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AN ASSESSMENT OF THE PERCEIVED INSERVICE NEEDS OF K-12
TEACHERS OF THE LAKE UNION CONFERENCE OF SEVENTH-DAY
ADVENTISTS

Andrews University

Ed.D. 1983

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AN ASSESSMENT OF THE PERCEIVED INSERVICE NEEDS
OF K-12 TEACHERS OF THE LAKE UNION
CONFERENCE OF SEVENTH-DAY
ADVENTISTS

A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Hazel R. Garner Wright
August 1983

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Hazel R. Garner Wright

APPROVAL BY THE COMMITTEE:

Chairman: Edward A. Streeter Dean, School of Education

Committee Member: George H. Akers

Committee Member: Fonda Chaffee Date approved _____

Committee Member: Arthur O. Coetzee

External Examiner: Frederick R. Stephan

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ABSTRACT

AN ASSESSMENT OF THE PERCEIVED INSERVICE NEEDS
OF K-12 TEACHERS OF THE LAKE UNION
CONFERENCE OF SEVENTH-DAY
ADVENTISTS

by

Hazel R. Garner Wright

Chairman: Edward A. Streeter, Ed.D.

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

Department of Education

Title: AN ASSESSMENT OF THE PERCEIVED INSERVICE NEEDS OF K-12
TEACHERS OF THE LAKE UNION CONFERENCE OF SEVENTH-DAY
ADVENTISTS

Name of researcher: Hazel R. Garner Wright

Name and title of faculty advisor: Edward A. Streeter, Ed.D.

Date completed: June 1983

Problem

While an active and costly inservice program exists for teachers of the Lake Union Conference, there appears to be no data on the perceived inservice needs of these teachers. Consequently, there is a need to identify their perceived inservice educational needs for purpose of enhancement and strengthening the existing program. The present study attempts to identify the perceived inservice needs of the K-12 teachers of the Lake Union Conference currently employed within its educational system.

Method

Data was gathered by using the "Lake Union Conference Inservice Assessment" which was a modified version of Ingersoll's Teacher Needs Assessment Survey modified to incorporate the unique place of religion in the curriculum under study. Responses for each item on the Likert-type scale were weighted giving strongly disagree--1, disagree--2, undecided--3, agree--4, and strongly agree--5. Items were ranked using weighted scores. Nine categories were ranked according to the mean of the weighted score, while each item within the category was ranked. Teachers were analyzed as a K-12 group, divided into elementary and secondary, further divided by years of experience and teaching assignment.

Results

Responses indicated similar perceived inservice needs, such as integrating the religious concepts into the curriculum, making it applicable to everyday life, motivating and instilling in the student the will to learn on his own. On the other hand, distinct differences were observed such as secondary teachers perceived a greater need for discipline and teaching techniques, whereas, the elementary teachers had a greater need for implementing and supervising individualizing instruction and developing better communication with parents and students.

Conclusions

The K-12 teachers of the Lake Union Conference were cognizant of their responsibility in the development of religious and moral values. It appears the teachers were more concerned about the

development of the students in their classroom than their own personal development. Years of experience and teaching assignment had a direct affect on the teachers' perceived inservice needs.

CHAPTER I

INTRODUCTION

Background--Inservice Education

The matter of inservice education for teachers should play a central role in the thinking of educators generally and educational administrators in particular. An example of such thinking is found in the following definition of inservice education as given by the National Commission on Teacher Education and Professional Standards:

. . . that growth which takes place after the teacher is on the job. It is a continuation of the professional development which was begun during the preservice period of preparation. Inservice education is a process inherent in any planned program designed to make the individual a more effective teacher. (Edmonds, 1966, p. 8, Emphasis supplied)

One of the important commodities dealt with in education, namely, factual information in both the learning process and the value of the course content to be taught, is continually undergoing updating and enlargement at an unbelievable rate, therefore, one can readily agree with a definition that places inservice education and updating at the heart of effective teaching.

While the centrality of the role of inservice education has seen limited alteration, the modes and foci of inservice education have seen considerable fluctuation. Prior to World War I, inservice

education was held in the normal schools of that day during summer sessions. When the certification requirements of the 1930s made it necessary for all teachers to hold bachelor's degrees, the focus of inservice education took on the form of remediation for making up degree deficits. Prall and Cushman conducted an extensive study of educational practices during 1944 and pointed up the need for inservice education to stretch beyond mere remediation to the development of teachers and the broadening of their understanding of the learning process itself.

During the period between World War II to the mid-1950s inservice education again made an effort to assist in certification requirements (Tyler, 1971). The increased birth rate called for additional certified personnel to teach the burgeoning school-age population.

The advent of Sputnik in 1957 shocked America into the realization that the Russian educational system had somehow yielded better space scientists than the American system. This realization in turn served as a stimulus to find ways and means of producing a superior educational product to what had previously originated in America. Scientists and educators alike collaborated to evaluate and improve the educational scene. As a result of the research conducted, curriculum guidelines and frameworks were established to assist the teacher to teach the required facts. The advent of the new mathematics, science innovations, and audio-visual technology of the time pointed up the dire necessity for retraining teachers for the new content and methodology needed (Tyler, 1971).

The post-Sputnik era provided renewal of both course content and teacher effectiveness.

The post-Sputnik era brought with it greater awareness for the value of inservice education and a popularizing of that practice, educators of the 1970s began with a fundamental review of the nature, value purposes, planning strategies, and modes of inservice education. Sportsman (1981, p. 307) felt that traditionally inservice education had been nothing more "than a hastily prepared, ineptly presented, and educationally stultifying" event. Others like Rubin (1978, p. 8) agreed that "the legacy of inservice education was characterized by randomness and fragmentation, by programs that deferred to expediency rather than need, and methodologies that were largely outdated."

This was a continuation of the analysis started in the 1960s when educators who noticed deficiencies in the inservice education process began to suggest new solutions. Moffit (1963) saw that schools were facing different kinds of issues than they had previously met strongly recommended that schools now become involved in the inservice educational process itself.

Up to this time the content and mode of inservice training had been determined by forces and considerations outside of the input of those who were directly involved in the actual teaching process. The need for teacher participation in all phases of inservice education was beginning to be recognized as of value. Mauth (1962) maintained that

. . . success of inservice program is directly proportionate to acceptance of its goals by participants. . . . Perhaps the surest way to avoid abuse of this principle of learning is to start an inservice education program with direct and immediate concerns of the staff. These concerns cannot be surmised but must be defined in direct consultation with the teachers themselves. (p. 15)

Throughout the literature of the 1960s, one could readily detect the growing emphasis on teacher participation in planning the inservice educational program. Teachers were not motivated by the programs which had been provided up to this time (Johnson & Johnson, 1980). Roberts (1964, p. 17) surfaced the problem like this: "Too often, decisions in such matters as inservice education were made for teachers as though someone else knew best the problems with which teachers needed help." While the need for participative planning by teachers became obvious, no planning models existed, nor did there appear to be enough experimental data to support the growing notion that participative planning was to be preferred. Harris and Bessent (1969) voiced their concern over the limited research which was being conducted in the area of inservice education as well as the lack of case studies and objective descriptions of inservice programming.

Gradually, educators began to fit the earlier findings of psychology into the framework of inservice training. The importance of "starting" an inservice program with perceived needs of teachers can be substantiated by basic learning theory. Bugelski (1956) wrote:

. . . learning proceeds most effectively and tends to be most permanent when the learner is motivated that is, when he has a stake, as it were, in the activity being undertaken. (p. 452)

Bigge (1964) now concurred with Bugelski (1956) by stating

. . . that motivation to learn is produced if a person develops a state of tension resulting from unsatisfied needs. . . . The person's aims becomes a reduction of tension, which can occur only as the need is whole or partially satisfied. Therefore when an individual is expected to be motivated to the point of participating in an inservice program the person must feel that some need is being met. (p. 1891)

For any inservice program to be successful, it seems, then, the participating teacher should perceive and identify a need for a particular skill then motivation toward participation in an inservice program can take place. It was felt that this could best be achieved when a teacher participates in the inservice planning process. This call for teacher participation in planning inservice educational programs continued into the 1970s. Brimm and Tollett (1974) reflected the tone of the decade by the following:

. . . determination of the needs of the teachers within the school system seems prerequisite to the planning of meaningful inservice programs. Too often, the membership of inservice planning committees is composed largely of school administrators.

