Classified by Relief Time Allocation

Relief time categories were designated by the percentage of regular school hours for which the principal reported being released from teaching to carry out administrative and supervisory responsibilities. The category "under fifty percent" was made up of principals who had at least twenty percent relief time, since those with less were excluded from the study. The other two relief time categories were "fifty to seventy-five percent" and "over 75 percent."

Most of the learning activities for which significant variations in recent use reporting patterns occurred were consultative activities (Table XLVI). In almost all cases, including all six consultative activities, the mean of recent use ranks was highest for the group of principals who reported over seventy-five percent relief time. Item 06 - District orientation or administrative training session, was an exception. The mean of recent use ranks for this item was lower in the "over seventy-five percent" relief time category than in either of the other two categories.

Table XLVI

Learning Activities: Means of Recent Use Ranks
for Items Showing Significant Variation in Reporting
Patterns Among Relief Time Categories

Learning activity	Mean of recent use ranks			Level of significance
	Relief time allocation:			
	under 50%	50-75%	over 75%	
N:	55	63	94	
06	2.3	2.3	1.9	0.007
08	3.5	3.8	3.9	0.000
09	1.3	1.7	3.1	0.000
12	3.3	3.4	3.6	0.050
13	2.9	3.0	3.4	0.004
16	2.3	2.3	2.7	0.002
17	1.7	1.4	1.8	0.003
20	1.9	1.6	1.6	0.040
21	1.6	1.8	1.9	0.094
24	1.5	1.4	1.8	0.005

Table XLVII

Learning Activities: Items Showing Significant Variation
Among Relief Time Categories for Availability and
Preference Indicators

Item	R ¹	Reported by						Level of significance	
		Relief time allocation:							
		under 50%		50-75%		over 75%			
		N: 55(25.9)	2	63(29.7)		94(44.3)			
		no.	%	no.	%	no.	%		
Availability	08	c	3	5.5	1	1.6	0	0.0	0.060
		i		75.0		25.0		0.0	
	20	c	2	3.6	0	0.0	0	0.0	0.056
		i		100.0		0.0		0.0	
Preference	09	c	1	1.8	1	1.6	11	11.7	0.011
		i		7.7		7.7		84.6	
	14	c	3	5.5	0	0.0	7	7.4	0.093
		i		30.0		0.0		70.0	
	15	c	7	12.7	0	0.0	10	10.6	0.018
		i		41.2		0.0*		58.8	

1. R = reporting characteristics, designated as:

c - number and percentage of respondents in this category who reported this item.

i - percentage of total reports for this item.

2. Figures in parentheses represent percentage of total sample.

*Category identified as major contributor to significance for this item.

Table XLVII lists the activities for which significant variation occurred in reporting patterns related to availability and preference. With one exception, the total number of responses for each of these items was very small. There was, however, a sufficient number of responses to permit further analysis of item 15 - Informal contacts at committee meetings. This item was seldom identified within the overall respondent group as a preferred activity (Table XXXVIII). None of the respondents in the group of principals who reported fifty to seventy-five percent relief time identified item 15 as a preferred learning activity. This category was the major contributor to significance for item 15.

A definite pattern exists with regard to mean ranks of recent use rates, as noted above. For most learning activities for which greater availability was desired or a preference indicated by enough principals to permit meaningful analysis, no significant variation was noted.

QUESTION 8: LEARNING ACTIVITIES AND RESPONDENT CHARACTERISTICS

This question examined the learning activities reported among principals grouped according to years of experience in specified positions in education (sub-question 8.1) and level of formal education (sub-question 8.2). Four response categories were specified for each kind of experience: zero to one year, two to five years, six to ten years and over ten years.

Sub-Question 8.1: Learning Activities of Principals Classified by Experience

A major difference between this sub-question and the others examined in the present study, as discussed in Chapter 6, was that three sets of data

were gathered about the principal's experience. These were:

1. Teaching experience. Years of experience as a teacher, with no administrative or supervisory responsibilities.
2. "Non-principal" administrative experience. Years of experience in administrative positions, but not as a principal.
3. Experience as a principal. This information was divided into three sub-categories:
 - 3.1 Total years of experience as a principal.
 - 3.2 Years of experience as a principal in the present district.
 - 3.3 Years of experience as a principal in the respondent's present school.

The findings related to each of these sub-groups are tabled in a similar manner to that used for the other variables. The three groups classified according to experience as a principal, however, are discussed together.

As was the case for learning interests, the questionnaires which were not identifiable as to years of experience in a given category were excluded from that phase of the analysis. In the case of non-principal administrative experience, the number of usable questionnaires was 187 of 212.

Teaching experience. Significant variation among the reporting patterns from which means of recent use ranks were derived was noted for five items (Table XLVIII). Three of the five were formal activities.

For all five of these items, the principals who reported zero to one year of experience as a teacher tended to report use rates which resulted in higher means than those for the total sample. The same was true among the principals who reported having had over ten years of experience as a teacher. In general, means of recent use ranks for these items among the middle two teaching experience categories were lower than total sample means.

All of the learning activities listed in Table XLIX were relatively widely reported, either as items for which greater availability was desired, or as preferred activities. As a result, further analysis to locate major contributors to significance was possible.

Items 01, 06 and 16 were widely reported among the total sample as items for which greater availability was desired. In each case, the group of principals with zero to one year of experience as a teacher was a major contributor to significance (Table XLIX). For items 01 and 06, this groups proportion of total responses was very low. The same was true for the "over ten years" category for item 01.

The "zero to one year" category was also a major contributor to significance for item 16 - Visits to other schools in the district. However, in this case, these principals contributed a disproportionately large percentage of total responses.

The group of principals who reported two to five years of experience as a teacher contributed a larger proportion of the preferred activity responses for items 02, 03 and 04 than their number would have suggested.

Table XLVIII

Learning Activities: Means of Recent Use Ranks for
Items Showing Significant Variation Among Teaching
Experience Categories

Learning activity	Mean of recent use ranks				Level of significance
	Years of experience:				
	0-1 N: 20	2-5 92	6-10 67	over 10 30	
01	3.1	2.8	2.5	2.9	0.005
02	2.4	2.1	2.0	2.5	0.030
05	2.4	1.9	1.9	2.4	0.001
17	2.0	1.6	1.6	1.8	0.093
22	2.9	2.7	2.5	3.0	0.055

For items 02 and 04, these response rates were the major contributors to significance. For item 03, this was attributed to the relatively low response rate of the "over ten years" category.

Item 23 - Reviewing the results of research, was reported as a preferred learning activity by a disproportionately small number of principals with two to five years of experience as a teacher. All other categories, and particularly the "zero to one year" group contributed a higher proportion of total responses indicating a preference for item 23 than their numbers would have suggested.

Experience as a non-principal administrator. Only five respondents (Table L) reported having had over ten years of experience as an administrator in positions other than the principalship. This factor should be con-

Table XLIX

Learning Activities: Items Showing Significant Variation
Among Teaching Experience Categories for Availability
and Preference Indicators

Item	R ¹	Reported by								Level of significance
		0-1		2-5		6-10		over 10		
		N: ²	20(9.6) ³	92(44.0)	67(32.1)	30(14.4)				
		no.	%	no.	%	no.	%	no.	%	
01	c	3	15.0	39	42.4	33	49.3	7	23.3	0.010
	i		3.7*		47.6		40.2		8.5*	
06	c	2	10.0	34	37.0	27	40.3	12	40.0	0.084
	i		2.7*		45.3		36.0		16.0	
16	c	11	55.0	21	22.8	10	14.9	8	26.7	0.003
	i		22.0*		42.0		20.0		16.0	
02	c	3	15.0	39	42.4	19	28.4	8	26.7	0.050
	i		4.3		56.5*		27.5		11.6	
03	c	13	65.0	68	73.9	53	79.1	16	53.3	0.058
	i		8.7		45.3		35.3		10.7*	
04	c	12	60.0	58	63.0	29	43.3	14	46.7	0.070
	i		10.6		51.3*		25.7		12.4	
23	c	8	40.0	10	10.9	14	20.9	7	23.3	0.016
	i		20.5		25.6*		35.9		17.9	

1. Reporting characteristics, designated as:

c - number and percentage of respondents in this category who reported this item.

i - percentage of total reports for this item.

2. Total N for this variable: 209.

3. Figures in parentheses indicate percentage of total N for this variable.

* Category identified as major contributor to significance for this item.

Table L

Learning Activities: Means of Recent Use Ranks for
Items Showing Significant Variation Among Categories
of Experience as a Non-Principal Administrator

Learning activity	Mean of recent use ranks				Level of significance
	Years of experience				
	0-1 N: 76	2-5 80	6-10 26	over 10 5	
05	1.9	2.0	2.2	2.8	0.092
08	3.6	3.9	3.9	3.8	0.006
09	1.5	2.8	2.6	2.8	0.000
12	3.3	3.6	3.4	3.6	0.099
18	2.1	3.5	3.4	3.6	0.003
21	1.6	1.9	2.1	2.2	0.057
23	2.1	2.4	2.4	3.2	0.064
24	1.4	1.8	1.6	2.6	0.016

sidered when examining the data related to the learning activities of respondents classified by non-principal administrative experience.

For each of the seven items listed in Table L, the means of recent use ranks for principals in the lowest experience category were lower than the mean for the overall sample. In general, the means for all other groups classified by non-principal administrative experience were higher than total sample means. In several cases, the mean for the "over ten years" category was considerably higher than the total sample mean. However, the very small size of this group (five respondents) should be kept in mind when examining the data.

Only for item 04 - Short course (1-2 weeks) was there a sufficient number of returns to warrant discussion and further analysis of variations in reporting patterns (Table LI). The response rate of the group with six to ten years of non-principal administrative experience was significantly lower than had been expected.

Experience as a principal. Three aspects of respondents' experience as a principal were examined: total years of experience, years in present district and years in present school.

Table LII identifies those items for which mean ranks of recent use rates were derived from reporting patterns which varied significantly among categories. There were no such items for the variable "years in present school."

Two items appeared for both total experience and present district experience. These were items 02 - Out-of-district workshop, (1-3 days)

Table LI

Learning Activities: Items Showing Significant Variation
Among Non-Principal Administrative Experience Categories
for Availability and Preference Indicators

Item	R ¹	Reported by								Level of significance	
		Years of experience									
		N: ²	0-1 ³		2-5		6-10		over 10		
			76(40.6) no.	%	80(42.8) no.	%	26(13.9) no.	%	5(2.7) no.		%
Availability	04	c	29	38.2	35	43.8	4	15.4	2	40.0	0.079
	i		41.4		50.0		5.7*		2.9		
	10	c	12	15.8	4	5.0	1	3.8	0	0.0	0.068
	i		70.6		23.5		5.9		0.0		
	15	c	5	6.6	0	0.0	0	0.0	0	0.0	0.058
	i		100.0		0.0		0.0		0.0		
Preference	20	c	1	1.3	0	0.0	0	0.0	1	20.0	0.004
	i		50.0		0.0		0.0		50.0		

- Reporting characteristics, designated as:
c - number and percentage of respondents in this category who reported this item.
i - percentage of total reports for this item.
 - Total N for this variable: 187.
 - Figures in parentheses indicate percentage of total N for this variable.
- * Category identified as major contributor to significance for this item.

Table LII

Learning Activities: Means of Recent Use Ranks for
Items Showing Significant Variation Among Categories
of Experience as a Principal

Learning activity	Mean of recent use ranks				Level of significance	
	Years of experience:					
	0-1	2-5	6-10	over 10		
<hr/>						
a. Total experience as a principal						
	N:	42	62	42	64	
02		2.0	2.3	2.1	2.2	0.093
12		3.3	3.4	3.6	3.6	0.035
23		2.0	2.5	2.5	2.2	0.034
<hr/>						
b. Experience as a principal in present district						
	N:	56	65	34	56	
02		2.0	2.3	2.0	2.2	0.037
05		1.9	2.2	1.9	2.0	0.067
12		3.4	3.3	3.5	3.6	0.038
19		3.0	2.7	2.4	2.6	0.061

and 12 - Consultation with other principals. For each of these learning activities, the mean ranks of recent use showed similar trends for both groups. For item 02, both the zero to one year and the two to five year category had means of recent use ranks which were lower than those of the total sample. The "over ten years" category mean was equal to the total sample mean, and the six to ten year group mean was higher. In the case of item 12, means for both of the lower experience categories were less than total sample means of recent use ranks, while those for the higher categories were greater than total sample means.

Although these patterns occurred between the findings for two types of experience, there were no general trends evident in the data displayed in Table LII. The only marked consistency was a tendency for principals in the lowest experience categories to report less frequent use of these activities than had the overall respondent group.

Of the learning activities listed in Table LIII, items 08 and 20 received too few responses for further analysis. Item 11 - Consultation with district central office staff, appears in both parts of Table LIII. Item 11 was identified as an activity for which greater availability was desired, and as a preferred activity, by fewer inexperienced principals than had been expected. Reports of desired greater availability by the zero to one year category constituted 10.0 percent of the total for item 11, although the group comprised 20.0 percent of the total sample. A similar pattern was observed with regard to the reporting of item 02 as a preferred activity.

Table LIII

Learning Activities: Items Showing Significant Variation
Among Categories of Experience as a Principal for
Availability and Preference Indicators

Item	R ¹	Reported by								Level of significance	
		Years of experience									
		N: ²	0-1 ³		2-5		6-10		over 10		
			no.	%	no.	%	no.	%	no.		%
Availability	08	c	3	7.1	1	1.6	0	0.0	0	0.0	0.041
		i		75.0		25.0		0.0		0.0	
	11	c	5	11.9	11	17.7	13	31.0	21	32.8	0.035
		i		10.0*		22.0		26.0		42.0	
Preference	02	c	8	19.0	18	29.0	19	45.2	25	39.1	0.046
		i		11.4*		25.7		27.1		35.7	
	11	c	21	50.0	30	48.4	22	52.4	47	73.4	0.017
		i		17.5		25.0		18.3		39.2*	
	20	c	0	0.0	0	0.0	2	4.8	0	0.0	0.045
		i		0.0		0.0		100.0		0.0	

1. Reporting characteristics, designated as:

c - number and percentage of respondents in this category who reported this item.

i - percentage of total reports for this item.

2. Total N for this variable: 210.

3. Figures in parentheses indicate percentage of total N for this variable.

* Category identified as major contributor to significance for this item.

Table LIV

Learning Activities: Items Showing Significant Variation
Among Present District and Present School Experience Categories
for Availability and Preference Indicators

Item	R ¹	Reported by								Level of significance
		Years of experience:								
		0-1		2-5		6-10		over 10		
Availability		a. In present district								
		N: ²	56(26.5) ³		65(30.8)		34(16.1)		56(26.5)	
	11	c	7	12.5	14	21.5	12	35.3	17	30.4
		i		14.0*		28.0		24.0		34.0
										0.047
	12	c	10	17.9	8	12.3	8	28.5	2	3.6
	i		35.7		28.6		28.6		7.1*	
										0.038
Preference		b. In present school								
		N: ²	86(40.8) ³		87 41.2		21(10.0)		17(8.1)	
	01	c	32	57.1	48	73.8	26	76.5	43	76.8
		i		21.5*		32.2		17.4		28.9
										0.078
	06	c	30	53.6	25	38.5	20	58.8	21	37.5
	i		31.3		26.0		20.8*		21.9	
										0.084
	11	c	30	53.6	32	49.2	17	50.0	42	75.0
	i		24.8		26.4		14.0		34.7*	
										0.019
Preference		b. In present school								
		N: ²	86(40.8) ³		87 41.2		21(10.0)		17(8.1)	
	14	c	5	5.8	1	1.1	1	4.8	3	17.6
		i		50.0		10.0		10.0		30.0
										0.030
	15	c	5	5.8	8	9.2	0	0.0	4	23.5
	i		29.4		47.1		0.0		23.5	
										0.045
	23	c	17	19.8	21	24.1	1	4.8	0	0.0
	i		43.6		53.8		2.6		0.0	
										0.038

- Reporting characteristics, designated as:
c - number and percentage of respondents in this category who reported this item.
i - percentage of total reports for this item.
 - N for present district experience: 211.
N for present school experience: 211.
 - Figures in parentheses indicate percentage of total N for this variable.
- * Category identified as major contributor to significance for this item.

Respondents with over ten years experience as a principal provided a disproportionately large percentage of the preferred activity returns for item 02 - Out-of-district workshop (1-3 days). This group accounted for 39.2 percent of the returns for item 02, although they represented only 30.5 percent of the total sample.

The patterns of reporting noted in the foregoing two paragraphs are repeated in Table LIV. With regard to experience as a principal in the present district, the same disproportionately low contribution by the zero to one year category was noted for item 11. The high proportion of returns contributed by the high experience group was also repeated. In no case was there a sufficient number of returns to warrant further analysis of an item in the section of Table LIV which deals with data provided by principals grouped according to experience in present school.

Sub-Question 8.2: Learning Activities of Principals Classified by Education

Respondents were placed in one of three groups on the basis of the university degree most recently achieved or in progress. Three categories were designated: bachelor's degree, master's degree in education administration and master's degree in some other field of study.

Significant variations in response patterns related to recent use were noted for twelve items, or half of the total list (Table LV). Six of these were consultative activities, and five were formal. In general, means of recent use ranks tended to be lowest for the bachelor's degree group and higher for those having or working on master's degrees, both in and out of education administration. The mean of recent use ranks for item 29 - Consultation with vice-principal, was considerably higher for the two

Table LV

Learning Activities: Means of Recent Use Ranks
for Items Showing Significant Variation in Reporting
Patterns Among Education Categories

Learning	Mean of Recent use ranks			Level of signifi- cance
	Degree:			
	Bachelor's N: 148	Master's (ed. admin.) 43	Master's (not ed. admin.) 21	
07	1.5	1.9	1.6	0.097
08	3.7	3.8	4.0	0.065
09	2.1	2.7	3.0	0.005
12	3.4	3.6	3.8	0.009
13	3.1	3.4	3.4	0.064
16	2.4	2.8	2.5	0.030
17	1.5	1.9	2.1	0.003
18	3.3	3.4	3.7	0.041
19	2.6	2.9	3.2	0.023
20	1.6	2.1	1.6	0.000
21	1.7	2.0	2.2	0.004
24	1.5	2.0	1.7	0.013

master's degree groups than for the overall sample.

For five of the seven learning activities listed in Table LVI, a definite reporting pattern was observed. In each case, the proportion of total returns contributed by the bachelor's degree group was higher than expected, while the proportions contributed by each of the two master's degree groups were lower than expected. The items were:

Greater availability desired:

06 - District orientation or administrative training session.

Preferred learning activities:

06 - District orientation or administrative training session.

08 - Consultation with teachers.

10 - Consultation with district central office staff.

16 - Visits to other schools in the district.

For item 06 ("greater availability desired" indicator) and item 16 ("preferred activity" indicator), the high response rate of the bachelor's degree group was primarily responsible for significant variation. The group who had or were working on master's degrees outside of education administration made the major contribution to significance for three items (06, 08, 10) in the preferred activity category.

SUMMARY

This chapter has examined the findings of the present study with regard to the reported learning activities of respondents. Three dimensions of an overall view of learning activities were discussed: rate of

Table LVI

Learning Activities: Items Showing Significant Variation
Among Education Categories for Availability and Preference
Indicators

Item	R ¹	Degree		Reported by				Level of significance	
		Bachelor's		Master's (ed. admin.)		Master's (not ed. admin.)			
		N: 148(69.8) ²		43(20.3)		21(9.9)			
		no.	%	no.	%	no.	%		
Availability	02	c	31	20.9	16	37.2	9	42.9	0.021
		i		55.4*		28.6		16.1	
	06	c	60	40.5	12	27.9	4	19.0	0.075
		i		78.9*		15.8		5.3	
	24	c	16	10.8	10	23.3	1	4.8	0.050
		i		59.3		37.0*		3.7	
Preference	06	c	75	50.7	19	44.2	3	14.3	0.007
		i		77.3		19.6		3.1*	
	08	c	58	39.2	15	34.9	3	14.3	0.083
		i		76.3		19.7		3.9*	
	10	c	67	45.3	15	34.9	4	19.0	0.051
		i		77.9		17.4		4.7*	
	16	c	44	29.7	6	14.0	2	9.5	0.026
		i		84.6*		11.5		3.8	

1. Reporting characteristics, designated as:

c - Number and percentage of respondents in the category who reported this item.

i - Percentage of total reports for this item.

2. Figures in parentheses indicate percentage of total sample.

* Category identified as major contributor to significance for this item.

recent use, desire for greater availability and the extent to which each item was identified as a preferred learning activity.

Question Five dealt with the findings related to the total sample. Six learning activities tended to be reported as more widely used than other activities (Table XXXVIII).

- 08 - Consultation with teachers.
- 10 - Consultation with district central office staff.
- 12 - Consultation with other administrators.
- 13 - Informal get-togethers with other administrators.
- 14 - Discussions with family or friends.
- 18 - Professional reading: books, journals, bulletins, etc.

With the exception of item 18, each of the above activities might be categorized as consultative in nature. In general, these activities appeared to have been available enough; that is, relatively few principals indicated that they would have used these activities more often, given greater availability. With the exception of item 14 - Discussions with family or friends, over twenty percent of the respondents identified each of the items listed above as a preferred learning activity.

Six activities appeared to have been used fairly infrequently by most respondents (Table XXXVIII):

- 04 - Short course (1-2 weeks).
- 07 - University course.
- 17 - Visit to schools in other districts.
- 20 - Reviewing university course notes.

- 21 - Writing a paper or giving a presentation.
- 24 - Use of information retrieval systems, i.e. ERIC.

Of these, only items 04 and 17 were widely reported as learning activities for which greater availability was desired, or as preferred activities.

Five other items fell in the middle range in terms of means of recent use ranks, but were relatively widely reported as the foci of a desire for greater availability and as preferred learning activities:

- 01 - In-district workshop (1-3 days).
- 02 - Out-of-district workshop (1-3 days).
- 03 - Series of workshops or study sessions on a specific topic.
- 06 - District orientation or administrative training session.
- 11 - Consultation with an outside specialist.

The discussion of Questions 6, 7 and 8 focussed primarily on learning activities for which statistically significant variation in reporting patterns was noted. Such variation occurred when the data were analyzed in terms of independent variables related to characteristics of the school district, the school and the respondent.

A major difference was noted between the outcomes of analysis of the data on learning activities and that related to learning interests. In general, variations in reporting patterns with respect to learning interests tended to be item-referenced. With the exception of the variable

"experience," there appeared to be few reporting trends which occurred over several items for a given variable. With regard to learning activities, however, the existence of trends was much more evident.

The specific findings with regard to patterns of reporting as they appear to be associated with independent variables have been reported in this chapter. They are further discussed in Chapter Eight, which summarizes the study and presents conclusions and recommendations.

Chapter 8

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Three main tasks are undertaken in this chapter. The first is a review of the present study, including problem, design and procedures. The second aspect of the discussion is a presentation of the major findings and the conclusions of the study. The third section of the chapter deals with the implications of the study's findings and discusses major considerations and recommendations arising from the study.

NATURE OF THE STUDY

The Research Problem

The main focus of investigation in the present study was on the efforts of school principals to gain work-related knowledge and skill.

The study had three major dimensions:

1. Identification of the work-related areas in which principals sought to increase their knowledge and skill. These areas were termed learning interests.
2. Identification of the activities in which principals engaged, or wanted to engage, as they sought to learn more about job-related topics. These were termed learning activities.
3. An attempt to determine the existence and nature of relationships between learning interests and activities and characteristics of the school district, the school and the principal.

Eight specific research questions were developed to investigate these dimensions of the problem. Four of these questions dealt with learning interests, and four with learning activities. For each set of

four questions, an initial question dealing with the overall findings of the study was followed by three questions which focussed on independent variables: school district, school and respondent characteristics. These specific questions were intended to gather descriptive information and to test the usefulness of a conceptual framework developed from a review of the literature and a pilot study.

Literature Review

Two major activities contributed to the development of a conceptual framework, a study design and a research instrument. One of these activities was a review of relevant literature, and the other was a pilot study which preceded the main research effort.

The learning interests and activities of school principals were thought of, at a general level, as the efforts of an adult to learn. Associating these efforts with a specific job, the principalship, necessitated some useful conceptualization of that job and some awareness of the state of current knowledge. Accordingly, three bodies of literature were reviewed.

The first area of the literature to be examined was a portion of the adult education literature which dealt with adults' learning projects. This particular body of research sought to identify some regularities associated with the ways in which adults go about trying to learn. The research found that deliberate efforts to learn were widespread among adults, and that a large proportion of these efforts were work-related.

The second body of literature reviewed was that which dealt with the attempt to conceptualize the principal's work. The information obtained

from this portion of the review was used primarily in the development of the learning interests aspect of the conceptual framework and of the research instrument. Specifically, it led to the use of operational areas to categorize aspects of the principal's work.

The third section of the literature review examined the recent research into the professional development of educational personnel. This section dealt with studies of the professional development needs of several categories of educational administrators, particularly school principals. It also reviewed two studies of the professional development of teachers.

The studies of administrators' professional development needs identified three main areas of perceived need: educational program, staff personnel and pupil personnel. Within these areas, the major concerns reported by principals were associated with the tasks of evaluation, communication and planning. These studies also presented findings which suggested that certain characteristics of the principal and of the job may be related to learning efforts. Although the findings in this area were inconclusive, further investigation of such variables as education, experience and school type and location appeared to be warranted.

The findings of the studies related to teachers' professional development suggested the possibility that an identifiable sequence of professional growth may exist. Such a sequence would be characterized by the nature of the teacher's interests and perhaps by the learning activities selected. These findings raised the question of whether such a sequence might exist with regard to the school principal.

These studies provided little information which was specifically related to the British Columbia scene. They did, however, provide considerable guidance in the development of a useful conception of principals' learning efforts and in the design of a research instrument.

Conceptual Framework

The learning interests and activities of school principals were considered to be the components of a learning effort, as shown in Figure 6. Two sets of learning interests were examined: recent and priority. An

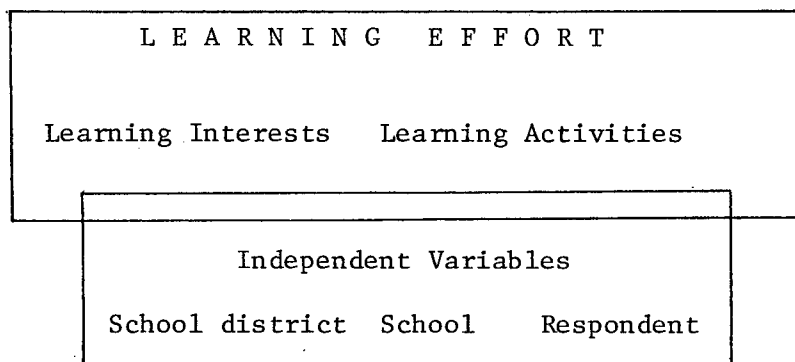


Figure 6

Principals' Learning Efforts

item was considered "recent" if it had been the focus of interest during the previous or then-current school year. Priority interests were those which the respondent identified as the most important for learning about over the next few months.

Three dimensions of a learning activity were examined. The study considered frequency of recent use, desire for greater availability and identification of an activity as preferred for use.

Three sets of independent variables were investigated to determine the existence and nature of any relationship with learning efforts. One set of variables included two school district characteristics: district group (urban or rural) and individual school district. School characteristics included location, type and allocation of principal's relief time. Respondent characteristics examined were the principal's experience and education.

Study Procedures

Following the literature review, and as an integral part of developing the conceptual framework and the research instrument, a pilot study was carried out. This pilot study, which consisted of interviews with seventeen principals, was intended to clarify and refine some of the major concepts used in the study. It was also carried out to assist in developing appropriate items for the questionnaire.

The main study examined the learning efforts of principals in ten mid-sized British Columbia school districts. A contrasting sample design was used to obtain five urban and five rural districts. Urban districts were larger and located in closer proximity to a large metropolitan area with a university than were rural districts.

The study instrument was a questionnaire which obtained information about the independent variables studied, about learning interests and about learning activities. Opportunity was given for respondents to enter additional interests and activities which were of personal interest, and which were perceived to have been omitted from the questionnaire. Respondents were also provided with an opportunity to provide further, more general comments about the topic of professional development.

The study was explained, and questionnaires distributed, at a principals' meeting in each school district. The researcher also agreed to return to the district, if requested, to report the findings of the study. Data collection was carried out during October, November and early December, 1977. Returns were completed by the end of December, 1977, and the overall return rate was 93.8 percent. Individual school district returns ranged from 84.2 percent to 100.0 percent.

The unit of analysis in the study was the individual learning interest or learning activity. Numerical frequency and percentage rate of reporting were specified for each recent and priority interest, with regard to the total sample and each category of every independent variable. The chi-square test and the chi-square test of quasi-independence were used to identify the existence and sources of variation in reporting patterns among the response categories of each independent variable.

The above analysis was also carried out for the "availability" and "preference" indicators used to examine learning activities. Rate of recent use of each activity was presented as a mean of four possible use rates. These means were calculated for the overall sample and for each response category of each independent variable. The Kruskal-Wallis one-way analysis of variance was used to identify items for which there was significant variation in reporting patterns among categories.

MAJOR FINDINGS AND CONCLUSIONS

The major findings of the study are summarized, and conclusions drawn, with reference to the two main components of learning efforts: interests and activities. The conclusions are numbered consecutively throughout this section.

Generalizability of the Findings

The present study was exploratory in nature, in that it attempted to determine whether observed regularities warranted further study of certain aspects of principals' professional development. Sampling was carried out according to specific criteria related to independent variables, to obtain a contrasting urban/rural sample.

The conclusions of the study, therefore, are limited to the population of principals in the ten school districts studied. Further generalization is limited to recommendations for further research.