Finally, if teachers' professional growth is to be taken seriously, school administrators and teachers must pool their knowledge and resources and seek to make inservice education more responsive to the needs and interests of practicing classroom teachers. (p. 525)

Aaron (1965, p. 5), and Edmond (1963, p. 8) maintained that "the initial step in the inservice programming is to be the identification of the needs of the participants. Inservice activities should then be planned based upon those needs." Harris (1969) advocated inservice programs should be planned around the needs of the individuals participating in the activities. Moburg (1972) stated:

Any successful program must be geared to the present needs of teachers. Research should be conducted which compares the self-perceived instructional needs of teachers with a needs assessment obtained through direct observation, personal interviews, unobtrusive or reactive measures. Research should be conducted which assesses the needs of teachers and bases the inservice program directly upon those needs. (p. 36)

Moburg (1972) wrote about conducting inservice programs in reading based on needs assessment and on surveys conducted by Adams (1964), Austin and Morrison (1963), and Smith, Otto, and Harty (1970) were based on teachers' needs. Unfortunately, results of the surveys were not reported in the literature.

Adams (1964) stated that teachers should be involved "in decisions about the content of the inservice through some medium, and the programs should be based on the perceived needs of the teachers" (p. 32).

Mills (1962) examined inservice education programs, and determined that inservice, to be effective, "needs to be planned intelligently. This planning required a critical assessment of the personnel which were involved, determining the types of programs, means and method of providing for such" (p. 52).

Ingersoll, aware of this need to include the teacher in the decision-making process for effective inservice education, in the absence of an existing instrument, developed in 1975 an assessment instrument himself which "would provide reliable and convenient format through which a variety of school systems could gather data on perceived inservice needs, using that data to plan inservice programs" (1978, p. 1). Ingersoll successfully field-tested the instrument and concluded that the needs of elementary- and secondary-school teachers

were different requiring differentiation in inservice education heretofore overlooked.

Differentiation of inservice training on the basis of needs assessments is logical from a variety of standpoints, including the fact that teacher training needs are not static. As teaching conditions change, concomitant changes are viewed in inservice training. (p. 2)

While the 1960s and 1970s brought much information on the purposes of inservice education as well as information on the characteristics of successful inservice education and the best delivery modes for such, their great contribution was the highlighting of the importance of the teacher as a partner and determinant in successful inservice education.

Statement of the Problem

Inasmuch as there is an active and costly inservice program which exists for the K-12 teachers of the Lake Union Conference of Seventh-day Adventists, the question has been raised whether the teachers' perceived needs had been taken into consideration when planning inservice programs.

Purpose of the Study

The purpose of this study was to identify the perceived inservice needs of the K-12 teachers of the Lake Union Conference of Seventh-day Adventists currently employed within its educational system. In order to adequately address the problem as stated above the researcher studied several consequential auxiliary questions which include:

1. Tracing what has been written and published on the major issues of inservice education including perceived inservice needs of teachers.

2. Analyzing the perceived inservice needs of the teachers of the Lake Union Conference of Seventh-day Adventists by years of experience and teaching assignment. Research questions (see page 80 and 81) such as the following were posed:

- a. What are the perceived inservice needs of all K-12 Lake Union Conference teachers?
- b. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades K-8?
- c. What are the perceived inservice needs of Lake Union Conference secondary teachers who teach grades 9-12?

3. Recommending specific ways for meeting the perceived needs of the teachers in this study.

Importance of the Study

Adequate inservice education has been recognized as an important part of the educational process of teachers (Moffitt, 1965). As such it is perceived to be at the heart of all education.

Proper education of the nation's teachers is and should be the concern of every citizen. It is the education of teachers that determines the quality of learning and therefore the quality of people of this country. . . . It therefore appears safe to conclude that the quality of any school system may largely be determined by the quality of the inservice educational program involving the total professional staff. (p. 7)

Inservice education has traditionally aimed at addressing the problems of either getting undegreed or uncertified teachers degreed or certified or retraining teachers for an updated content

and methodology. The 1980s, however, have brought new and unanticipated demands and purposes to inservice education. One can hardly depend only on the content of the past educational inservice programs. A cutback in the teacher corps because of decreasing enrollment has to a large extent eliminated undegreed and uncertified teachers.

The question now is what the shape of inservice is to be for these remaining teachers and how should the content of inservice training for these teachers be determined in order to get the best returns on the dollar? If the answer to successful inservice education was previously seen to lie in teacher participation and in determining the perceived needs of the teachers involved, would not that same solution be of value again? The answers to these questions are seen to be of national interest, yet literature on experimental investigation of this is scarce.

How much has Seventh-day Adventist educational leaders made use of the teacher as a partner and determinant in inservice education? To this researcher's knowledge it appears no study has to date been conducted to determine the extent to which the educational leaders of the church have utilized the participative and needs assessment approach either nationally or in the geographical area of the Lake Union Conference of Seventh-day Adventists.

The extent to which current inservice programs meet the needs of their teachers is not known. If the answer to the above questions are of national importance to American education generally, it could also be of specific significance to the educational administration of the Lake Union Conference of Seventh-day Adventists. Furthermore,

if Mauth (1962), Bugelski (1956), and Bigge (1964) are correct that inservice programs are more effective and greatly improved by greater teacher participation in their planning, then that factor ought to figure strongly in the development of any inservice programs that the Lake Union Conference of Seventh-day Adventists might develop in the future.

The findings of this dissertation appear to be the first published data on the perceived inservice needs of the teachers in the Lake Union Conference of Seventh-day Adventists. The data presented in this dissertation could give the educational leaders of the Lake Union Conference a knowledge base from which to plan future inservice education programs. The review of the related literature provides a consensus of the views of educators upon which to form a theoretical base for the development of successful inservice programs.

Basic Assumptions

It was assumed for the purpose of this study that:

1. Teachers have perceived needs for inservice which are not being met at the present time.
2. Teachers can adequately perceive and express their need for professional growth.
3. Inservice education based on the teacher's perceived need would provide a more highly desirable basis for successful professional growth.
4. There is a difference in the perceived needs of teachers at different grade levels.

Delimitations of the Study

This study was delimited to the teachers in the Lake Union Conference of Seventh-day Adventists which did not include non-teaching principals and supervisors.

Limitations of the Study

1. The study was limited to the concepts which relate to the regular educational program provided for by the Lake Union Conference of Seventh-day Adventists.
2. The study was limited to the extent to which teachers can articulate their needs.

Definition of Terms

For the purposes of this study, the following definitions are used:

Inservice Education is that portion of professional development which takes place during employment and which consists of systematically organized meetings conducted for a number of educators to increase their competencies, knowledge, skills, and attitudes needed by school personnel in the performance of their assigned responsibilities.

Teacher's Perceived Needs is the teachers' interpretation of an instructional activity or competency that is needed for them to perform more effectively in the classroom.

Combination elementary and secondary is when a teacher is involved on both the elementary and secondary level.

Multi-grade is a classroom where an elementary certified teacher teaches more than one elementary grade.

Elementary is kindergarten through grade eight.

Secondary is ninth, tenth, eleventh, and twelfth grades.

Lake Union Conference is a geographical and administrative unit of the Seventh-day Adventist Church which is made up of five local conference encompassing the states of Michigan, Illinois, Wisconsin, and Indiana.

Conference is an administrative unit of the Seventh-day Adventist Church which is made up of an area or one state, such as Michigan.

Supervisor is a person from each individual conference who assists the teachers in their teaching assignments.

Need is a gap in educational outcomes or results. It is the discrepancy between the current results (not procedures or processes) and the desired or required results (Kaufman & English, 1975).