Learning Interests

Several learning interests were widely reported throughout the total sample both as recent and as priority learning interests. These items, which were also among the more widely reported learning interests in most response categories of many of the independent variables studied, are shown in Table LVII.

These learning interests fall into three categories. Items 05 and 06 are concerned with the development and evaluation of the school's instructional program. Item 23 focusses on the provision of instructional services to students with special needs. Items 10, 11 and 19 relate to various aspects of the supervision of teachers. Further, all of these items are directly concerned with work carried out within the individual school.

In contrast to the items discussed above, several learning interests were infrequently reported within the overall sample, and were also infrequently reported within most categories of many of the independent variables studied. These items are displayed in Table LVII.

Table LVII
Most Widely Reported and Seldom Reported Interests
of Respondents

Item number	Learning interest
Widely reported interests:	
05	Developing curriculum at the school level.
06	Evaluating the effectiveness of the school's instructional program.
10	Evaluating and writing reports on the work of teachers.
11	Developing an effective approach to the supervision of instruction.
19	Stimulating teacher interest in professional growth.
23	Providing for students with special needs.
Learning interests which were seldom widely reported:	
13	Interpersonal relationships.
16	Conducting staff meetings.
18	Supervising non-teaching personnel.
22	Advising students about course and program selection.
26	Developing a district testing program.
36	Dealing with other departments of the school district.
39	Provincial education finance.

The seldom reported items listed in Table LVII are less easily categorized than are the widely reported items. Three of these interests, though, relate primarily to matters which are outside the direct concern of the individual school and its staff (items 26, 36, 39). Items 18 and 22 may be seen by principals either as routine, (a designation which might also apply to item 16) or as primarily someone else's responsibility.

These findings permit two conclusions about the population studied:

1. The development and evaluation of the instructional program, the provision of educational services to pupils with special needs, and the supervision of teachers, were learning interests of major importance to principals.
2. Priority of attention, in terms of the desire to learn more, was generally given to topics which were directly relevant to the work of the principal within the individual school, rather than to matters of provincial or even district-level concern.

Beyond the examination of the learning interests reported within the total sample, the study was concerned with the existence and nature of relationships between learning interests and the independent variables studied. While there were numerous instances of significant variation in reporting patterns among the response categories of independent variables, there was less evidence of any trends or repeated patterns. Findings related to the three groups of independent variables are discussed below.

School district variables. Two school district characteristics were studied as independent variables: district group, designated as urban or rural, and individual school district.

In general, the findings for the two district groups were similar. There were several items for which significant variation existed between groups. However, no consistent pattern was noted as to proportions or responses from one group or the other, or across a number of items.

There was very wide variation in reporting patterns among school districts. Approximately two-thirds of the questionnaire items were widely identified as learning interests in at least one school district.

The same was true for the items which were seldom identified. In fact, nine of the thirty-seven learning interests listed on the questionnaire were very frequently reported in at least one school district, and very infrequently reported in at least one other. There was no evidence of major contributions to significant variation having been repeatedly made by a particular school district. The only item for which variation was attributable to an identifiable group of districts was item 05 - Developing curriculum at the school level. This item was reported by over twenty percent of the principals in each of the rural school districts (Table XIII, page 98), but in none of the urban districts.

The major conclusion which may be drawn from these findings is that, for the population studied:

3. The individual school district was an important variable in relation to the learning interests of the principals in that district. Further, its importance was probably related to some factor or factors other than the district's urbanness or ruralness as defined in the present study.

School variables. Three independent variables which described characteristics of the school were studied. These were: school location, school type and relief time.

The findings with regard to the learning interests of principals classified by school location were very similar to those of the overall sample. Variations in reporting trends across response categories showed no repeated patterns between recent and priority interests.

Some variations in reporting patterns among school type categories warrant discussion. For two instruction-related items there were significant differences among principals whose schools were classified as elementary, secondary and elementary-secondary. Item 01 - Assessing community and school needs for special courses and programs, was very widely reported as a recent learning interest among secondary and elementary-secondary principals, but significantly less frequently among elementary principals. Elementary principals, however, contributed a disproportionately large percentage of total reports for item 02 - Choosing instructional programs from among available alternatives.

The variable "relief time" was a measure of school size. The exact relationship between the size of the school and the percentage of relief time allocated to the school varies among districts. However, it is generally the case that as school size increases, the amount of principal's relief time also increases.

The "under fifty percent relief time" group of principals were the major contributors to significant variations in reporting patterns for five items. These respondents, who were the principals of the smaller schools, reported items 06 - Evaluating the effectiveness of the school's instructional program and 11 - Developing an effective approach to the supervision of instruction, significantly less often than did the principals in the other relief time categories. Both of these items were widely identified among the total sample and for many other response categories.

The same group (low relief time) contributed disproportionately large percentages of the returns for three items. Among the recent interests, item 43 - Allocating budgeted funds, and item 43 - General office

management routines, were widely reported within this group. The low relief time category also provided a disproportionately large percentage of the indications of priority interest in item 14 - Handling the stresses of my job.

Several conclusions may be drawn about the population of principals in the ten school districts studied:

4. The location of the school, measured in terms of the extent to which the principal was able to consult with colleagues by local telephone call, was not related in any systematic way to the learning interests of principals.
5. The learning interests of principals, in areas related to the development and delivery of the instructional program, varied in a manner which suggested different emphases among elementary than among secondary school principals.
6. The amount of relief time available to a principal was an important factor in relation to his/her learning interests. The findings suggested that principals of small schools wanted to know how to handle routine operational tasks more effectively.

Respondent characteristics. The two respondent-related variables examined in the present study were experience and education. In the case of experience, several dimensions were examined: experience as a teacher, as a non-principal administrator and as a principal.

There were several examples of significant variation in reporting patterns among response categories for teaching experience. However, only two instances of repeated patterns were noted. Principals who reported zero to one year of teaching experience before becoming a principal reported item 04 - Developing curriculum at the school level, disproportionately heavily, both as a recent and as a priority interest. Principals

in the two to five year category for teaching experience were the major contributors to significant variation for recent interest returns on items 10 and 11. Both of these interests were related to the supervision of personnel. In each case, the two to five year group contributed a larger proportion of total responses than had been expected.

Significant variation also occurred for several items when experience as a non-principal administrator was examined. There was, however, insufficient evidence of any repeated pattern to warrant conclusions about any relationship between this type of experience and the learning interests of principals.

Three categories of experience as a principal were studied: total years of experience, years in present district and years in present school. Several examples of repeated patterns in reporting trends were noted, particularly for total experience as a principal.

Items 10 - Evaluating and writing reports on the work of teachers, and 11 - Developing an effective approach to the supervision of instruction, were widely reported among many groups of principals. In addition, respondents with zero to one year of experience as a principal reported these items very frequently. The same group indicated widespread recent and priority interest in items 41 - Preparing annual school budget submissions, and 42 - Allocating budgeted funds. In each instance, this low experience group contributed a disproportionately large percentage of total indications of interest. Several other examples of variation in reporting patterns were attributed to other "experience as a principal" categories.

Reporting frequencies and patterns among groups of principals classified according to level of formal education showed little indication of systematic variation. Although specific examples existed, there was insufficient evidence of any repeated patterns to permit conclusions to be drawn about relationships between education and interests.

Based on the findings of the present study, the following conclusions were drawn about the population of principals represented by the sample:

7. There was insufficient evidence to support the suggestion of relationships between learning interests and previous experience as a teacher or as a non-principal administrator, or between learning interests and level of formal education.
8. Length of previous experience as a principal was an important factor related to the principal's learning interests. Minimal previous experience, in particular, was associated with widespread reporting of items not generally seen as important by other experience groups.

Learning Activities

Three dimensions of learning activities were examined: rate of recent use, desire for greater availability and preference for the activity. Learning activities were classified as being primarily formal, consultative or personal in nature.

Six learning activities tended to be reported within the total sample as having been used at least three or four times during recent months. Six others tended to be reported as having been used on two occasions or less. These frequently and infrequently used items are shown in Table LVIII.

The frequently used learning activities were generally seen by principals as having been available enough. Four items (08, 10, 12, 18), three of which were consultative in nature, were widely reported as activities which principals would prefer to use to learn more about their priority interests.

Of the activities which tended to be reported as infrequently used, two were widely reported as needing to be more available and as preferred activities. These were items 04 - Short course (1-2 weeks), and 17 - Visits to schools in other districts.

Several other learning activities appeared to have generally been used with moderate frequency, but were the focus of a relatively widespread desire for greater availability and of designation as preferred activities. Four of the six learning activities for which this was the case (Table LIX) were in the formal activities category.

One item was most widely designated both as an activity for which greater availability was desired and as a preferred learning activity. This was item 03 - Series of workshops or study sessions on a specific topic. Item 01 - In-district workshop (1-3 days) was also very widely reported in both categories.

Some conclusions relevant to the sample population were drawn, based on an examination of the overall findings of the study:

9. Principals tended to make most frequent use of learning activities which were consultative in nature. With the exception of inter-school visitation and consultation with an outside specialist, opportunities to consult were generally seen as readily available.

Table LVIII

Learning Activities Which Tended to be Reported
Among the Study Sample as Most Frequently
and Least Frequently Used

Item number	Learning activity	R ¹
Frequently used activities:		
08	Consultation with teachers.	P
10	Consultation with district central office staff.	P
12	Consultation with other principals.	P
13	Informal get-togethers with other administrators.	
14	Discussions with family or friends.	
18	Professional reading: books, journals, bulletins, etc.	P
Infrequently used activities:		
04	Short course (1-2 weeks).	A,P
07	University course.	
17	Visits to schools in other districts.	A,P
20	Reviewing university course notes.	
21	Writing a paper or giving a presentation.	
24	Use of information retrieval systems, i.e. ERIC.	

1. R = reporting frequency, where

A = item widely reported as an activity for which greater
availability was desired.

P = item widely reported as a preferred learning activity.

Table LIX

Learning Activities Used With Moderate
Frequency and Widely Reported as Needing
to be More Available and as Preferred

Item number	Learning activity
01	In-district workshop (1-3 days).
02	Out-of-district workshop (1-3 days).
03	Series of workshops or study sessions on a specific topic.
06	District orientation or administrative training session.
11	Consultation with an outside specialist.
16	Visits to other schools in the district.

10. Most of the activities of which principals tended to make infrequent or moderate use, but which they desired to use more often and which they also perceived as important, were formal activities of a workshop or short course nature.
11. Learning activities which are held in the district, and/or which facilitate ongoing study of an area of interest were widely viewed as important activities which should be more readily available.

School district characteristics. Two school district variables were examined: district group, specified as urban or rural, and individual school district.

The findings related to rates of recent use of learning activities suggested that use of several activities was less frequent in rural than in urban school districts. However, apart from this trend, reporting patterns indicating desired greater availability and preference were generally

similar among school districts. There was a strong trend indicating a more widespread desire for greater availability among rural district principals.

The only major conclusion which is warranted by the findings is that, in the population studied:

- 12'. Principals in more remote districts tended to report having used some learning activities less often than did those in urban districts. However, variation in rates of recent use was generally referenced to the individual school district rather than to the majority of districts in either the urban or the rural group.

School characteristics. Three school variables were considered: location, type and relief time allocation.

School location was measured in terms of the number of schools which a respondent could contact with a local telephone call. Most instances of variation from expected patterns of reporting were associated with the most isolated schools and with consultative activities.

All five activities for which reporting patterns showed significant variations in recent use rates among location categories were consultative in nature. In each case, the mean rate of recent use was lowest in the category of principals who reported being unable to contact any other school with a local phone call.

For some learning activities for which significant variation was noted in reporting patterns for desired greater availability, the small number of responses limited the validity of analysis. However, for the items which had sufficient reports (items 04, 05) the "zero contacts" group were the primary contributors to significant variation. In each case,

their percentage of reports was disproportionately high. This pattern was repeated for the items mentioned above, which had relatively few reports. Altogether, nine items showed significant variation in reporting patterns among location groups. Six of these items were consultative learning activities. In almost every case, more principals than had been expected in the three groups who were able to contact somewhere between zero and ten other schools reported a desire for greater availability. In every case, those who could contact more than ten other schools contributed at a disproportionately low rate.

School type was specified as elementary, secondary or elementary-secondary. A definite pattern appeared in the means of recent use ranks for items showing significant variation among school type categories.

For twelve of the twenty-four learning activities listed in the questionnaire, recent use reporting trends resulting in significant variation. For nine of these twelve items, the mean of recent use ranks was higher among secondary principals than among either elementary or elementary-secondary principals. Six of the nine activities were consultative in nature.

Although these consultative activities tended to be more frequently used among secondary principals, there was generally no significant variation in indications of preference for the same items. In fact, for item 16 - Visits to other schools in the district, secondary principals contributed much smaller proportions of total responses than expected for indicators of availability and preference. These findings suggest that although secondary principals tended to use certain consultative activities more

frequently than did their colleagues, they did not more often see these as preferred activities.

Relief time was measured in terms of the percentage of regular school hours for which the principal was released from teaching to carry out administrative and supervisory responsibilities. As might have been expected, principals with the greatest amount of relief time also reported using certain learning activities more frequently than did others.

Significant variation in patterns of recent use occurred for ten of the twenty-four learning activities. In eight of these cases, six of which were consultative, principals with over seventy-five percent relief time had the highest mean ranks of recent use rate. In almost every case, the mean ranks for those with under fifty percent and for those with fifty to seventy-five percent were below the mean for the total sample.

Reporting trends for indicators of the desire for greater availability and of preference were generally consistent among groups. Other than for some activities where the number of responses was very low, only one item was unevenly reported among relief time groups. Item 15 - Informal contacts at committee meetings, was identified as a preferred activity by more principals in the lowest and highest relief time categories than had been expected. No principal in the fifty to seventy-five percent category identified item 15 as a preferred activity.

The findings related to school characteristics permit the following conclusions about the population studied:

13. Availability was an important factor in the use of consultative activities. Further, there was evidence to suggest that principals who had limited opportunities to consult with others would have preferred greater availability of activities of this nature.
14. Consultative activities tended to be most frequently used among secondary principals. These principals did not, however, tend to express more of a preference for consultative activities than did their colleagues. This suggests that the frequent use of certain consultative activities may indicate some major differences between elementary and secondary schools in some aspects of the principal's job.
15. The amount of relief time available to the principal was related to the use of learning activities, particularly consultative activities. Those with more relief time tended to consult more frequently.

Respondent characteristics. Two characteristics of respondents were examined as independent variables: experience and education.

Experience as a teacher, as a non-principal administrator and as a principal were studied. For experience in the first two categories, some patterns were noted among items for which recent use rates varied significantly. The items themselves were spread across all three categories of learning activities. With regard to previous teaching experience, the "zero to one year" group tended to report less frequent use than did the other three experience categories. The opposite was true for non-principal administrative experience. There was little evidence of any repeated patterns with regard to desired greater availability or preference for either of these categories of experience.

Examination of the findings regarding the learning activities of respondents categorized by experience as a principal reveals little evidence of association. Numerous examples of variation were identified, but there was little evidence of repeated patterns of variation.

Education was measured in terms of the university degree most recently achieved or in progress. Three degrees were designated: bachelor's degree, master's degree in education administration, master's degree in some other field. For twelve of the twenty-four learning activities listed, the bachelor's degree group reported use rates which led to mean ranks lower than those of the overall sample. In almost every one of these cases, the mean of recent use ranks for the bachelor's degree category was lower than for either of the master's degree groups. Six of the twelve activities were consultative in nature, and five were personal.

This repeated pattern among items for recent use ranks was not generally carried over to measures of availability and preference. Although several instances of variation were noted, various groups were primarily responsible for this variation.

It should be noted that there was wide discrepancy as to group size. Of 212 respondents, 148, or approximately seventy percent, fell in the bachelor's degree category. It seems likely that this category would have included a large percentage of the small schools, the elementary schools and the more isolated schools. It would be difficult to assert that evidence exists to indicate a relationship between education and the various dimensions of learning activities.

It may be concluded that, for the population studied:

16. There was insufficient evidence to suggest that the principal's experience or education were important factors in the learning activities component of his/her learning efforts.

Summary

This section has reviewed the major findings of the study, and has presented conclusions related to those findings. The following section draws on these findings and conclusions, and on other observations made during the study, to state several implications and to make recommendations.

IMPLICATIONS AND RECOMMENDATIONS

Theoretical Considerations

A major task performed by this exploratory study was the testing of a particular conception of the learning efforts of school principals. Hills (1975:444) suggests that useful conceptions

provide the intellectual tools that an individual must have if he is to . . . analyze what . . . , others are doing, or what is going on in terms other than those of common sense.

The two main aspects of the conceptual framework developed for the present study were the definition of a learning effort and the idea that certain independent variables may be related to one or both of the major components of a learning effort: interests and activities. The general consistency of the data obtained from various groups of principals, the completeness of the questionnaires and the nature of the items added by respondents suggest that the terms "learning interest" and "learning activity" were relatively clear and commonly interpreted.

Figure 7 shows the areas in which the findings of the study most strongly suggested relationships between independent variables and components of a learning effort. There would seem to be two main variables, or groups of variables, which seem important in this regard. One of these is

the principal's experience as a principal. There is substantial evidence in the findings to suggest that the number of years for which one has been a principal is related to the kinds of learning interests which one has.

Another group of variables appears to be related to the principal's learning efforts. These variables might be termed situational or contextual factors. School location seems to be a factor which affects learning activities. School type, the amount of relief time allocated to the principal and some unspecified characteristics of the school district appear to be related both to learning interests and to learning activities.

There is not a substantial body of research in the area of principals' professional development. A major purpose of this exploratory study has been to identify, in a preliminary way, some regularities which may warrant further study. Corwin, Lane and Monahan (1975:80) assert that

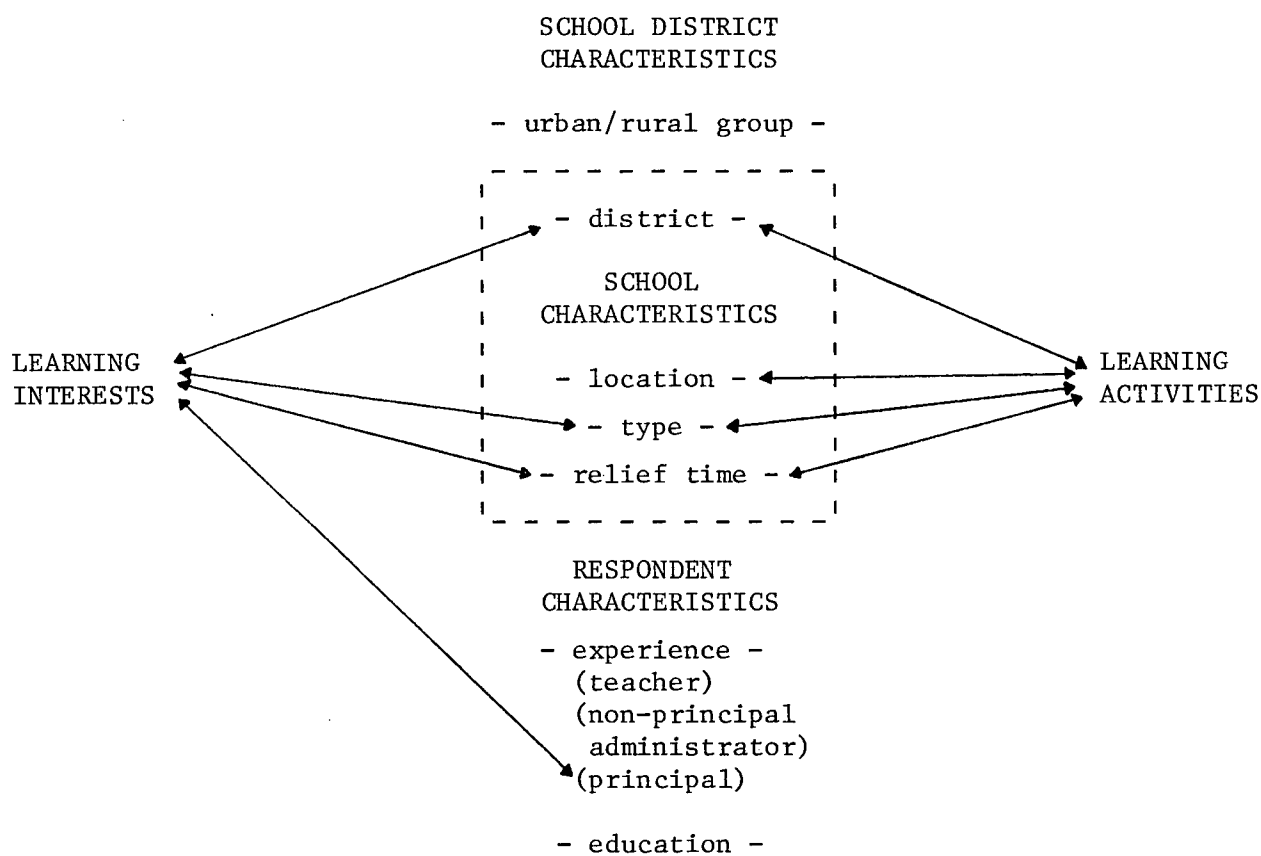
At the early stages of theory formulation, exact limits often remain unknown, and the theorist must content himself with establishing whether or not certain relationships occur at all and must postpone more refined analyses of the limiting conditions for further research.

Care should be taken not to ignore the possibility that there may be relationships other than those noted in Figure 6. There was, however, sufficient evidence of regularities, such as those described above, to suggest further research, perhaps on the basis of a revised conceptual framework. The following suggestions for research are offered:

1. A revised conceptual framework might be used to guide further study. Such a framework could utilize the conception of a learning effort developed for the present study, retaining the ideas of recent and priority interests and the three dimensions of a learning activity

Figure 7

Relationships Identified Between Learning
Efforts and Independent Variables



(recent use, availability, preference). Independent variables might be designated as situational and as experiential.

2. Further research might explore in greater depth and breadth the characteristics of the work setting, or situation, and should be structured to facilitate isolation of the effects of one variable from those of another.
3. The "developmental sequence of teacher professional growth" postulated by Kass and Wheeler (1975) should be applied to a study of school principals. Such a study might help to establish whether a growth pattern exists which might explain the apparent relationship between experience and learning interests. Findings of this nature would have important implications for the development of theory in the area of professional development.
4. The present study did not explore relationships between learning interests and the activities preferred for learning more in these areas. Future research might attempt to determine whether such relationships exist.
5. There is a need for a more rigorous conceptual scheme to classify learning activities. The system used in the present study (formal, consultative, personal) appeared to be usable by respondents, but it is difficult to avoid overlap, particularly between formal and consultative activities. It may be, for example, that some principals attend certain formal activities in order to consult with others.

Methodological Considerations

The possibility that learning efforts may be related to combinations of independent variables, and the apparent importance of situational factors, suggest the need for a more in-depth study. Such a study might take the form of a single-district or two-district case study, or an interview study intended to explore the idea of experience-related differences among principals.

The present study had a high return rate and a high proportion of usable data. These facts might be explained by examining some aspects of the data collection procedure. Specifically, the returns may have been enhanced by respondent interest in the topic, attendance of the researcher at principal's meetings, agreement of the researcher to return with a report of the findings, and the appointment of a local contact person. The cost of site visits, however, may be prohibitive for many studies.

The research instrument would benefit from some minor modifications before further use. The instructions for part A1 might be made somewhat more explicit, in an effort to ensure that respondents make an entry opposite each kind of experience. If a shorter list of items is desired, some seldom-reported interests and activities could be deleted. The two extra spaces at the end of each group of learning interests could be replaced by two or three spaces at the end of the page.

The study sample was not randomly selected. To carry out a survey which would provide enough data for meaningful analysis, some adjustments would have to be made in operational definitions. The terms "urban group" and "rural group" were defined in such a way that twelve school districts in British Columbia qualified. Ten of these districts were studied. Sample size would also need to be greatly increased to ensure sufficient data.

The foregoing comments might be summarized in several methodological recommendations:

6. Further study might employ an in-depth interview approach which would facilitate exploration of the possible existence and nature of identifiable differences among principals with varying backgrounds of experience on the job.

7. A case study approach might be used to further explore a wide range of situational variables which may be important to the principal's learning efforts.
8. Where appropriate, site visits should be carried out before and after research in a school district, if such research involves a large proportion of the personnel in the district. Such visits serve not only to enhance return rates. They may also aid in the dissemination of knowledge.
9. If further research is to be carried out with the instrument used in the further study, minor modifications might be made to clarify one item and to shorten the list of learning interests, as suggested in the text of this report.

Implications for Practice

A number of theoretical and methodological considerations have been identified in the previous two sections of this chapter. The findings of the study also have implications related to the planning and delivery of professional development opportunities for school principals.

In the area of learning interests, three major topics were of widespread interest. In addition, there was evidence to suggest that priority of concern rests with matters of direct relevance to the work carried on in the individual school. The findings and conclusions in this area lead to several recommendations:

10. If professional development functions of interest to a wide range of principals are to be planned, three general areas of study might be considered. These are: development and evaluation of the instructional program, provision of educational services to students with special needs, and the supervision of teachers.
11. Further research at the local level is prerequisite to effective planning, for several reasons. The present study has identified general concerns, but more specific information is needed. There is evidence of differing priorities among districts.

Finally, such factors as school type and size, and the principal's experience, appear to be associated with differences in interests.

12. Despite the fact that a number of general trends have been identified, there were many instances where learning interests and activities were reported by only a few principals. Although the numbers were limited in these cases, the perceived importance of the interest or activity may have been very high. Planning efforts should facilitate meeting individuals' stated needs.
13. This study surveyed principals only. It may be that the responses of others associated with the principal's work should be surveyed, to obtain a multi-dimensional view of potential areas of study.

Interest in the topic examined appears to have been high among the principals studied. The questionnaire return rate was high in all school districts, and a large number of principals entered comments on the back page of the questionnaire. Many of these comments reflected a desire for more professional development activities at a local or regional level, and for a more systematic approach to planning. The findings related to learning activities were consistent with these remarks. Widespread interest was expressed in local and regional activities, and in activities which permitted ongoing study of a problem. These findings led to the following recommendations:

14. Greater emphasis should be given to the in-district and regional workshop as professional development activities.
15. Ongoing study groups might be established to provide opportunities for sustained learning efforts.

Both of these recommendations, if implemented, would be likely to lead to increased consultation among principals. The contacts established at such sessions might also facilitate intervisitation, an activity widely

reported among principals as being preferred and as needing to be more available. It is recommended that, in the districts studied:

16. Provision be made for inter-school visitation, within and outside of the district, as a part of the effort to gain knowledge and skill in specific areas.

There was also an indication that, where principals were relatively isolated and/or had a substantial teaching assignment, they were unable to consult as often or as broadly as they would have liked. Sometimes this appeared to be because of location, and sometimes because of a lack of time. The findings of the study suggested that, in the districts studied, consultative activities of several kinds were widely felt to be important. It is recommended that:

17. Ways to increase consultative opportunities for principals in isolated and/or small schools be explored, and that the question of available time be considered in such exploration.

Clearly, there are many factors to be considered in planning professional development activities. The present study has identified some learning interests which were widely reported among the principals in ten mid-sized British Columbia school districts. It has also gathered information about the learning activities of these principals. Some major questions, particularly those having to do with relationships between learning efforts and the principal's experience and job situation, require further research. The findings, conclusions and recommendations of the present exploratory study may provide a partial basis for local research and planning in the districts studied. They may also provide some direction for further research into the nature of the learning efforts of school principals.

REFERENCES

Bargen, P.F.

- 1963 "Of principals and leaders." The Tasks of the Principal, ed. F. Enns. Edmonton: Leadership Course for School Principals

Blalock, H.M.

- 1970 An Introduction to Social Research. Englewood Cliffs: Prentice-Hall

Brown, M.

- 1977 "Two-way contingency tables: empty cells and the identification of departures from independence." Biomedical Computer Program - P Series, eds. W.J. Dixon and M.B. Brown. Berkeley: University of California

Campbell, A.A. and G. Katona

- 1953 "The sample survey: a technique for social science research." Research Methods in the Behavioral Sciences, eds. L. Festinger and D. Katz. New York: Holt, Rinehart and Winston

Campbell, R.F., J.E. Corbally and J.A. Ramseyer

- 1966 Introduction to School Administration, 3rd edition. Boston: Allyn and Bacon

Corwin R.G., W.R. Lane and W.G. Monahan

- 1975 "The nature of theory." Theoretical Dimensions of Educational Administration, ed. W.G. Monahan. New York: Macmillan

Davis, W.J.

- 1976 "In-service staff development programs for school principals." Paper presented at the Annual Meeting of the American Association of School Administrators, Atlantic City, New Jersey

Dill, W.R., W. Crowston and E. Elton

- 1971 "Strategies for self-education." Developing Executive Leaders, eds. E.C. Bursk and T.B. Blodgett. Cambridge, Massachusetts: Harvard University Press

Downey, L.W.

- 1961 "The skills of an effective principal." Canadian Administrator, 1:3 (December, 1961)

Goldhammer, K.

- 1968 "Implications for change in training programs." Knowledge Production and Utilization in Education Administration, eds. T. Eidell and J. Kitchell. Eugene: University of Oregon

Gregg, R.T.

- 1957 "The administrative process." Administrative Behavior in Education, eds. R.F. Campbell and R.T. Gregg. New York: Harper and Brothers

Griffiths, D. et al

- 1962 Organizing Schools for Effective Education. Danville, Illinois: Interstate

Haughey, M.L.

- 1976 Consultative Practices in Elementary Schools. Unpublished doctoral dissertation. Edmonton: University of Alberta

Hays, W.L.