Needs Assessment is the formal process for identifying outcome gaps between current results and desired results placing those gaps in priority order and selecting the gaps of highest priority for closure. It is, then, an outcome gap analysis plus the placing of priorities among the needs (Kaufman & English, 1975).

Organization of the Study

The organization of the study involves five chapters. Chapter I includes the introduction, statement of the problem, purpose of the study, importance of the study, basic assumptions, delimitation, limitations, definition of terms, and organization of the study.

Chapter II gives a review of literature which contains an historical overview of inservice training development, purposes of

inservice education, characteristics of successful and unsuccessful inservice programs, delivery systems, cooperative inservice education programs, varying needs of teachers, and planning strategies. Chapter III describes the research design, the methodology used for collection of data, the population, and the instrument tabulation used in the study. Chapter IV presents the data results and Chapter V summarizes the findings of the study, drawing conclusions and making recommendations.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Introduction

This chapter reviews the relevant literature which surfaced as a result of this study relating to the inservice needs of teachers.

The review of the related literature constitutes a theoretical framework for thinking about inservice education and for evaluating the effectiveness of inservice educational programs. As such, it forms both the background and basis for the evaluation of the findings of the perceived inservice needs of the teachers in the Lake Union Conference of Seventh-day Adventists as reported in chapter IV of this study.

The literature on inservice education is reviewed by first giving an historical overview of inservice education followed by a consensus discussion of the purposes of inservice education. Next is given an overview of what is considered by educators to be the characteristics of successful and unsuccessful inservice education, the inservice education perceptions of teachers, successful modes of delivery systems, and the preferred planning strategies.

Historical Overview on Inservice Education

Inservice education over the years passed through several modal stages, as revealed by the literature, but it also experienced a pluralization of purposes.

Substitutions for College Education

Tyler (1971, p. 5) wrote that during the past 120 to 130 years the country was committed to the concept of universal elementary education. During the mid-1800s teachers did not have the benefit of a college education. Some had limited formal training in the art of teaching but were allowed to teach because most adults had little knowledge of reading or writing and even less knowledge of what should be taught in schools. Yearly institutes were held for new teachers to update their profession. The public accepted this as adequate preparation.

Degree Completion and Summer Schools

Tyler (1971, p. 8) continued that from 1889 until after World War I, the type of inservice education provided for teachers were summer courses offered by normal schools. After World War I until the Great Depression the main purpose of summer school was to enable teachers to complete their college degrees (p. 11). This meant that colleges and universities concentrated on filling the need for these courses.

Certification

The Great Depression, according to Tyler (p. 12), forced a reexamination of the inservice education of teachers and school curriculum. A need to keep more students in school resulted in the universities and colleges introducing new courses and new methods of inservice education for teachers.

Tyler stated that after World War II the baby boom brought increased enrollments and with this a shortage of teachers. This

changed the direction of inservice education in order to enable teachers to qualify for certification.

Sputnik Era--Science and Mathematics Emphasis

During the 1960s inservice education focused on improving the science and mathematics curriculum (Tyler, 1971, p. 13). The primary impetus for this came from the space program and other technological advances. Inservice education concentrated on preparing teachers to cope with new trends.

The Seventies and Reexamination of Inservice Training

During the 1970s inservice education turned to implementation and examination of the schools' goals and objectives (Tyler, 1971, p. 15). Joint planning of inservice education by teachers and administrators was another step forward in some districts. It did not seem proper for administrators to dictate any longer the content of inservice education. Teachers were well educated and felt they could successfully contribute to joint planning sessions. This trend in turn brought an emphasis on determining the perceived need of teachers in order to plan effective inservice educational programs (Ingersoll, 1978, p. 1; Nigaiyaya & Hanley, 1978, pp. 309-10).

In fact the 1970s constituted a complete reevaluation of everything related to inservice education such as the nature, purpose, existing program modes, delivery systems, interest groups, and characteristics of successful inservice training programs.

For the highpoints of the results of the reexamination of inservice education one turns to the next sub-sections of this chapter.

Purposes of Inservice Education

Naturally one of the first concerns of educational researchers was to determine why inservice training programs should exist.

Updating, Continuation, and Completion of Formal Education

The purpose of inservice education, according to Hass (1957, p. 211), Smith and others (1961, p. 173) was stated as follows:

. . . The major purpose for inservice education is to promote the continuous improvement of the total professional staff of the school system. All teachers, administrators, and supervisors must study constantly in order to keep up with advances in subject matter and in theory and practice of teaching. Continuous inservice education is needed to keep the profession abreast of new knowledge and to release creative abilities.

Frandsen (1980, p. 63) stated that a complete rethinking had taken place defining what is an adequate preparation for today's professions. It is no longer considered necessary to try to cram all of the professional preparation into undergraduate and graduate programs. These programs have become "the gate of entry into a lifetime of challenge in the broader realms of learning and accomplishments." Professionally trained teachers have an obligation to continue to enhance and to develop their abilities. Teachers should prepare the citizens of tomorrow and feel at home with technical advances. If teachers were not prepared to work in the world of expanding knowledge and advancing technology, they would be holding back students' development.

McManana (1972, p. 61) concurred with Broudy (1978, p. 59) that inservice education programs should help teachers keep up to date on latest developments in new content, teaching materials, techniques, and innovations that have taken place in the field of

education. Researching, observations, visitation, meetings, college courses, and professional conferences could help toward this goal. The teacher would continue to have high morale and interest in teaching if administration allowed teachers to take advantage of these types of inservice programs.

Student Performance and Teaching Improvement

Bush (1971, p. 38) maintained the following was the purpose of inservice education:

The only true "index of the programs" quality lies in the teacher's classroom performance and ultimately in the students' learning. Surely the ultimate objective and purpose is to improve the student's learning but there are intermediate objectives at which inservice education can be aimed. The alternation of teacher behavior can be considered as a legitimate objective in and of itself. It is essential, in the final analysis to link teacher behavior to changes in pupil behavior, but there are intermediate stages in which it is not necessary to apply this full link.

The real purpose of inservice education was to improve the total learning environment for children and youth, advocated Zeran (1953, p. 257), and Smith and Others (1961, p. 173). The most important part of this learning environment was the teacher and their involvement.

The improved preservice education of school employees, wrote Yeager (1959, p. 77), does not always decrease the need for continued inservice education. It was expected that employees would grow professionally because of performed assigned tasks without an awareness of advances that may have taken place. The purpose of inservice education was to acquaint teachers with new methods, skills, and social changes that had occurred.

Problem-Solving Orientation

According to Tyler (1978, p. 152) the individuals who had the responsibility for inservice education should be held accountable for helping teachers to become professional problem solvers guided by concepts and principles. Tyler pointed out four purposes of inservice:

1. Remediation
2. Developing the competence necessary to deal with specific problems
3. Assisting the teacher in learning what is necessary to attain professional goals
4. Giving stimulation and educational opportunities to counteract boredom and lowered professional performance.

Tyler's purposes could be accomplished if the people who have the responsibility for inservice education ensure that well-defined goals are attained. Tyler continued that enthusiasm, initiative, intelligence, and energy of the teachers can help to make the inservice education a meaningful program that will help to develop the individuality of the teachers rather than pressing them all into the same conformity (p. 153).

Stone (1969, p. 189) found inservice education activities attempted to cover four primary objectives. These were:

1. To change attitudes toward the problems encountered in teaching
2. To increase personal knowledge, understanding, and appreciation of pupils
3. To improve professional knowledge and skills and to

increase effectiveness in providing instruction to meet the special needs of pupils

4. To modify personal and professional behaviors in the classroom and school (Stone, 1969, p. 190).

A variety of workshops, scholarly presentations, small group discussions and interactions, and practicums was used to implement inservice programs to meet these objectives, according to Stone (1969, p. 191).

Salary Improvement

Houston and Freiberg (1979, p. 7) indicated that the major incentive for teachers to continue their education was to gain an increase in salary. This was true of typical inservice programs.