- 1973 Statistics for the Social Sciences. New York: Holt, Rinehart and Winston

Helmstadter, G.C.

- 1970 Research Concepts in Human Behavior. Englewood Cliffs: Prentice-Hall

Hencley, S.P. et al

- 1970 The Elementary School Principalship. New York: Dodd Mead

Hills, R.J.

- 1975 "The social-behavioral sciences and educational administration." Theoretical Dimensions of Educational Administration, ed. W.G. Monahan. New York: Macmillan
- 1977 "The place of theory in an applied profession." Unpublished paper presented at the Annual Meeting of the National Conference of Professors of Educational Administration: Eugene

Kass, H. and A.E. Wheeler

- 1975 "Toward a concern-based developmental sequence of teacher professional growth." Paper presented at the Annual Meeting of the Canadian Society for the Study of Education: Edmonton

Katz, D.

- 1953 "Field studies." Research Methods in the Behavioral Sciences, eds. L. Festinger and D. Katz. New York: Holt, Rinehart and Winston

Katz, R.L.

- 1955 "Skills of an effective administrator." Harvard Business Review, 33:1 (January-February, 1955)

Kelsey, J.G.T. and B. Leullier

- 1978 "School district policies for the identification, selection and training of principals." Canadian Administrator, XVII:5 (February, 1978)

Knowles, M.S.

- 1967 "Program planning for adults as learners." Adult Leadership, 15

Konrad, A.G., J.C. Long and J.M. Small

- 1976 "Canadian administrators have needs too." The Administrator in Higher Education: An Assessment of Professional Development Needs, eds. C.W. Edwards and J.W. Pruyne. Columbus: University Council for Educational Administration

Lipham, J.M. and J.A. Hoeh

- 1974 The Principalship: Foundations and Functions. New York: Harper and Row

McCatty, C.

- 1975 "Patterns of learning projects among professional men." Alberta Journal of Educational Research (June, 1975)

Miklos, E.

- 1968 "The administrative process." The Principal as Administrator, ed. D.A. MacKay. Edmonton: Leadership Course for School Principals

Ministry of Education

- 1976 Report on Education 1975-76. Victoria: Queen's Printer

Mintzberg, H.

- 1973 The Nature of Managerial Work. New York: Harper and Row

Musella, D.F. and H.D. Joyce

- 1975 "Professional development needs of educational administrators." OCLEA, 4 (April, 1975)

Newberry, A.J.H.

- 1975 Practices and Criteria Employed in the Selection of Elementary School Principals in British Columbia. Unpublished doctoral dissertation. Indiana University

Pawliuk, R.J. and B.W. Pickard

- 1976 Professional Development Needs of Alberta School Principals. Edmonton: University of Alberta

Robertson, J.P.

- 1975 Administrative Skills Development Needs of Alberta School Principals. Unpublished M.Ed. thesis. University of Alberta

Schwartz, A.M.

- 1977 Declining Enrolment: Implications for British Columbia's Public School System. Vancouver: Educational Research Institute of British Columbia

Sweitzer, R.E.

- 1976 "The professional continuing education needs of state college administrators." The Administrator in Higher Education: An Assessment of Professional Development Needs, eds. C.W. Edwards and J.W. Pruyne. Columbus: University Council for Educational Administration

Tough, A.

- 1967 Learning Without a Teacher. Toronto: Ontario Institute for Studies in Education
- 1968 Why Adults Learn. Toronto: Ontario Institute for Studies in Education

1971 The Adult's Learning Projects. Toronto: Ontario Institute for
Studies in Education

Wagstaff, L. and T. McCollough

1962 "In-service education: education's disaster area." Administrator's
Notebook, XXI:8 (April, 1962)

APPENDIX A

PILOT STUDY

Interview Questions Used in Pilot Study (Phase Two)

These questions are not in any particular order, and as you can see, some of them overlap with others. Choose any which you find to be of particular interest (as many as you wish) to use as a basis for discussion. Space has been left for any notes you may wish to make to guide your thinking and our discussion.

Thank you for your interest and help.

.

1. As you think about your work, and your efforts to become increasingly effective as a principal, can you think of any areas in which you are particularly interested in gaining more knowledge and skill?
2. Are there any aspects of your job which you see as problematic at least partly because you need to know more about a particular topic, or to increase your skill in a particular area?
3. Are there any particular aspects of your job about which you feel that you have recently (in the past year or so) learned a lot?
4. When you decide that you want to learn more about some aspect of your job, what do you usually do?
5. If you were asked to offer suggestions for professional development topics to a principals in-service education committee, what might you suggest as the "most important" topics?

Interview Schedule and Personal and School Data Sheet Used in
Pilot Study, Phase Three

Interview Schedule

(obtain completed data sheet from respondent)

The study I am proposing is related to the professional development activities of principals. Specifically, I am interested in the areas and topics principals identify as important, and in the ways in which they go about learning.

This interview is part of the latter phase of a pilot study which will lead to the development of a questionnaire to be administered to principals in eight school districts.

Do you want to know anything else about the study before we look at some specific questions?

(provide further information if requested)

As you think about your work during the past year, can you think of any aspects which stand out as areas in which you have wanted to learn more, or learn how to do something more effectively?

(obtain items)

It doesn't matter whether the item is still of interest or concern, or not. I'm interested in knowing about any topic which comes to mind and which is, or was at the time, quite important.

(obtain additional items)

Here are some items that other principals have mentioned.

(supply list)

Do any of these bring to mind any additional areas of recent interest or concern to you?

(obtain additional items)

Let's look at the topics you have mentioned, in some detail. What specific questions/concerns do/did you have with regard to (specify each item)?

(record details)

What do you think prompted your interest in (specify each item)? Were there any specific incidents/situations/demands?

(record details)

You have identified (list areas). Which of these are most important, in terms of their urgency, frequency of recurrence, or your general interest?

(record means)

Of these methods that you commonly use (list those specified), which are of the greatest value? Why?

(list responses)

Are any of these methods sometimes not very useful at all? Why?

(list responses)

Are there any other methods or learning resources which you would like to use or have available, but which are unavailable or difficult to obtain access to?

(list responses)

That completes my list of questions - is there anything you'd like to add about your efforts to learn - any other areas or ways in which you try to increase your knowledge or skill?

Thanks very much for your help - this information will be of real value in developing the final form of the questionnaire.

Personal and School Data Sheet

1. Of which type of school were you a principal during 1976-77?
____ elementary
____ secondary
____ elementary-secondary
2. How many other schools are located within 10 miles of your school?
____ 0 to 3
____ 4 to 10
____ more than 10
3. How many years of experience do you have?
____ years as a teacher, with no administrative/supervisory responsibilities.
____ years in administrative positions, but not as a principal.
____ years as a principal.
____ years in total.
4. Which of the following most closely describes your current educational level? (check one)
____ Bachelor's degree completed or in progress.
____ Master's degree completed or in progress, in education administration.
____ Master's degree completed or in progress, but not in education administration.
5. How far is your school from either Vancouver or Victoria (whichever is more readily accessible)?
____ 0 to 100 miles
____ more than 100 miles
6. Would you consider your district to be:
____ primarily urban (almost all schools fairly large and in town)?
____ fairly rural (25% or more of the schools are quite small and scattered)?

Table LX

Pilot Study Findings: Learning Interests

-
-
- selection and development of instructional programs
 - evaluation of programs
 - school-level curriculum development: needs assessment, materials development, evaluation
 - program evaluation
 - curriculum development
 - curriculum area expertise

 - staffing practices: deployment, utilization
 - supervision practices
 - staffing: interview techniques
 - staff selection, allocation
 - staff development
 - clinical supervision
 - use of substitute teachers
 - use of non-teaching personnel
 - an overall approach to teacher evaluation
 - personnel management: personal counselling
 - development of teaching skills in teachers
 - alternate teaching styles
 - dealing verbally with staff members
 - evaluation of non-teaching personnel
 - personnel relations: motivation
 - formation and responsibilities of staff committees
 - interpersonal relations
 - approaches to supervision
 - supervision of instruction
 - evaluation of teaching
 - management of conflict
 - getting staff involved in professional reading

 - student discipline: approaches
 - district programs of student evaluation
 - interpersonal relations
 - special education: ethnic, special class, remedial
 - dealing with student and family problems

 - conducting parent and other interviews
 - role of personnel from other agencies
 - community involvement
 - public relations
 - dealing with student and family problems

 - finances: methods of school budgeting
 - preparation of reports to board
 - school district budgeting procedures
 - general office management
 - management of time
 - long-term and short-term planning
 - accounting and filing procedures
 - building programs
 - budget record-keeping systems
 - scheduling, timetabling
 - school law as it pertains to school operation
-
-

Table LXI

Pilot Study Findings: Learning Activities

-
-
- university extension course
 - summer session course
 - workshops - in-district
 - workshops - out-of-district
 - conferences: multi-district
 - orientation sessions for new principals
 - arranged a reading workshop
 - arranged for a university course
 - attempted unsuccessfully to attend workshops
 - attended district training functions

 - discussions with teachers
 - talked to other principals
 - met with district staff coordinators
 - served on a district committee
 - talked to district staff
 - approached specialists in the area
 - talked to superintendent
 - talked to mature, experienced teachers
 - contacts trustworthy colleagues
 - contacted district staff for specific information
 - discussed with vice-principal
 - intervisitation in the district
 - intervisitation outside the district
 - shared copies of good material
 - met with friends for lunch regularly to discuss
 - talks to university personnel
 - consult an expert colleague
 - discussions at PSA meetings
 - mutual cooperative school assessment
 - consult a colleague who works close by
 - consult someone with similar responsibilities or problems
 - talk to co-participants at workshops
 - committee work
 - discussion with family, friends

 - professional reading, writing
 - implementation attempts (trial and error) based on reading and thinking
 - personal research: testing of students, etc.
 - university course content and note review
 - reflection, pondering, independent thought
 - trial use of programs
 - reading of departmental bulletins
 - developing own files
 - review of research
 - participated in accreditation process
 - reading of curriculum guides, administrative bulletin
 - changed routines, deleted activities, stopped some projects
-
-

APPENDIX B

INSTRUMENTATION

Evaluation Sheet Used in Final Phase
of Questionnaire Development

Were there any questions or phrases that you did not understand or thought were ambiguous? Please specify question number and comment further.

Is there any information which you have liked to provide (relevant, of course, to the purposes of the study), but were not given the opportunity to do so on this questionnaire? Please specify.

Were the instructions to each question clear? YES _____ NO _____

If not, which instructions were unclear? _____

Overall, in terms of the ease of filling out this questionnaire compared to others that you have completed, how would you rate it?

(circle one) OUTSTANDING GOOD AVERAGE POOR

Explanatory comments, if any: _____

Thank you for completing the questionnaire
and this evaluation.



PRINCIPALS' PROFESSIONAL DEVELOPMENT STUDY

Thank you for participating in the Principals' Professional Development Study, which is currently being carried out in several British Columbia school districts. The information gathered is expected to be of considerable importance to principals, their professional associations, school districts and other groups involved in the in-service education of school administrators.

An important premise of the study is that the planning of professional development activities and programs should be based substantially on the priorities of those involved. This questionnaire will provide an opportunity for you to reflect on your own learning interests and activities, and to contribute to a process which may yield very useful results.

A. PERSONAL AND SCHOOL INFORMATION

NO. _____

A1 Experience in Educational Positions

How many years of experience have you had in each category?
Please do not include the current school year.

Please check one box opposite each category below.

- As a teacher with no administrative responsibilities.....
- In administrative positions, but not as a principal.....
- As a principal.....
- As a principal in your present district.....
- As a principal in your present school.....

Years of experience prior to this school year			
0 - 1	2 - 5	6 - 10	over 10

A2 Education

Which of the following best describes your most-recently-achieved educational level?
Check one item only.

- Bachelor's degree completed or in progress..... ☐
- Master's degree completed or in progress (a) in education administration..... ☐
- (b) not in education administration..... ☐
- Other (please specify) _____

A3 School Location

Of all the other schools in your district, how many can you contact
from your school with a local (not long-distance) phone call?

- none..... ☐
- 1 to 3..... ☐
- 4 to 10..... ☐
- more than 10..... ☐

A4 School Type

Please circle all grades enrolled in your school. —————→

K	1	2	3	4	5	6	7
8	9	10	11	12			

A5 Relief Time

For what portion of your time during regular school hours
do you have time off from teaching to carry out administrative
and/or supervisory responsibilities?

- less than 50%.....☐
- 50% to 75%.....☐
- over 75%.....☐

B. AREAS OF INTEREST

As you think about your work during the past year or so, you can probably identify some areas in which you have particularly wanted more knowledge and skill.

In some cases, you may have learned what you wanted to know. In others, time or resources may not have been available, or your interests may have changed. Some topics might still be important to you.

B Instructions

Listed below are some aspects of your job. Circle the number of each area in which, at some time during this or the previous school year, you have particularly wanted to increase your knowledge and skill, regardless of whether you actually engaged in any learning activities related to those topics.

Educational Program

- | | |
|---|--|
| 01 Assessing community and school needs for special courses and programs. | 06 Evaluating the effectiveness of the school's instructional program. |
| 02 Choosing instructional programs from among available alternatives. | 07 Learning more about specific subject areas. |
| 03 Implementing new instructional programs. | Other "educational program" items not included in this list: |
| 04 Developing curriculum at the district level. | 08 _____ |
| 05 Developing curriculum at the school level. | 09 _____ |

Staff Personnel

- | | |
|--|---|
| 10 Evaluating and writing reports on the work of teachers. | 17 Developing effective communication among teachers and between teacher and principal. |
| 11 Developing an effective approach to the supervision of instruction. | 18 Supervising non-teaching personnel. |
| 12 Managing and resolving conflict. | 19 Stimulating teacher interest in professional growth. |
| 13 Interpersonal relationships. | Other "staff personnel" items: |
| 14 Handling the stresses of my job. | 20 _____ |
| 15 Involving staff in planning and decision-making activities. | 21 _____ |
| 16 Conducting staff meetings. | |

Pupil Personnel

- 22 Advising students about course and program selection.
- 23 Providing for students with special needs.
- 24 Assigning, grouping and scheduling students for instruction.
- 25 Evaluating student achievement and progress.
- 26 Developing a district testing program.

- 27 Dealing with student problems.
- 28 Developing school guidelines for pupil conduct.
- 29 Student-teacher relations.

Other "pupil personnel items:

- 30 _____
- 31 _____

External Relations

- 32 Determining community attitudes and priorities.
- 33 Working with home-school groups and parent committees.
- 34 Conducting conferences and interviews with parents.

- 35 Working with agencies which provide services to students and their families.
- 36 Dealing with other departments of the school district.

Other "external relations" items:

- 37 _____
- 38 _____

General Management

- 39 Provincial educational finance.
- 40 School district budgeting procedures.
- 41 Preparing annual school budget submissions.
- 42 Allocating budgeted funds.
- 43 General office management routines: record-keeping, filing systems, etc.

- 44 Managing my time.
- 45 Legal aspects of the job.

Other "general management" items:

- 46 _____
- 47 _____

C. LEARNING ACTIVITIES - USE AND AVAILABILITY

C1 Instructions

As you re-examine the learning interests you identified in Part B (opposite) consider those for which you have engaged in definite efforts to learn more, and try to recall what you did.

Opposite each item in the list below, circle the symbol which best describes your actual use of that activity during this or the previous school year.

Symbols:N - NEVERS - SELDOMO - OCCASIONALLYF - FREQUENTLY

(once or twice)

(3 or 4 times)

(5 or more times)

- | | | | | | |
|---|---|---|---|----|--|
| N | S | O | F | 01 | In-district workshop (1-3 days). |
| N | S | O | F | 02 | Out-of-district workshop (1-3 days). |
| N | S | O | F | 03 | Series of workshops or study sessions on a specific topic. |
| N | S | O | F | 04 | Short course (1-2 weeks). |
| N | S | O | F | 05 | Annual conference or convention. |
| N | S | O | F | 06 | District orientation or administrative training session. |
| N | S | O | F | 07 | University course. |
| | | | | | |
| N | S | O | F | 08 | Consultation with teachers. |
| N | S | O | F | 09 | Consultation with vice-principal. |
| N | S | O | F | 10 | Consultation with district central office staff. |
| N | S | O | F | 11 | Consultation with an outside specialist. |
| N | S | O | F | 12 | Consultation with other principals. |
| N | S | O | F | 13 | Informal get-togethers with other administrators. |
| N | S | O | F | 14 | Discussions with family or friends. |
| N | S | O | F | 15 | Informal contacts at committee meetings. |
| N | S | O | F | 16 | Visits to other schools in the district. |
| N | S | O | F | 17 | Visits to schools in other districts. |
| | | | | | |
| N | S | O | F | 18 | Professional reading: books, journals, bulletins, etc. |
| N | S | O | F | 19 | Reference to a personal file of collected articles. |
| N | S | O | F | 20 | Reviewing university course notes. |
| N | S | O | F | 21 | Writing a paper or giving a presentation. |
| N | S | O | F | 22 | Purposeful trial-and-error and experimentation. |
| N | S | O | F | 23 | Reviewing the results of research. |
| N | S | O | F | 24 | Use of information retrieval systems, i.e. ERIC. |

Other activities used or desired:

- | | | | | | |
|---|---|---|---|----|-------|
| N | S | O | F | 25 | _____ |
| N | S | O | F | 26 | _____ |
| N | S | O | F | 27 | _____ |

C2 Instructions:

Which learning activities (items 01 through 27 above) would you probably have used more often if they had been more readily available?

Circle the numbers of those items in the list above.

D. PRIORITY AREAS AND PREFERRED ACTIVITIES

D1 Instructions

Of all the areas listed in Part B (preceding page), which would you most like to learn more about, over the next few months?

Enter the numbers of these areas in any order in the boxes below, and then go on to D2.



Priority Areas
(at least 3 and up to 5)

D2 Instructions

Opposite each priority area you have just identified in D1, enter the numbers of three learning activities you think would be most useful in learning about that aspect of your work.

Choose these activities from items 01 through 27 above. Assume that all are readily available. You may wish to vary activities according to the topic.

Preferred Learning Activities

APPENDIX C

DATA COLLECTION

Sample Letter
to
District Superintendents

Dear _____:

Further to our telephone conversation, I am forwarding details of my doctoral research project. Thank you for your expression of interest.

I have attached an outline of the Principals' Professional Development Study, which is being carried out in ten school districts in the province this fall. The findings of the study should be of considerable use to your district in planning professional development programs for school administrators. In this regard, I am willing to return to _____ after completing the study, should you so wish, to review the findings with you and the principals.

As we discussed, I have set aside (date) for attendance at your principals' meeting to introduce the study and distribute the questionnaire. This should take about twenty minutes. Will you use the enclosed consent form and return envelope to confirm permission to conduct research? Could I also get from you a list of the principals in your district who have at least 20% administrative/supervisory time?

If you would like further information about the study, please contact me or Dr. Ian Housego (Phone numbers attached). I look forward to the meeting, and trust that this research activity will be of value to your district as well as being helpful in the completion of my dissertation.

Thank you.

Yours truly,

Vernon J. Storey

Enclosure

APPENDIX D

LEARNING INTERESTS

Table LXII

Recent and Priority Learning Interests:
Numerical Frequency and Percentage Reporting

Learning interest	Reported as Recent interests			Reported as Priority Interests		
	Number of principals reporting N: 212	Percentage of principals reporting	Rank	Number of principals reporting	Percentage of principals reporting	Rank
01	79	37.3	16	16	7.5	19
02	80	37.7	15	21	9.9	14
03	106	50.0	7	32	15.1	8
04	46	21.7	30	12	5.7	25
05	115	54.2	6	47	22.2	6
06	166	78.3	1	104	49.1	1
07	84	39.6	12	25	11.8	11
10	129	60.8	4	59	27.8	4
11	141	66.5	3	74	34.9	2
12	58	27.4	26	16	7.5	19
13	40	18.9	32.5	14	6.6	22
14	55	25.9	28	20	9.4	15.5
15	74	34.9	20	11	5.2	27
16	40	18.9	32.5	7	3.3	31.5
17	74	34.9	20	22	10.4	13
18	39	18.4	34.5	6	2.8	33.5
19	120	56.6	5	54	25.5	5
22	8	3.8	37	2	0.9	37
23	147	69.3	2	69	32.5	3
24	56	26.4	27	18	8.5	17
25	102	48.1	8.5	28	13.2	10
26	42	19.8	31	4	1.9	35
27	74	34.9	20	24	11.3	12
28	73	34.4	23	12	5.7	25
29	74	34.9	20	16	7.5	19
32	94	44.3	10	30	14.2	9
33	74	34.9	20	12	5.7	25
34	72	34.0	24	8	3.8	30
35	82	38.7	13	13	6.1	23
36	35	16.5	36	6	2.8	33.5
39	39	18.4	34.5	3	1.4	36
40	76	35.8	17	10	4.7	28.5
41	69	32.5	25	10	4.7	28.5
42	50	23.6	29	7	3.3	31.5
43	81	38.2	14	15	7.1	21
44	89	42.0	11	35	16.5	7
45	102	48.1	8.5	20	9.4	15.5

Table LXIII

Recent Learning Interests Added by Respondents

Item number	Item
08	Hearing impaired programs
08	How to increase effectiveness of instruction in small schools
08	Evaluation of "pre-vocational" materials
08	Kindergarten
08	Developing specific behavioral objectives for subjects
08	Training program for prospective administrators
08	Counselling
08	Metric programme
08	Familiarity with primary curriculum, methods
08	Indian education
08	Impact of French in elementary schools
08	Physical handicap - instruction
08	Ideas for new courses
08	Techniques of developing specific course objectives
08	Better work habits
08	Integrated studies technique
09	Learning diagnostic skills for special needs students
09	Developing knowledge of how to behave
20	Communication between school boards and teachers
20	Dealing with the 9 to 3 teacher
20	Evaluating effectiveness of part-time staff
20	Working with staff on specific programs
20	Improving parent-teacher relationships
20	Assistance to new teachers
20	Changing teacher behavior
20	Helping teachers to be more effective
20	Assisting weak teachers
20	Improving teacher-pupil communication skills
20	Helping beginning teachers
21	Boosting teacher morale
21	Helping "tired" teachers
30	Developing a school newspaper
30	Dealing with former teachers of transfers-in
30	Dealing with damage to school property
30	Developing realistic disciplines for item 28
30	Inter-agency info for counselling, etc.
30	Integrating EMR pupils
30	Drug and alcohol abuse
30	Developing a school testing program

/continued.

Recent Learning Interests Added by Respondents (cont.)

Item number	Item
31	Effective anti-smoking campaign
37	Developing a handbook for parents
37	Dealing with area counsellor (other specialists)
37	Developing and distributing school policies
37	Dealing with our board office
37	PR to improve teacher image
37	Family counselling
38	Dealing with maintenance staff, etc.
46	Priority of demands
46	Improving efficiency
46	Assisting teachers to manage their time
46	Office management - levels of expectation
47	Sound general management

Table LXIV

Frequently and Infrequently Reported Learning Interests
and Items Showing Significant Variation Between District Groups

Item	Reported as a										
	N.	recent interest by district group				Sig. ¹	priority interest by district group				Sig. ¹
		urban		rural			urban		rural		
		113		99			113		99		
		no.	%	no.	%		no.	%	no.	%	
03		55	48.7	51	51.5						
04		21	18.6	25	25.3						
05		57	50.4	58	58.6		14	12.4	33	33.3	0.028
06		90	79.6	76	76.8		58	51.3	46	46.5	
10		70	61.9	59	59.6		34	30.1	25	25.3	
11		75	66.4	66	66.7		42	37.2	32	32.3	
13		22	19.5	18	18.2						
14							13	11.5	7	7.1	0.081
15							9	8.0	2	2.0	0.091
16		20	17.7	20	20.2						
17		41	36.3	33	33.5	0.092	14	12.4	8	8.1	0.017
18		23	20.4	16	16.2						
19		65	57.5	55	55.6		29	25.7	25	25.3	
22		3	2.7	5	5.1	0.058					
23		78	69.0		69.7		38	33.6	31	31.3	
25		57	50.4	45	45.5						
26		25	22.1	17	17.2		1	0.9	3	3.2	0.097
33		47	41.6	27	27.3	0.025					
36		19	16.8	16	16.2						
39		25	22.1	14	14.1						
41		45	39.8	24	24.2	0.029					
44		41	36.3	48	48.5	0.007	18	15.9	17	17.2	0.003
45		57	50.4	45	45.5						

1. Significance level reported only if less than 0.10.

Table LXV

Recent Learning Interests Reported Among Respondents Classified
by School District

Item	Respondents reporting as recent interest									
	District:		B		C		D		E	
	A		23		21		23		16	
	N: 30									
	no.	%	no.	%	no.	%	no.	%	no.	%
01	7	23.3	8	34.8	8	38.1	7	30.4	10	62.5
02	11	36.7	14	60.9	8	38.1	9	39.1	4	25.0
03	16	53.3	12	52.2	12	57.2	9	39.1	6	37.5
04	6	20.0	5	21.7	1	4.8	3	13.0	6	37.5
05	16	53.3	11	47.8	9	42.9	12	52.2	9	56.3
06	27	90.0	18	78.3	17	81.0	16	69.6	12	75.0
07	11	36.7	6	26.1	10	47.6	13	56.5	8	50.0
10	20	66.7	13	56.5	15	71.4	15	65.2	7	43.8
11	21	70.0	14	60.9	16	76.2	16	69.6	8	50.0
12	10	33.3	2	8.7	9	42.9	6	26.1	3	18.8
13	5	16.7	6	26.1	3	14.3	3	13.0	5	31.3
14	8	26.7	4	17.4	6	28.6	8	34.8	6	37.5
15	12	40.0	5	21.7	11	52.4	6	26.1	9	56.3
16	6	20.0	2	8.7	4	19.0	4	17.4	6	37.5
17	11	36.7	3	13.0	13	61.9	6	26.1	8	50.0
18	8	26.7	9	39.1	1	4.8	2	8.7	3	18.8
19	19	63.3	11	47.8	15	71.4	12	52.2	8	50.0
22	0	0.0	1	4.3	0	0.0	1	4.3	0	0.0
23	19	63.3	16	69.6	15	71.4	18	78.3	10	62.5
24	10	33.3	5	21.7	6	28.6	5	21.7	6	37.5
25	14	46.7	15	56.5	11	52.4	9	39.1	10	62.5
26	7	23.3	7	30.4	4	19.0	2	8.7	5	31.3
27	11	36.7	9	39.1	9	42.9	6	26.1	9	56.3
28	11	36.7	8	34.8	9	42.9	4	17.4	7	43.8
29	9	30.0	5	21.7	9	42.9	9	39.1	2	12.5
32	13	43.3	8	34.8	11	52.4	9	39.1	9	56.3
33	12	40.0	6	26.1	10	47.6	8	34.8	11	68.8
34	13	43.3	13	56.5	7	33.3	4	17.4	7	43.8
35	14	46.7	11	47.8	11	52.4	8	34.8	5	31.3
36	4	13.3	6	26.1	3	14.3	4	17.4	2	12.5
39	7	23.3	6	26.1	5	23.8	4	17.4	3	18.8
40	12	40.0	10	43.5	7	33.3	6	26.1	7	43.8
41	16	53.3	10	43.5	9	42.9	5	21.7	5	31.3
42	7	23.3	5	21.7	5	23.8	2	8.7	4	25.0
43	16	53.3	7	30.4	8	38.1	2	8.7	8	50.0
44	16	53.3	8	34.8	7	33.3	3	13.0	7	43.7
45	15	50.0	10	43.5	12	57.1	11	47.8	12	48.0

* Level of significance for item 22 = 0.058

Table LXVI

Priority Learning Interests Reported Among Respondents Classified
by School District*

Item	Respondents reporting as priority interest									
	District:		A		B		C		D	
	N: 30		23		21		23		16	
	no.	%	no.	%	no.	%	no.	%	no.	%
01	2	6.7	3	13.0	2	9.5	1	4.3	1	6.3
02	2	6.7	4	17.4	3	14.3	5	21.7	1	6.3
03	4	13.3	5	21.7	2	9.5	4	17.4	3	12.0
04	2	6.7	0	0.0	1	4.8	1	4.3	2	8.0
05	4	13.3	4	17.4	1	4.8	2	8.7	3	18.8
06	16	53.3	13	56.5	5	23.8	13	56.5	11	68.8
07	3	10.0	2	8.7	2	9.5	5	21.7	3	18.8
10	9	30.0	9	39.1	3	14.3	8	34.8	5	31.3
11	14	46.7	9	39.1	7	33.3	8	34.8	4	25.0
12	2	6.7	0	0.0	3	14.3	1	4.3	2	12.5
13	2	6.7	4	17.4	1	4.8	0	0.0	1	6.3
14	7	23.3	0	0.0	2	9.5	3	13.0	4	16.0
15	0	0.0	1	4.3	3	14.3	2	8.7	0	0.0
16	2	6.7	0	0.0	0	0.0	1	4.3	1	6.3
17	6	20.0	0	0.0	6	28.6	2	8.7	0	0.0
18	1	3.3	1	4.3	0	0.0	0	0.0	1	6.3
19	10	33.3	4	17.4	5	23.8	8	34.8	2	12.5
22	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
23	7	23.3	9	39.1	5	23.8	12	52.2	5	31.3
24	2	6.7	2	8.7	3	14.3	0	0.0	3	18.8
25	5	16.7	2	8.7	4	19.0	4	17.4	4	16.0
26	0	0.0	0	0.0	0	0.0	1	4.3	0	0.0
27	4	13.3	3	13.0	5	23.8	0	0.0	2	8.0
28	2	6.7	1	4.3	0	0.0	2	8.7	0	0.0
29	2	6.7	2	8.7	1	4.8	1	4.3	1	4.0
32	3	10.0	5	21.7	2	9.5	1	4.3	4	25.0
33	0	0.0	1	4.3	0	0.0	1	4.3	3	18.8
34	1	3.3	0	0.0	3	14.3	0	0.0	2	8.0
35	2	6.7	3	13.0	1	4.8	3	13.0	0	0.0
36	0	0.0	1	4.3	0	0.0	1	4.3	0	0.0
39	0	0.0	0	0.0	1	4.8	1	4.3	0	0.0
40	0	0.0	0	0.0	2	9.5	0	0.0	1	6.3
41	1	3.3	1	4.3	1	4.8	1	4.3	1	6.3
42	1	3.3	1	4.3	2	9.5	0	0.0	0	0.0
43	2	6.7	2	8.7	2	9.5	0	0.0	1	6.3
44	12	40.0	3	13.0	0	0.0	1	4.3	2	12.5
45	4	13.3	1	4.3	2	9.5	0	0.0	1	6.3