Morale Building

Harrison and Gowin (1958, p. 251) contended that because of the large number of teachers that became discouraged and left the profession, raising teachers' morale should be one of the goals of inservice, one reason for encouraging teachers to participate in any part of the inservice education.

Socialization

Mackie and Gervais (1979, p. 9) indicated that once inservice education had provided for teacher's basic needs, another function should take place, namely, the need for socialization. Every inservice program should provide adequate time for social interaction of participants. During these periods of socialization many ideas and experiences could be exchanged which could be valuable to teachers. One factor which would encourage a social discourse would be the

seating arrangement. This would encourage questioning and practical answers could be shared. Inservice workshops would not only serve as a center for dissemination of knowledge but for exchanging ideas.

Characteristics of Successful and Unsuccessful Inservice Programs

Successful Programs

The effective inservice programs described by Berman and Friederwitzer (1980, p. 51) and those preferred by teachers possessed common elements for planning, implementation, and evaluation. Inservice should involve a continuous theme over a period of time, interspersed with classroom tryouts. According to Berman and Friederwitzer successful inservice should possess the following characteristics based on teachers' expressed needs.

1. Include teacher input early in the program, deal with curriculum change and innovation, providing teacher training prior to the onset of a new program.
2. Have immediate application to the classroom.
3. Combine subject-matter content with teaching methodology.
4. Include construction of teacher-made materials.
5. Employ activities for teachers that paralleled those to be used with children, thus creating a model for classroom application.
6. Provide teachers with a knowledge of subject matter before and after their particular grade level.
7. Include supervisory personnel as well as teachers in the same program.
8. Hold inservice education at the school building or building level.
9. Conduct inservice education during the school day with released time for participants.
10. Provide for ongoing, continuous evaluation of the process, the participants and the effects of the program on the student achievement. (Berman & Friederwitzer, p. 51)

Inservice for both teachers and administrators. Stoops, Rafferty, and Johnson (1981, p. 375) pointed out the necessity of inservice education for both teachers and administrators. This has resulted because of rapid changes in environment and technology.

It is the responsibility of each individual, stated Stoops, Rafferty, and Johnson (p. 376), to seek self-improvement and the responsibility of the school to provide opportunities for this to take place. Inservice should be based on the need assessment of school individuals.

Nine basic facts of inservice education according to Stoops, Rafferty, and Johnson were:

1. Inservice programs have emerged from recognized needs of school and community.
2. School personnel need inservice education.
3. Proper supervision is an effective means of accelerating the inservice professional growth of personnel.
4. The quality of instruction is the immediate and long range goal of inservice education.
5. Inservice education leads to a continuous process of reexamination and revision of the educational program.
6. A concern of state agencies, colleges and universities, school boards, school administrators, and teachers has been inservice education.
7. Supervisors should create an atmosphere that stimulates a desire on the part of teachers for inservice growth.
8. Inservice education should provide for keeping teachers abreast of important research and advances in education.

9. Inservice education is most effective when cooperatively initiated and planned (p. 375).

Needs assessment of community, curriculum, and staff. Stoops, Rafferty, and Johnson (1981, p. 377) further maintained that inservice education must be flexible and adapt to the changing needs of community, curriculum, and staff. The principal was the key person in observing, consulting with, and advising and helping teachers select inservice programs that would make them proficient.

Guidelines for improved inservice efforts were reported by Oliva (1976, p. 395) and Hutson (1980, p. 6). They maintained that it was important to involve inservice clients in planning their own programs. This meant that data on teacher's interests, needs, concerns, and problems should be assessed and made the important part of planning inservice activities.

According to Dull (1981, p. 112), inservice education programs were influenced by many factors, and to be effective they should include the following:

1. Relate to the district's goals
2. Evolve from a diagnosis of district, building, and individual's needs followed by programs to meet these individual needs in reference to district goals
3. Provide for continuous inservice education for all levels
4. Relate to goal setting by individual staff members with evaluation done in terms of these goals
5. Concentrate on changes in both subject matter and methodology
6. Utilize multiplication principles of recognizing staff

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members who are competent in specific skills so that they can train others

7. Relate theory and application in such a way that changes in staff behavior can be measured

8. Provide continuation of preservice training as the beginning of a continued development which is the responsibility of the local district and universities

9. Provide activities which are well planned and carried out for the mutual benefits of staff members and students

10. Initiate effective change within the school or school district (Dull, 1981, p. 112).

Dull concluded (p. 113) that inservice education should leave an impact on teachers. Theoretically, this would make learning more exciting and significant for students. Teachers should have developed new teaching strategies and have new up-to-date knowledge to use in their teaching as a result of their inservice education.

Incentives and location. Hutson also stated that incentives for participation in inservice programs should emphasize intrinsic professional rewards. There should be limited dis-incentives, inconvenient times or locations or other factors that would penalize participation. Research literature did not support the concept that extrinsic rewards such as extra pay induced teachers to work harder planning or participating in inservice programs if professional motivation was absent. He also advocated that "the school site" was where inservice activities should be conducted.

Of course, the exact nature of planned activities should be the determinant of location, but for the most purposes the school site has the distinct advantage of being "job-embedded."

Inservice education should follow the developmental, not a deficit model. Teachers are not seen as needing inservice education because they lack the necessary skills to do an effective job. The developmental assumption is that teachers need not be weak in order to become stronger. (Hutson, p. 6)

Participative planning. Hutson and Silvernail (1980, p. 9) believed the best planners of inservice were people who participate in inservice programs. Equally important, the best planners were school personnel working together to assess and meet their professional needs. Hutson and Silvernail stated that the best providers of inservice were master teachers and administrators within local systems or those recognized by their fellow colleagues as having credibility and expertise within the inservice topic area. Outside consultants were acceptable as good providers if they were knowledgeable in the topic areas and were available for follow-up activities. The authors maintained that the time for inservice activities was during regular school hours and participation in inservice programs was necessary for professional development and self-fulfillment. The ultimate results of an inservice program were improvements in the instructional program for students. An additional benefit for the participants was better cooperation and communication among staff and administrators as well as improved morale, concluded Hutson (p. 6).

Houston and Freiberg (1979, p. 8) contended that poorly planned inservice programs could be remedied by a conceptual model wherein teachers could participate. As educators, professional teachers should assume some responsibility for continued growth (p. 10). This meant teachers should have a voice in the inservice programs that attempted to keep abreast with new trends and innovations in the field of education.

Drummond (1979, p. 39) believed that inservice education should be managed by people who worked in the buildings and should deal with the individual, group problems, and concerns found there. The motives of those involved in inservice education needed to be apparent.

A five-step technical assistance process approach to inservice education was advocated by Trohaus and Jackson (1980, p. 386). They maintained that an effective and efficient inservice program required an overall framework to guide its implementation employing the following steps:

1. Examining objectives
2. Assessing the client's needs
3. Preparing an agent-client agreement
4. Coordinating and delivering assistance
5. Evaluating the technical assistance.

In the event that additional assistance was needed, the individual might ask for another assessment and the cycle would be repeated (Trohaus & Jackson, 1980, p. 386).

The distinguishing characteristics of a good inservice program presented by Alexander (1960, p. 152) contained the following points:

1. Relationship of the inservice program to the experimental background of the people
2. Cooperation of school systems, state departments of education, and universities
3. Well-organized conferences and workshops
4. Experimentation and action research
5. Work experiences of various kinds

6. Participation in various studies by teachers and administrators, principles, and supervisors.

Alexander (1960, p. 156) thought growth would result for both leader and staff members when all cooperated and had as their common goal the improvement of the classroom atmosphere. There would be value in active participation of studying the problems which were of mutual concern and a policy would evolve democratically.

Chamberlain, Kindred, and Mickelson (1969, p. 359) and Kent (1979, p. 247) reported that local school administrators should give careful attention to establishing inservice procedures that allow "an on-going and response" of classroom teachers' needs. If teachers were going to implement change, time should be given to plan, revise curriculum, discuss problems, try out new techniques, and to rethink instructional practices. At the same time, Kent maintained, the school administrators should realize that time was money and should have a workable plan before allowing teachers to fritter away valuable time. Both teachers and administrators have the responsibility to plan inservice programs and follow-up in such a way that the community would realize that results were being utilized in the classroom.

There should be active participation by teachers and other staff members in inservice, stated Harris, Bessent, and McIntyre (1969, p. 16). Inservice should be planned with individual needs as the central theme. However, the following practices still violated this basic idea in many ways.

1. Inservice planned for teachers by administrators
2. Plans based on superficial surveys of teachers' interests or needs

3. Individual differences generally ignored
4. Programs in process rarely evaluated carefully when completed.

Harris, Bessent, and McIntyre (p. 17) were not aware of any plan that would eliminate all of these problems, but they felt inservice education should be planned with active participation of those who were to be the benefactors. Inservice programs should be designed with enough freedom to accommodate each individual, such as having a variety of activities that would meet the need of individual teachers.

Bush (1971, p. 66) maintained education should use experienced teachers to help inexperienced or beginning teachers. From their experience, these teachers could aid in the process of encouraging and helping new teachers cope with classroom joys and difficulties. Bush felt the change that was needed was to have "fewer global and so-called inspirational meetings." Efforts should be concentrated in building a repertoire of technical skills which would give teachers a different alternative when confronted with educational problems. This could be accomplished by tailoring inservice education to meet needs of specific groups of teachers or individual teachers. Bush also recognized (p. 67) different teachers have different abilities and students learn more effectively from different teaching methods. To implement this Bush felt teachers and their style of teaching should be matched to learning styles of students which could require a refinement of inservice education.

Olivero (1977, p. 195) believed something could be done to

eliminate negative feelings toward inservice programs. His beliefs were:

1. Deal with attitudes of the educationists. Teachers were expected to individualize instruction, diagnose, establish learning profiles, create learning centers and other instructional aides but had never been taught procedures or techniques in setting up the classroom for these concepts.

2. Gather information by assessing personal and professional needs.

3. Improve human relations and school climate. Personnel in some schools had sought ways to make the schools more productive and enjoyable for staff and students and positive solutions resulted.

4. Strive for personal growth. This was possible when teachers added to their professional growth.

5. Arrange time for inservice education. Time certainly must be made available if staff development was to take place (Olivero, 1977, p. 195).

Olivero concluded by stating that successful inservice should be based on developmental theories of learning and should involve teachers in activity-oriented experiences with peer interaction encouraged to enhance learning of relevant information (p. 195).

Changes in knowledge and practice were beginning to make inservice relevant, maintained Cole (1982, p. 370). In addition there should be collaboration among people involved in the educational process. Teachers, administrators, and community--and even students--should be heard. Attention should be given to the participants' needs. Cooperation among schools, state departments, universities,

and professional organizations should be taking place. In conclusion he stressed, "Collaboration, always collaboration."

Knowles (1970, p. 173) found people would accept responsibility for their own learning if they were honestly given the opportunity and a facility that would provide a chance for them to implement their newly learned knowledge. Knowles (p. 173) also observed that individuals often learned from each other and this exceeded what they learned from an outside authority.

The emotions of the participants were not considered when an inservice presenter tried to teach new skills and concepts.

Furey (1978, p. 198) felt that the vehicle used in inservice education which gave personal growth and increased self-awareness was not the most important. The important factor was that educators should work together in an atmosphere of mutual concern so that the effects of a comprehensive inservice could be channeled into behavior that had a direct, positive impact on the growth of students in the schools.

There should be more attention given to teachers' competencies, noted Corno and Clark (1978, p. 172), which was the core of the daily classroom life of the average teacher, namely; (1) teacher planning, (2) decision making of the classroom, (3) analysis of classroom transactions, and (4) other maintenance procedures. Each teacher should be given tools to effectively measure the competency of teaching. Teachers should be encouraged to investigate new ways of teaching and to try their own ideas. Inservice education should provide the techniques by which these experiments could be conducted. Corno and Clark (1978, p. 173)

further stated that such a program would take advantage of the concept that inservice teachers know what their teachers' needs and what their interests were and would make use of that knowledge to create training suitable for similar groups of teachers.

Purposeful planning. Cruickshank, Lorish, and Thompson (1979, p. 28) pointed out that inservice education does not give clear directions for individuals planning inservice for professional educators. There was not a consensus of opinion as to what the concepts were that made up inservice education. There was even a limited consensus about the definition of the term "inservice education." From research on the subject, there had emerged the following information about inservice programs.

1. School-based and college-based inservice education were equally successful in improving teachers' knowledge, but school-based programs were slightly more successful in improving teaching skills.

2. Teacher attitudes were improved more often in school-based than college-based programs

3. Mini-courses emphasizing development and application of teaching skills had a high rate of success in both college and school setting.

4. No medium of instruction--e.g., lecture/discussion, reading material, observations system--was clearly superior to others.

5. School-based programs in which teachers participated as helpers and planners of inservice activities tended to be more frequently successful than programs planned and conducted without teachers' assistance.

6. Programs in which teachers engaged in self-instruction by using prepared materials, objectives, and planned guidance were successful.

7. Programs with conceptual or informational objectives were more successful in meeting those objectives while programs with teaching objectives were less successful.

8. Programs that attempted to change teacher behavior only were more successful over programs that attempted to change teacher behavior and, consequently, pupil behavior.

9. Inservice programs that had different or individual training experiences for different teachers were more successful over programs that had common activities for all subjects.

10. Inservice programs that required teachers to construct and generate ideas, materials, and behaviors were more successful over programs in which teachers accepted ideas and behaviors from instructional agents.

11. Programs that emphasized demonstrations, supervised trials, and allowed feedback were more successful over programs in which teachers were expected to make unsupervised applications at some future time.

12. Programs in which teachers shared ideas and provided material assistance to each other were more successful over programs in which teachers did not.

13. Teachers were likely to benefit from inservice programs that were part of a long-term systematic staff development plan than they were from "single shot" short-term programs.

14. Teachers were likely to benefit from programs in which

they chose their own goals and activities than from programs in which goals and activities were prepared.

15. Teacher self-initiated and self-directed activities were seldom used in inservice educational programs; but were highly successful in accomplishing objectives (Cruickshank, Lorish, & Thompson, 1979, p. 28).

Unsuccessful Inservice Programs

Uninteresting and poorly planned. Teachers surveyed by Harris, Bessent, and McIntyre (1969, p. 15) agreed there was a need for inservice education but that most programs did not meet the teachers' needs. Criticisms centered around the fact that programs were dull and useless because they were generally planned, poorly timed, or devoted to administrative housekeeping. The following were areas where mistakes frequently occurred:

1. Not relating inservice education programs to genuine needs of the staff
2. Not selecting appropriate activities for implementing program plans
3. Not implementing inservice program activities with sufficient staff and other resources to assure effectiveness (Harris, Bessent, & McIntyre, 1969, p. 15).

Another weakness was the priority placed on the inservice programs. They were limited in resources, money, and directions, stated Houston and Frieberg (1979, p. 7).

The people who were training teachers were not always well prepared. It appeared that additional time was needed for the development

of a logical framework in which the inservice programs could exist.

Inadequate funding. The history of education revealed that there had been inadequate provision made for inservice education of teachers in the past. Rubin (1978, p. 4) stated there were two main reasons for this:

1. Inservice was treated so casually that programs were clumsy and inept
2. Very little was known about the mechanics of teacher improvement.

At times, there was little incentive to improve programs. Rubin (p. 8) concluded that the legacy of inservice education was characterized by randomness and fragmentation, by programs that deferred to expediency rather than need, and by methodologies that were largely outdated.

Corrigan (1978, p. 255) was critical of education because he felt there was not a significant effort to provide a continuing education program for teachers. He stated other professions spent a certain percentage of their income on inservice education for members. Few school districts even provided the funds for further graduate work that all teachers were expected to have. Teachers were required to do this on their own time in the evenings, weekends, or during the summer. Teachers' salaries did not permit expenditure of large sums on professional literature that would benefit them. During the 1970s information was provided about the delivery of inservice education to teachers. Now the problem lay with the fact there were not enough funds to make these newly acquired practices a reality (Corrigan, 1978, p. 255).