* Level of significance for item 05 = 0.028

** Level of significance for item 14 = 0.081

Table LXVII

Frequently and Infrequently Reported Recent Learning
Interests and Items Showing Variation
Among School Location
Categories

Learning interest	Respondents reporting as recent interest:								Sig. ¹
	Accessible schools: ²								
	0		1-3		4-10		over 10		
	N: 8		20		15		169		
	no.	%	no.	%	no.	%	no.	%	
01	5	62.5	9	45.0	5	33.3	60	35.5	0.082
03	5	62.5	9	45.0	8	53.3	84	49.7	
04	1	12.5	4	20.0	5	33.3	36	21.3	
05	4	50.0	10	50.0	7	46.7	94	55.6	
06	6	75.0	17	85.0	10	66.7	133	78.7	
07	4	50.0	5	25.0	6	40.0	69	40.8	
10	6	75.0	14	70.0	11	73.3	98	58.0	
11	5	62.5	14	70.0	12	80.0	110	65.0	
13	1	12.5	4	20.0	3	20.0	32	18.9	
16	4	50.0	4	20.0	2	13.3	30	17.8	
17	4	50.0	6	30.0	1	6.7	63	37.3	
18	3	37.5	3	15.0	1	6.7	32	18.9	
19	4	50.0	8	40.0	7	46.7	101	59.8	
22	0	0.0	2	10.0	0	0.0	6	3.6	
23	6	75.0	13	65.0	11	73.3	117	69.2	
25	2	25.0	10	50.0	5	33.3	85	50.3	
26	2	25.0	3	15.0	4	26.7	33	19.5	
28	4	50.0	4	20.0	6	40.0	59	34.9	
32	5	62.5	10	50.0	8	53.3	71	42.0	
33	3	37.5	6	30.0	8	53.3	57	35.7	
35	2	25.0	7	35.0	1	6.7	72	42.6	
36	1	12.5	5	25.0	3	20.0	26	15.4	
39	3	37.5	4	20.0	3	20.0	29	17.2	
41	2	25.0	9	45.0	1	6.7	57	33.7	
44	2	25.0	10	50.0	6	40.0	71	42.0	
45	5	62.5	10	50.0	8	53.3	79	46.7	

1. Significance level reported only if less than 0.10.

2. Schools accessible by local telephone call from respondent's school.

Table LXVIII

Frequently Reported Priority Learning Interests
and Items Showing Variation Among School
Location Categories

Learning interest	Respondents reporting as recent interest:								Sig. ¹
	Accessible schools: ²								
	0		1-3		4-10		over 10		
	N: 8		20		15		169		
	no.	%	no.	%	no.	%	no.	%	
05	1	12.5	6	30.0	3	20.0	37	21.9	
06	2	25.0	10	50.0	4	26.7	88	52.1	
10	4	50.0	4	20.0	6	40.0	45	26.6	
11	6	75.0	7	35.0	5	33.3	56	33.1	
17	2	25.0	0	0.0	0	0.0	20	11.8	0.099
23	4	50.0	7	35.0	8	53.3	50	29.6	
33	0	0.0	1	5.0	4	26.7	7	4.1	0.004
41	1	12.5	3	15.0	0	0.0	6	3.6	0.071
44	0	0.0	0	0.0	4	26.7	31	18.3	0.070
45	0	0.0	5	25.0	2	13.3	13	7.7	0.061

1. Significance level reported only if less than 0.10.

2. Schools accessible by local telephone call from respondent's school.

Table LXIX

Frequently and Infrequently Reported Recent Learning Interests
and Items Showing Variation Among School
Type Categories

Learning interest	Respondents reporting as recent interest:						Sig. ¹
	School type:						
	Elementary N: 161		Secondary 40		Elem.-sec. 11		
	no.	%	no.	%	no.	%	
01	50	31.1	23	57.5	6	54.5	0.004
02	69	42.9	10	25.0	1	9.1	0.015
03	86	53.4	15	37.5	5	45.5	
05	89	55.3	21	52.5	5	45.5	
06	127	78.9	32	80.0	7	63.6	
07	72	44.7	9	22.5	3	27.3	0.025
10	102	63.4	20	50.0	7	63.6	
11	106	65.8	29	72.5	6	54.5	
12	44	27.3	12	30.0	2	18.2	
13	35	21.7	4	10.0	1	9.1	
16	30	18.6	6	15.0	4	36.4	
17	54	33.5	18	45.0	2	18.2	
18	31	19.3	4	10.0	4	36.4	
19	92	57.1	27	67.5	1	9.1	0.002
22	2	1.2	4	10.0	2	18.0	0.001
23	119	81.0	23	15.6	5	45.5	0.028
25	82	50.9	17	42.5	3	27.3	
26	36	22.4	4	10.0	2	18.2	
34	62	38.5	7	17.5	3	27.3	
36	24	14.9	9	22.5	2	18.2	
39	28	17.4	8	20.0	3	27.3	
40	56	34.8	14	35.0	6	54.5	
41	54	33.5	9	22.5	6	54.5	
42	39	24.2	6	15.0	5	45.5	
43	64	39.8	11	27.5	6	54.5	
45	77	47.8	20	50.0	5	45.5	

1. Significance level reported only if less than 0.10.

Table LXX

Frequently Reported Priority Learning Interests
and Items Showing Variation Among
School Type Categories

Learning	Respondents reporting as priority interest						Sig. ¹
	School type:						
	Elementary		Secondary		Elem.-sec.		
	N:	161	40		11		
	no.	%	no.	%	no.	%	
05	35	21.7	10	25.0	2	18.2	
06	77	47.8	23	57.5	4	36.4	
10	45	28.0	10	25.0	4	36.4	
11	54	33.5	15	37.5	5	45.5	
13	14	8.7	0	0.0	0	0.0	0.093
17	14	8.7	8	20.0	0	0.0	0.057
19	41	25.5	11	27.5	2	18.2	
22	0	0.0	1	2.5	1	9.1	0.006
23	54	33.5	11	27.5	4	36.4	
28	7	4.3	5	12.5	0	0.0	0.096
41	6	3.7	2	5.0	2	18.2	0.091
44	26	16.1	8	20.0	1	9.1	

1. Level of significance reported only if less than 0.10.

Table LXXI

Frequently and Infrequently Reported Recent Learning Interests
Items Showing Variation Among Relief
Time Categories

Learning interest	Respondents reporting as recent interest						Sig. ¹
	Relief time:						
	under 50%		50 - 75%		over 75%		
	N: 55		63		94		
	no.	%	no.	%	no.	%	
03	27	49.1	36	57.1	43	45.7	
04	10	18.2	18	28.6	18	19.1	
05	28	50.9	37	58.7	50	53.2	
06	35	63.6	53	84.1	78	83.0	0.009
10	31	56.4	42	66.7	56	59.6	
11	30	54.5	45	71.4	66	70.2	0.091
13	12	21.8	11	17.5	17	18.1	
16	10	18.2	10	15.9	20	21.3	
18	13	23.6	17	27.0	9	9.6	0.011
19	27	49.1	35	55.6	58	61.7	
22	2	3.6	1	1.6	5	5.3	
23	38	69.1	48	76.2	61	64.9	
25	26	47.3	29	46.0	47	50.0	
26	9	16.4	13	20.6	20	21.3	
35	16	29.1	22	34.9	44	46.8	0.077
36	5	9.1	13	20.6	17	18.1	
39	10	18.2	12	19.0	17	18.1	
42	19	34.5	13	20.6	18	19.1	
43	28	50.9	20	31.7	33	35.1	
45	23	41.8	29	46.0	50	53.2	

Table LXXI

Frequently Reported Priority Learning Interests
and Items Showing Variation Among Relief
Time Categories

Learning interest	Respondents reporting as priority interest						Sig. ¹
	Relief time:						
	under 50%		50 - 75%		over 75%		
	N: 55		63		94		
	no.	%	no.	%	no.	%	
05	12	21.8	19	30.2	16	17.0	
06	22	40.0	31	49.2	51	54.3	
10	15	27.3	17	27.0	27	28.7	
11	17	30.9	27	42.9	30	31.9	
14	10	18.2	6	9.5	4	4.3	0.020
17	3	5.5	4	6.3	15	16.0	0.059
19	11	20.0	19	30.2	24	25.5	
23	19	34.5	27	41.9	23	24.5	0.051
26	1	1.8	3	4.8	0.	0.0	0.099
44	9	16.4	13	20.6	13	13.8	

1. Significance level reported only if less than 0.10.

Table LXXIII

Frequently and Infrequently Reported Recent Learning Interests
and Items Showing Variation Among Teaching
Experience Categories

Learning interest	Respondents reporting as recent interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 20		92		67		30		
	no.	%	no.	%	no.	%	no.	%	
04	9	45.0	20	21.7	11	16.4	5	16.7	0.046
05	13	65.0	55	59.8	29	43.3	18	60.0	
06	16	80.0	76	82.6	47	70.1	24	80.0	
10	9	45.0	64	69.6	36	53.7	18	60.0	0.091
11	10	50.0	70	76.1	38	56.7	20	66.7	
13	4	20.0	19	20.7	12	17.9	5	16.7	
14	3	15.0	22	23.9	18	26.9	11	36.7	0.088
15	9	45.0	29	31.5	20	29.9	16	53.3	
16	3	15.0	20	21.7	8	11.9	9	30.0	
18	5	25.0	20	21.7	6	9.0	8	26.7	0.089
19	15	75.0	45	48.9	41	61.2	17	56.7	
22	0	0.0	4	4.3	1	1.5	3	10.0	
23	14	70.0	65	70.7	43	64.2	22	73.3	0.061
25	10	50.0	42	45.7	34	50.7	14	46.7	
26	3	15.0	16	17.4	16	23.9	7	23.3	
33	5	25.0	34	37.0	18	26.9	15	50.0	0.011
34	6	30.0	31	34.8	17	25.4	16	53.3	
35	9	45.0	43	46.7	15	22.4	14	46.7	
36	4	20.0	13	14.1	11	16.4	7	23.3	
39	7	35.0	15	16.3	14	20.9	3	10.0	
42	4	20.0	25	27.2	16	23.9	5	16.7	
45	12	60.0	47	51.1	29	43.3	12	40.0	

1. Level of significance reported only if less than 0.10.

Table LXXIV

Frequently Reported Priority Learning Interests
and Items Showing Variation Among Teaching
Experience Categories

Learning interest	Respondents reporting as priority interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 20		92		67		30		
	no.	%	no.	%	no.	%	no.	%	
04	6	30.0	5	5.4	0	0.0	1	3.3	0.000
05	2	10.0	31	33.7	13	19.4	1	3.3	0.002
06	12	60.0	50	54.3	28	41.8	13	43.3	
10	5	25.0	30	32.6	13	19.4	10	33.3	
11	5	25.0	34	37.0	20	29.9	12	40.0	
19	6	30.0	25	27.2	14	20.9	8	26.7	
23	7	35.0	24	26.1	27	40.3	10	33.3	
29	0	0.0	5	5.4	11	16.4	0	0.0	0.007
35	2	10.0	3	3.3	2	3.0	6	20.0	0.005
36	1	5.0	0	0.0	2	3.0	3	10.0	0.037
44	3	15.0	15	16.3	9	13.4	6	20.0	
45	4	20.0	9	9.8	5	7.5	2	6.7	

1. Level of significance reported only if less than 0.10.

Table LXXV

Frequently and Infrequently Reported Recent Learning
Interests and Items Showing Variation Among
Non-Principal Administrative
Experience Categories

Learning interest	Respondents reporting as recent interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 76		80		26		5		
	no.	%	no.	%	no.	%	no.	%	
02	29	38.2	30	37.5	8	30.8	4	80.0	
03	37	48.7	41	51.3	12	46.2	2	40.0	
05	45	59.2	41	51.3	15	57.7	3	60.0	
06	57	75.0	65	81.3	18	69.2	4	80.0	
10	47	61.8	50	62.5	16	61.5	2	40.0	
11	50	65.8	59	73.8	14	53.8	4	80.0	
17	25	32.9	27	33.8	13	50.0	2	40.0	
19	40	52.6	46	57.5	15	57.7	5	100.0	
22	1	1.3	2	2.5	3	11.5	0	0.0	0.073
23	57	75.0	52	65.0	16	61.5	4	80.0	
25	32	42.1	42	52.5	11	42.3	2	40.0	
32	33	43.4	38	47.5	13	50.0	2	40.0	
33	25	32.9	26	32.5	13	50.0	1	20.0	
35	27	35.5	40	50.0	7	26.9	2	40.0	
36	8	10.5	16	20.0	6	23.1	3	60.0	
41	26	34.2	24	30.0	10	38.5	3	60.0	
42	26	34.2	16	20.0	5	19.2	0	0.0	0.086
43	27	35.5	31	38.8	9	34.6	3	60.0	
44	35	46.1	27	33.8	14	53.8	1	20.0	
45	41	53.9	38	47.5	11	42.3	3	60.0	

1. Level of significance reported only if less than 0.10.

Table LXXVI

Frequently Reported Priority Learning Interests
and Items Showing Variation Among
Non-Principal Administrative
Experience Categories

Learning interest	Respondents reporting as priority interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 76		80		26		5		
	no.	%	no.	%	no.	%	no.	%	
02	6	7.9	9	11.3	0	0.0	2	40.0	0.030
05	17	22.4	16	20.0	8	30.8	1	20.0	
06	36	47.4	41	51.3	12	46.2	2	40.0	
10	23	30.3	22	27.3	7	26.9	1	20.0	
11	29	38.2	30	37.5	6	23.1	2	40.0	
15	1	1.3	7	8.8	2	7.7	1	20.0	
17	8	10.5	10	12.5	2	7.7	1	20.0	
19	18	23.7	18	22.5	8	30.8	1	20.0	
23	26	34.2	29	36.3	6	23.1	1	20.0	
25	10	13.2	8	10.0	4	15.4	1	20.0	
28	5	6.6	4	5.0	2	7.7	1	20.0	
36	2	2.6	2	2.5	0	0.0	1	20.0	0.090
43	7	9.2	5	6.3	1	3.8	0	0.0	0.045
44	11	14.5	6	7.5	9	34.6	0	0.0	0.005