Unstructured university courses. Tracey (1971, p. 33)

observed that public and private enterprises encouraged personnel to study at colleges and universities, but self-study did not always relate to the goals and objectives or even the successful day-to-day operations of the enterprise. Encouragement offered to the professionals took the form of increased salary, time off to study, tuition payments, and a promise of a better position. The benefits of this type of study could be questioned, but enterprises had confidence in the results. University coursework was often something that the enterprise wished the individual to accomplish without the individual really wanting to. Such requirements could diminish the value that the individual received from an advanced degree. University education paid greater dividends if the individual had a desire to undertake advanced study.

School systems tried to improve their staff, wrote Wiles and Lovell (1975, p. 169), but the results did not satisfy anyone. Courses were chosen because of convenient scheduling or they were easily accessible. These sessions or courses were mandatory and the presentations were made to people who were not especially interested in the contents.

Chamberlain, Kindred, and Michelson (1966, p. 125) maintained that teachers did not cease to take college classes once they had graduated because they were required to take classes to maintain certification. Teachers were required to take additional study to obtain salary increases. Therefore teachers often took professional education courses that had little to do with their teaching assignment or the betterment of classroom skills. Inservice education that

merely consisted of taking an additional college course had been open to criticism. Courses were made up of meaningless content, were uninteresting and were unrelated to the real world of teaching. According to Chamberlain, Kindred, and Mickelson (p. 126), professional courses taught by colleges had relied on state departments of education to dictate course content and had not involved teachers in planning the courses. Teachers could tell colleges where their professional weaknesses lay, but they needed help in solving or improving professional competencies.

No intrinsic motivation of teachers. Inservice education could serve to increase intrinsic rewards of teaching, advocated Palmer (1978, p. 218), while increasing teaching effectiveness of participants. Teachers valued success, and if inservice was structured to increase success of teachers, inservice education would increase the satisfaction the teacher derived from teaching. Inservice education would do this if it were designed to fulfill unmet needs of teachers and also provided tools that would make them effective in teaching. To accomplish this, programs should be conducted in a non-threatening atmosphere. Materials should be presented in segments that would be assimilated by teachers. After these presentations, ample opportunity should be provided for the concepts to be implemented. It could be assumed that if teachers' chances of success were increased they would be more receptive to inservice.

Palmer (1978, p. 219) continued that this did not mean extrinsic rewards could not be an incentive for inservice education. However, this had been the standard type of motivation that was used in most inservice education. After years of ignoring the intrinsic

motivation by inservice educators, extrinsic motivation had lost its influence on teachers.

Hasty and casual inservice education. Sportsman (1981, p. 307) stated: "Traditionally, inservice has been a hastily prepared, ineptly presented, an educationally stultifying event." He felt teachers had left the profession to escape from boredom of routine and lack of professional growth. These were the very concerns that inservice education was supposed to address. Typically, a consultant came to the district, tried to explain new concepts or methods in one or two sessions, and left--hoping teachers had absorbed the techniques.

Delivery Systems

High and Low Experience Impact Programs

Differences in inservice education delivery systems indicated a wide diversity of programs used by schools. Harris and Bessent (1969) designed a way to analyze the different delivery systems through analyzing the activities based on the "experience impact" of the teacher.

Activities may be arrayed from those with low experience impact to those with high experience impact on the learner. By experience impact we mean that the learner is more likely to interact with the learning situation in such a way that the experience will have some impact that will affect his later behavior. (p. 34)

The authors related the experience impact to three characteristics of the learning situation.

The first of these is the extent to which he can control the content of the experience. If he has some influence on the content of what is being presented, there is a greater chance that it can be made relevant to this past experience--an

important principle in learning. The second characteristic is whether or not the learning experience is multisensory. Use of multisensory stimuli increases the probability that the learner will become involved in the learning situation. Finally, whether communication is one-way or two-way will influence the accuracy of perception and affect confidence in what has been communicated. (p. 34)

The following diagram suggests several basic types of activities which were delivery systems and illustrates the order in which they were placed according to their "experience impact" (Harris & Bessent, 1969, p. 35).

TABLE 1
EXPERIENCE IMPACT OF ACTIVITIES

Activities	Control of Content	Multi-Sensory	Two-Way Communication	
Lecture				
Illustrated lecture		X		<div>Low Experience Impact</div> <div>↑</div> <div>↓</div> <div>High Experience Impact</div>
Demonstration		X		
Observation		X		
Interviewing	X		X	
Brainstorming	X		X	
Group discussions	X		X	
Buzz sessions	X		X	
Role-playing	X	X	X	
Guided practice	X	X	X	

Inservice activities reflected "low experience activities impact" (p. 36). However, teacher involvement encouraged models which were based on "high experience impact" for

teachers. The models of inservice education being advocated by teachers indicated Bloom's educational theory could aid in bringing about the following situations:

1. Increasing the number of inservice activity options to meet the individual needs of teachers
 2. Providing opportunities for teachers to teach teachers
 3. Allowing freedom to experiment and for self-evaluation
- (p. 36).

"Hands-on" Programs

Harris and Bessent (1969, p. 35) continued by describing the laboratory approach which utilized the "hands on" activities. One model which was based on this approach was the teacher center concept. A teacher center was a physical space where teachers developed programs for the training and improvement of education. It could be located within the district or school. At the teacher center participants were actively involved in problem solving which was as realistically portrayed as possible. Quantifiable data were then produced and recorded so participants had immediate feedback, allowing comparison with other members. Data were then discussed and analyzed so as to lead to ideas and solutions.

Drummond's Inservice Models

Drummond (1979, p. 39) classified inservice models into the following groups:

1. Provision-of-Service Model: People outside the faculty have services or ideas that would help the faculty. They would provide this service at a reasonable price.

2. Job-Maintenance Model: Individuals in charge have mandated or strongly suggested teachers submit to remediation, update knowledge and skills, or take a required course or courses.

3. Personal-Development Model: The teacher feels that a new lease on life was needed to break out of the routine, to feel more in charge, and to restore one's energy and faith in people.

4. Problem-Solving Model: Teachers are dissatisfied with classroom happenings. Things could be better. They desire to have an inservice that attacks a specific weakness that all or just one seems to have (Drummond, 1979, p. 39).

Institutes and Workshops

Zeran (1953, p. 257), Stone (1969, p. 191), and Stoops, Rafferty, and Johnson (1981, p. 378) believed that within a school system there were a number of methods that could be used to make inservice meaningful. These included institutes and workshops, university work, travel, teacher's meetings, teacher visitation, professional publications, lectures and forums, and teacher centers.

Successful Inservice Models

A survey reported by Betz, Jensen, and Zigarmi (1978, pp. 491-93) assessed 1,239 South Dakota teachers' attitudes toward inservice education. The assessment indicated the following as most useful but least used.

1. Current trends in education workshop
2. In-classroom assistance from another teacher
3. Workshops on a college or university campus
4. Observations of teachers in other school system

5. Special college courses conducted at the local school by a college or university staff member.

Unsuccessful Inservice Models

Continuing, the assessment determined the inservice activities that were used most but were the least helpful:

1. Reading bulletins, newsletters, brochures, and periodicals
2. Presentations by educational sales representatives
3. One hour to a full-day program conducted by outside consultants or other experts
4. Workshops held during the school year for intensive study of a local school problem (Betz, Jensen, & Zigarmi, 1978, pp. 491-93).

Sharing Sessions

It was discovered through Ngaiyaye and Hanley's research (1978, p. 309) that teachers learned more from meetings organized for teachers of similar grades, subject fields, or programs. Another discovery, namely, the sharing of ideas among teachers, was often more important and informative for changing classroom instruction than great lectures. They also found it was beneficial when practice was emphasized rather than theory. Length of time for inservice education should be determined by subject matter and type of meeting. From the research (p. 310), Ngaiyaye and Hanley made the following recommendations.

1. Teachers should be actively involved planning topics that pertain to their interests.

2. Teachers do make a difference in what happens in the classroom.

Administrators must provide inservice programs to stimulate, challenge, and enhance teachers' professional growth (Ngaiyaye & Hanley, p. 310).

Performance Analysis Programs

Fischier (1971, p. 185) found that teachers felt threatened by the principal sitting in the back of the room taking notes about the lesson being taught or the written lesson plans. For a change, Fischier suggested an observational record could be made by technology which would be less threatening. Afterwards, principal and teacher could focus on analysis of performance and center their discussion on alternative utilization of skills, goals, methods, and interpersonal relationships. Such a discussion could provide an opportunity for "a give and take" that would explore the availability of the alternate methods of teaching, therefore putting the principal in a helping role.

Seldin (1979, p. 266) believed school personnel wanted their inservice (1) to be conducted in their district, preferably during or immediately after school, rather than during vacations, evenings, or weekends; (2) involve concentrated one-day or one-afternoon meetings; (3) to incorporate small group sessions taught by outside consultants and/or university professors.

Wiles and Lovell (1975, p. 161) thought that an important influence over teachers in a school would be their peers. People in the central office would have less influence on teachers.

Because of this it would appear money should be spent for the following inservice activities:

1. Opportunities for staff members to visit, observe, and participate in outstanding educational programs
2. Seminars built around the study of research on a given topic
3. Experiments that are an outgrowth of seminars
4. Seminars which consider evidence obtained from experiments
5. Demonstrations of practices that have been perfected
6. Clinics held as adjuncts to demonstrations
7. Classes to develop skills and concepts
8. Large group presentations.

Theory and Application Inservice Programs

For inservice education to be effective, theory, demonstration, practice, feedback, and classroom application must be included, observed Joyce and Showers (1981, p. 166). Through their studies, Joyce and Showers discovered that teachers were good listeners and could acquire new skills that improved their teaching competence. In order to learn these skills teachers needed some conditions that were not available in inservice sessions. Inservice education sessions should be planned to include the following:

1. Presentation of theory or description of skill or strategy.
2. Modeling or demonstration or models of teaching
3. Practice in simulated and classroom settings

4. Structured and open-ended feedback (provision of information about performance)

5. Coaching for application (hands-on, in classroom assistance with transfer of skills and strategies to the classroom) (p. 168).

Hencley, McCleary, and McGrath (p. 239) felt that certain minimal considerations were necessary for any inservice program to succeed. These were:

1. A primary goal should be the improvement of the teachers' competencies.

2. The atmosphere of sessions should be conducive to inquiry and research. Teachers' evaluations and other programs should be a meaningful part of inservice. If research data were used properly, new directions, changes, and methodology could take on meaning.

3. Group and individual teacher projects should be encouraged and planned.

After Hours Inservice Programs

Providing time to carry on inservice activities was an extremely important function, maintained Sergiovanni and Elliott (1975, p. 254). Some teachers used time after school and even evenings and weekends to prepare for instruction and to work on self-improvement. Over a period of time this could not be expected of teachers and provision for these activities should be scheduled as a part of the regular school year (p. 152). Time should be allotted for activities by using the following methods:

1. Dismiss school early or begin late to give staff members time to work together, with parents, or other adults.

2. Provide special teachers, student teachers, parents, and volunteers to take over classrooms or groups of students in order to free teachers for periods of an hour or more.

3. Budget money that might be allocated for the salaries of central office supervisors and other nonclassroom personnel into salaries for additional classroom teachers and could rotate thus freeing a regular teacher (Sergiovanni & Elliott, p. 152).

Specialist Advisors

It was Sergiovanni and Elliott's contention (p. 254) that a reallocation of funds should be used to provide specialists from different disciplines to help teachers' effectiveness. This would permit teachers to become involved in kinds of work they do rather than following the practice of just accumulating more credits from college courses. Specialists would enhance teaching ability and enable teachers to deal effectively with classroom problems.

Group Techniques

Promising practices for inservice education should make use of protocol materials and brainstorming, wrote Neagley and Evans (1980, p. 276). These techniques should be evaluated to determine their effectiveness. The use of carefully planned group techniques could increase the chance of improving instruction. Neagley and Evans (p. 270) further stated that activities designed to enhance job performance of teachers, supervisors, and administrators could be labeled inservice education. However, if inservice education programs were to be received, they should be cooperatively planned and professionally executed.

Outside Agencies

Another concept of Bush (p. 68) was that inservice education should be moved from administrative jurisdiction into "the hands of the teachers." Studies inferred that inservice education had been directed by administration and conducted for administrative purposes in many cases. Perhaps teachers could determine their needs and employ an outside agency which could present effective programs, designed to meet the teacher's needs. Bush (p. 67) suggested school systems should appropriate enough funds and resources for inservice education to insure quality results. Planning desirable conditions for inservice, and paying attention to the development of professional-quality materials were necessary to accomplish this task.

In-School Programs and Management Teams

Lippitt and Fox (1971, p. 161) developed a list of activities that should foster development and meaning to local inservice programs. These included:

1. School building meetings focused on professional problems
2. Principal-teacher consultation
3. Teacher consultation with university-based persons
4. School system supporting a particular action-research project
5. Utilization of a curriculum materials center for retrieval of basic research, innovations, and tools
6. Sessions for sharing practices
7. Clinic sessions with teachers from other systems
8. Internship with other projects on a released-time basis

(curriculum projects, university-based development, or research activities)

9. Sensitivity training laboratory
10. College classes
11. Membership on an inside-outside team responsible for developing strategies for school or school system
12. Summer work sessions
13. Preschool workshops

Lippit and Fox (p. 166) concluded that the aforementioned could be accomplished by a management team consisting of teachers, supervisors, and administrators. A coordinator would help to facilitate team plans, thus improving the lines of communication between the various school groups.

Extension Courses

The extension course was a common form of inservice education, according to Hill and Potthoff (1959, p. 205). The opinion of college teachers was that quality of teaching in extension courses did not compare to courses taught on campus. In spite of this, extension classes were a growing and a valuable source of inservice education for the public. They provided a means of education that were available to people because classes could be located at different centers. Teachers that could not travel to a college or university could readily avail themselves of opportunities that extension courses provided.

Schaller (1975, p. 38) found graduate and continuing education through inservice education served to reinforce and update

teachers. The role of inservice education was to compensate for deficiencies developed through current undergraduate programs. If a teacher were to remain effective, updating professional abilities was important. Being professional, according to Schaller, included the following:

1. Membership and participation in professional organizations
2. Extensive reading in professional journals
3. Provisions for interaction with fellow teachers
4. Involvement in the curriculum-planning process
5. Periodic attendance at relevant lectures, seminars, and workshops as well as work toward advanced degrees
6. Utilization of resource personnel and materials from public and private agencies (p. 39).

The cooperative delivery systems are discussed in the next section of this chapter.

Cooperative Inservice Education Programs

Besides being handled state-wise, inservice education programs had also been cooperatively planned and administered with specific organizations. A review of the literature revealed the following models.

School-based Programs

Burnett (1979, p. 1) discussed a document written for administrators interested in establishing school-based competency inservice education. An alliance between a school system and a teacher training institution was outlined. It was recommended that common competencies

be developed so teacher skills could be acquired. The project's main theme was the area of field-training, or on-the-job training, for teachers. The guide book covered the following topics:

1. Involving school administrators and teachers in learning activities
2. Improving attitudes in school systems
3. Conducting a needs assessment
4. Establishing competencies
5. Providing staff and financial resources
6. Suggesting time lines for activities, personal, and incurred costs.

Universities

Steps taken by a university to develop a meaningful inservice education were described by James (1979, p. 1). Faculty members were assigned by educational support teams to help schools identify needs, acquire resources, and work with individuals in intermediate school districts. The major emphasis was the active participation of teachers who would benefit from inservice courses designed.