1. Significance level reported only if less than 0.10.

Table LXXVII

Frequently and Infrequently Reported Recent Learning
Interests and Items Showing Variation Among
Categories of Experience
as a Principal

Learning interest	Respondents reporting as a recent interest:									Sig. ¹
	Years of experience:									
	0-1		2-5		6-10		over 10			
	N: 42		62		42		64			
	no.	%	no.	%	no.	%	no.	%		
01	13	31.0	31	50.0	10	23.8	24	37.5	0.041	
03	19	45.2	32	51.6	16	38.1	37	57.8		
04	12	28.6	16	25.8	8	19.0	10	15.6		
05	25	59.5	35	56.5	18	42.9	37	57.8		
06	33	78.6	41	66.1	33	78.6	57	89.1	0.021	
10	32	76.2	40	64.5	24	57.1	32	50.0	0.048	
11	29	69.0	39	62.9	27	64.3	44	68.8		
13	6	14.3	15	24.2	6	14.3	13	20.3		
16	5	11.9	17	27.4	8	19.0	10	15.6		
17	12	28.6	26	41.9	9	21.4	27	42.2	0.075	
18	8	19.0	18	29.0	6	14.3	7	10.9	0.058	
19	19	45.2	37	59.7	28	66.7	34	53.1		
22	2	4.8	4	6.5	0	0.0	2	3.1		
23	29	69.0	41	66.1	28	66.7	47	73.4		
25	19	45.2	33	53.2	17	40.5	32	50.0		
26	9	21.4	14	22.6	8	19.0	11	17.2		
28	14	33.3	16	25.8	12	28.6	30	46.9	0.069	
32	21	50.0	28	45.2	16	38.1	28	43.8		
36	4	9.5	13	21.0	9	21.4	9	14.1		
39	9	21.4	15	24.2	6	14.3	9	14.1		
41	23	54.8	15	24.2	13	31.0	18	28.1	0.008	
42	19	45.2	14	22.6	8	19.0	9	14.1	0.002	
43	23	54.8	25	40.3	16	38.1	17	26.6	0.035	
44	16	38.1	26	41.9	14	33.3	32	50.0		

1. Level of significance reported only if less than 0.10.

Table LXXVIII

Frequently Reported Priority Learning Interests
and Items Showing Variation Among
Categories of Total Experience
as a Principal

Learning interest	Respondents reporting as priority interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 42		62		42		64		
	no.	%	no.	%	no.	%	no.	%	
02	3	7.1	6	9.7	9	21.4	3	4.7	0.037
05	10	23.8	18	29.0	6	14.3	13	20.3	
06	23	54.8	23	37.1	20	47.6	38	59.4	0.077
10	15	35.7	21	33.9	10	23.8	13	20.3	
11	22	52.4	18	29.0	13	31.0	19	29.7	
19	8	19.0	16	25.8	11	26.2	18	28.1	
23	15	35.7	18	29.0	15	35.7	20	31.3	
32	10	23.8	5	8.1	7	16.7	7	10.9	
44	2	4.8	11	17.7	7	16.7	14	21.9	

1. Level of significance reported only if less than 0.10.

Table LXXIX

Frequently and Infrequently Reported Recent Learning
Interests and Items Showing Variation Among
Categories of Present District Experience

Learning interest	Respondents reporting as recent interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 56		65		34		56		
	no.	%	no.	%	no.	%	no.	%	
03	23	41.1	35	53.8	15	44.1	32	57.1	0.007
04	15	26.8	15	23.1	8	23.5	8	14.3	
05	32	57.1	35	53.8	17	50.0	31	55.4	
06	44	78.6	42	64.6	29	85.3	50	89.3	
10	40	71.4	42	64.6	18	52.9	28	50.0	0.083
11	40	71.4	40	61.5	22	64.7	38	67.9	
13	8	14.3	16	24.6	6	17.6	10	17.9	0.023
16	9	16.1	15	23.1	6	17.6	10	17.9	
18	8	14.3	20	30.8	40	11.8	7	12.5	
19	26	46.4	42	64.6	24	70.6	27	48.2	
22	2	3.6	4	6.2	0	0.0	2	3.6	0.064
23	39	69.6	43	66.2	22	64.7	42	75.0	
25	24	42.9	36	55.4	15	44.1	26	56.4	
26	10	17.9	14	21.5	8	23.5	10	17.9	
27	19	33.9	19	29.2	8	23.5	27	48.2	
28	16	22.2	19	26.4	11	32.4	26	36.1	
32	29	51.8	31	47.7	11	32.4	22	39.3	
36	7	12.5	15	23.1	6	17.6	7	12.5	
39	11	19.6	15	23.1	6	17.6	7	12.5	0.003
41	29	51.8	14	21.5	9	26.5	17	30.4	
42	22	39.3	16	24.6	3	8.8	9	16.1	

1. Level of significance reported only if less than 0.10.

Table LXXX

Frequently Reported Priority Learning Interests
and Items Showing Variation Among
Categories of Present District
Experience

Learning interest	Respondents reporting as priority interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 56		65		34		56		
	no.	%	no.	%	no.	%	no.	%	
05	12	21.4	17	26.2	8	23.5	10	17.9	
06	33	58.9	21	32.3	18	52.9	32	57.1	0.011
10	20	35.7	20	30.8	7	20.6	12	21.4	
11	29	51.8	20	30.8	9	26.5	15	26.8	0.017
19	10	17.9	22	33.8	8	23.5	14	25.0	
23	19	33.9	19	29.2	11	32.4	20	35.7	
25	4	7.1	6	9.2	8	23.5	10	17.9	0.076
27	7	12.5	3	4.6	3	8.8	11	19.6	0.071
32	13	23.2	7	10.8	4	11.8	5	8.9	
41	8	14.3	1	1.5	0	0.0	1	1.8	0.001
42	6	10.7	1	1.5	0	0.0	0	0.0	0.004
44	3	5.4	12	18.5	8	23.5	11	19.6	0.073

1. Level of significance reported only if less than 0.10.

Table LXXXI

Frequently and Infrequently Reported Recent Learning
Interests and Items Showing Variation Among
Categories of Present School Experience

Learning interest	Respondents reporting as recent interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 86		87		21		17		
	no.	%	no.	%	no.	%	no.	%	
01	32	37.2	33	37.9	5	23.8	9	52.9	0.081
03	41	47.7	45	51.7	9	42.9	10	58.8	
04	21	24.4	20	23.0	4	19.0	1	5.9	
05	46	53.5	52	59.8	8	38.1	9	52.9	
06	71	82.6	64	73.6	15	71.4	15	88.2	
10	55	64.0	53	60.9	11	52.4	10	58.8	
11	62	72.1	52	59.8	13	61.9	13	76.5	
12	22	25.6	26	29.9	3	14.3	7	41.2	
13	16	18.6	18	20.7	2	9.5	4	23.5	
15	28	32.6	31	35.6	6	28.6	9	52.9	
16	11	12.8	22	25.3	4	19.0	3	17.6	
18	15	17.4	18	20.7	3	14.3	3	17.6	
19	41	47.7	57	65.5	10	47.6	11	64.7	
22	2	2.3	4	4.6	0	0.0	2	11.8	
23	59	68.6	61	70.1	15	71.4	11	64.7	
25	40	46.5	44	50.6	9	42.9	9	52.9	
26	14	16.3	24	27.6	1	4.8	3	17.6	
28	28	32.6	24	27.6	10	47.6	11	64.7	
29	22	25.6	34	39.1	11	52.4	7	41.2	
32	39	45.3	38	43.7	8	38.1	9	52.9	
33	30	34.9	33	37.9	3	14.3	7	41.2	
35	35	40.7	30	34.5	8	38.1	9	52.9	
36	11	12.8	17	19.5	2	9.5	5	29.4	
39	19	22.1	14	16.1	3	14.3	3	17.6	
41	37	43.0	19	21.8	5	23.8	8	47.1	
42	26	30.2	17	19.5	3	14.3	4	23.5	
45	39	45.3	42	48.3	7	33.3	14	82.4	

Table LXXXII
Frequently Reported Priority Learning Interests
and Items Showing Variation Among
Categories of Present School
Experience

Learning interest	Respondents reporting as priority interest:								Sig. ¹
	Years of experience:								
	0-1		2-5		6-10		over 10		
	N: 86		87		21		17		
	no.	%	no.	%	no.	%	no.	%	
03	12	14.0	12	13.8	5	23.8	3	17.6	
05	18	20.9	22	25.3	5	23.8	2	11.8	
06	47	54.7	40	46.0	9	42.9	8	47.1	
10	28	32.6	24	27.6	5	23.8	2	11.8	
11	38	44.2	26	29.9	5	23.8	4	23.5	0.096
17	9	10.5	7	8.0	2	9.5	4	23.5	
19	19	22.1	29	33.3	3	14.3	2	11.8	0.091
23	28	32.6	27	31.0	8	38.1	5	29.4	
25	9	10.5	11	12.6	5	23.8	3	17.6	
27	12	14.0	6	6.9	2	9.5	4	23.5	
41	9	10.5	0	0.0	0	0.0	1	5.9	0.009
45	9	10.5	7	8.0	0	0.0	4	23.5	

1. Level of significance reported only if less than 0.10.

Table LXXXIII

Frequently and Infrequently Reported Recent Learning Interests
and Items Showing Variation Among
Education Categories

Learning interest	Respondents reporting as recent interest:						Sig. ¹
	Degree: ²						
	Bachelor's		Master's (admin.)		Master's (other)		
	N: 148		43		21		
	no.	%	no.	%	no.	%	
03	75	50.7	21	48.8	10	47.6	0.081
04	27	18.2	14	32.6	5	23.8	
05	78	52.7	24	55.8	13	61.9	
06	113	76.4	36	83.7	17	81.0	
10	92	62.2	24	55.8	13	61.9	
11	97	65.5	28	65.1	16	76.2	0.062
12	36	24.3	12	27.9	10	47.6	
13	30	20.3	6	14.0	4	19.0	
16	29	19.6	7	16.3	4	19.0	
18	23	15.5	12	27.9	4	19.0	
19	76	51.4	30	69.8	14	66.7	0.063
22	5	3.4	2	4.7	1	4.8	
23	106	71.6	27	62.8	14	66.7	
25	74	50.0	18	41.9	10	47.6	
26	27	18.2	11	25.6	4	19.0	
27	55	37.2	9	20.9	10	47.6	0.095
32	62	41.9	18	41.9	14	66.7	
36	21	14.2	10	23.3	4	19.0	
39	19	12.8	13	30.2	7	33.3	
42	36	24.3	7	16.3	7	33.3	
44	58	39.2	20	46.5	11	52.4	0.006
45	67	45.3	25	58.1	10	47.6	

1. Level of significance reported only if less than 0.10.

2. University degree most recently completed or in progress, specified as bachelor's, master's in education administration, master's in some other field.

Table LXXXIV

Frequently Reported Priority Learning Interests
and Items Showing Variation Among Education
Categories

Learning interest	Respondents reporting as priority interest:						Sig. ¹
	Degree: ²						
	Bachelor's		Master's (admin.)		Master's (other)		
	N:	148	43	21			
	no.	%	no.	%	no.	%	
05	33	22.3	10	23.3	4	19.0	
06	68	45.9	25	58.1	11	52.4	
10	43	29.1	10	23.3	6	28.6	
11	52	35.1	13	30.2	9	42.9	
17	11	7.4	8	18.6	3	14.3	0.088
19	34	23.0	15	34.9	5	23.8	
23	50	33.8	10	23.3	9	42.9	
32	17	11.5	8	18.6	5	23.8	
44	20	13.5	14	32.6	1	4.8	0.004

1. Level of significance reported only if less than 0.10.

2. University degree most recently completed or in progress, specified as bachelor's, master's in education administration, master's in some other field.

APPENDIX E

LEARNING ACTIVITIES

Table LXXXV

Additional Learning Activities specified by Respondents

-
-
- meetings with the Board formally/informally
 - preparation of monthly and annual reports
 - preparation of university course assignments
 - university course
 - informal get-togethers
 - resource centre
 - community organizations
 - meetings with school parents
 - committee of department heads
 - staff meetings
 - comparing test results with other principals
 - principal-teacher retreats
 - consultation with parent groups
 - consultation with personnel from other agencies
 - working with school board members
 - parent-teacher conference
 - parent-principal conference
 - meetings with community groups
 - staff-community sporting activities
 - school open house
 - frequent classroom visits
 - consultation with parents
 - discussion in local teachers centres
 - exchange program
 - thinking
 - resource centre
 - district curriculum development
 - discussion and work with parents
-
-

Table LXXXVI

Learning Activities: Variation Among School Districts
for Availability and Preference Indicators

Item		Respondents reporting, by district																					Sig. ¹
		District:		A		B		C		D		E		F		G		H		J		K	
		N:30(14.2) ³		23(10.8)		21(9.9)		23(10.8)		16(7.5)		25(11.8)		18(8.5)		20(9.4)		20(9.4)		16(7.5)			
R ²		no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
03	c	6	20.0	12	52.2	9	42.9	11	47.8	10	62.5	13	52.0	4	22.2	9	45.0	12	60.0	7	43.8		
	i		6.5*		12.9		9.7		11.8		10.8		14.0		4.3		9.7		12.9		7.5		0.063
06	c	6	20.0	9	39.1	9	42.9	10	43.5	9	56.3	3	12.0	8	44.9	10	50.0	8	40.0	4	25.0		
	i		7.9		11.8		11.8		13.2		11.8		3.9*		10.5		13.2		10.5		5.3		0.052
09	c	1	3.3	0	0.0	1	4.8	1	4.3	0	0.0	3	12.0	5	27.8	3	15.0	0	0.0	2	12.5		
	i		6.3		0.0		6.3		6.3		0.0		18.8		31.3		18.8		0.0		12.5		0.021
18	c	6	20.0	0	0.0	2	9.5	3	13.0	0	0.0	13	52.0	1	5.6	0	0.0	4	20.0	2	12.5		
	i		19.4		0.0		6.5		9.7		0.0		41.9		3.2		0.0		12.9		6.5		0.000
19	c	4	13.3	0	0.0	0	0.0	0	0.0	0	0.0	1	4.0	0	0.0	2	10.0	0	0.0	1	6.3		
	i		50.0		0.0		0.0		0.0		0.0		12.5		0.0		25.0		0.0		12.5		0.099
09	c	3	10.0	1	4.3	4	19.0	0	0.0	0	0.0	0	0.0	0	0.0	4	20.0	0	0.0	1	6.3		
	i		23.1		7.7		30.8		0.0		0.0		0.0		0.0		30.8		0.0		7.7		0.016

1. Sig. = level of significance.

2. R = reporting characteristics, designated as: c = number and percentage of respondents in this category who reported this item; i = percentage of total reports for this item.

3. Figures in parentheses indicate percentage of total sample represented by this district.

* = Category identified as major contributor to significance for this item.