Teacher Education Centers

Besides universities becoming involved in successful inservice programs, teachers' organizations had become involved putting forth their efforts for effective inservice education through Teacher Education Centers. Maloy and others (1980, p. 10) examined two separate programs in neighboring communities which approached developing teacher centers in two different ways. Both provided inservice education for staff and community. One program responded to teachers'

needs by providing inservice education, staff development, community education, and materials for the high-school district it served. The other program originated as a comprehensive study of secondary education. It was based on concepts that people involved in a school system are also people best suited for establishing goals, identifying needs, and planning "the-on-going direction" of a school. Information was given on needs assessment, inservice programming, conducting research, and teacher centers.

Rationale, background information, fundamental theory and implementation strategy for a staff development model were outlined by Lhota (1976, p. 17). These focused on a teaching center which was designed to include part-time and full-time instructors. Lhota (p. 37) discussed the necessity of professional development for all faculty and using teacher-center facilities in providing inservice education.

Luke and others (1980, p. 10) gave steps for planning and developing inservice programs based on teacher centers. The emphasis was on ways to meet teacher inservice education needs in a teacher-center setting.

Intermediate School Districts

Intermediate school districts have become active in assuming leadership roles in inservice education, according to Edwards (1975, p. 70). The reason for this was the delegation of authority by state departments of education. Resources for manpower to administer the inservice education seemed to be available within intermediate school districts. Funding was also available within these districts.

Several districts were involved in assessing their district with survey-type assessments.

Planning Strategies

Planning Model

Dull (1981, p. 130) pointed out ten factors vital to effective planning of inservice education. They were as follows:

1. Planning should begin with objectives of staff development.
 2. Teachers should determine who would take part in inservice programs.
 3. Time of the year and day of the week that programs are to take place should be established.
 4. Types of inservice that would serve the needs of the group and resources of the district should be established.
 5. Specific needs of the group should be determined.
 6. Planners should organize a variety of activities.
 7. Audiovisual materials should be prepared that enhance presentations.
 8. Planners should give thought to location and facilities that would be needed
 9. Inservice programs should be evaluated and summarized.
 10. Appropriate incentives should be considered and used
- (Dull, 1981, p. 130).

Zeran (1953, p. 257) maintained group or cooperative planning was an important part that would help involve teachers and build competency.

Staff Participation

Wiles and Lovell (p. 163) concluded that when courses and workshops held in a school system were structured to implement ideas the staff already accepted, meaningful courses and workshops resulted. People taking part in these activities would have to make application for these activities because participation indicated a willingness to accept and to put into practice those ideas gained from the presentations. Others who were slow to accept new ideas would then be influenced by leaders they accept and would make an effort to follow those individuals.

Focused District-wide Planning

It was postulated by Hencley, McCleary, and McGrath (1970, p. 238) that inservice education development of teachers and programs was a function of the personnel department, which could consist of district-wide activities as well as activities that occur within a given school or attendance area. However, a common goal must exist that would be enhanced by established priorities, well-developed schedules, meaningful participation, and a desire on the part of teachers to take part.

Bush (p. 68) thought educational establishments should not expect miracles from inservice education. "There should be improvements, but at times this may occur over a period of years and not be readily observable."

Adequate Time Provision

If teachers were expected to gain proficiency they should be given time and adequate inservice presentations which would allow

them to absorb and implement new materials and knowledge (p. 309). To aid this process, Sportsman (1981, p. 310) suggested the following plan of action.

1. School districts should ally themselves closely to local universities.
2. Needs assessment should be conducted by representatives of the university, administration, and teachers in order to obtain balanced resources and to eliminate appearance of enforced results.
3. Inservice committees should be established to attack and resolve problems which needs assessment determined.
4. University classes on the new material should prove stimulating. Eventually these should be conducted by the local staff.
5. Development of a permanent information and retrieval system should be centrally located for teacher's use.
6. Classes should be started after the inservice program for the advanced degrees.

According to Sportsman (p. 311), the first three steps provided for foundation of the inservice; while the last three areas dealt with positive significance of inservice education. The vital part of this program was the involvement at the three levels of participation.

Meaningful Technological Orientation

Inservice was unchanged over past years according to Howard, Test, and Cooke (1981, p. 16). The purpose of inservice education failed because newly discovered technologies were forced on teachers

who lacked of understanding. Howard et al, gave the following steps to make inservice meaningful and new technologies more understandable:

1. Demonstrating hardware
2. Presenting instructional techniques
3. Producing software for teachers to use
4. Providing opportunities to teach in the visual response

system

Howard et al. (pp. 20-24) also gave steps for planning, implementing, and evaluating inservice education. These were:

1. View the inservice as training, not as education
2. Use a systems approach to develop training programs
3. Employ a competency-based training model
4. Use technology in training
5. Practice new skills immediately following introduction
6. Require teachers to demonstrate and master use of

technology with "real students"

7. Individualize the inservice program
8. Reduce as much as possible teachers' response cost

for participation

9. Provide recognition and reinforcement for participating

teachers

10. Conduct follow-up observations of teacher performance
11. Use continuous impact-based education

Intensive Non-threatening Programs

It was the opinion of Goldhammer, Anderson, and Krajewski (1981, p. 8) that educational training and inservice education of the 1980s would have to be more elaborate and intense than those of the 1960s and 1970s. The role of supervision would have to be expanded in helping teachers discover and remediate professional weaknesses. The programs should not be used to create an atmosphere of fear. If supervision would be properly used, rapport could be built between teacher and supervisor, resulting in a positive relationship. If properly used, supervision could help to detect weaknesses and would be a framework for improvement.

Differentiated Programs

Allen (1971, p. 112) realized that if inservice education was to be meaningful to educational professionals, a new boldness should be exhibited in educational communities that would foster and capitalize upon multiplicity of educational tasks teachers performed. There must be a workable instructional form, the kind of distinctions among teachers' roles that makes educational sense. This could be accomplished by recognition of differentiated teaching staff. Different roles that were performed by teachers needed to be analyzed and criteria formulated which would allow for adequate judging of teachers' performances.

The Varying Needs of Teachers

Innovation and Teachers' Attitudes

Inservice education was a process which brought about change Postman and Weingarten (1969) maintained

There can be no significant innovation in education that does not have at its center the attitudes of teachers, and it is an illusion to think otherwise. The beliefs, feelings, and assumptions of teachers are the air of a learning environment; they determine the quality of life within it. (p. 30)

Rubin (1971) placed importance on "how the teacher felt about something, how strongly and in what order of importance." He felt these were tightly interwoven with his view of the educational process. He went on to say

the difference between routine teaching and inspired teaching depends to a large degree upon the teacher's own sense of motivation and commitment. The desire to change, if it is to be consequential, must come from within the individual teacher himself.

The way a teacher perceives of himself and his role, his attitude toward education, his belief in the children he teaches, and his basic commitments all influence the quality of his work. . . . Real learning causes the learner to alter his behavior. Inservice education, must offer a rich opportunity to acquire personal insights that lead to new ways of behaving in the classroom. (p. 251)

Combs, Avila, and Purkey (1971) looked at perceptions and wrote the following:

All behavior of a person is the direct result of his field of perceptions at the moment of his behaving. More specifically, his behavior at any instant is the result of (1) how he sees himself, (2) how he sees the situation in which he is involved, and (3) the interrelations of these two. . . . To change another person's behavior it is necessary somehow to modify his beliefs or perceptions. When he sees things differently, he will behave differently. (p. 18)

Inservice Needs Differences between Individual Teachers

There appeared to be a difference in inservice needs of inexperienced teachers, observed Burlingman (1978, p. 158). The needs were as follows:

1. More formal training in the area of college of education for local schools
2. Emphasis on the basic skills of teaching
3. Efforts to provide different sources of information for starting or inexperienced teachers
4. Development of prestige systems to enhance the status of inexperienced teachers.

Teachers' Awareness of Their Inservice Needs

Inservice education critics concurred that inservice education could have immediate and long range effects on the improvements of professional training and classroom instruction, but there was still a question as to the format and content of the scheduled activities. Arena (1974, p. 43) discovered that the teachers knew as much if not more than the inservice speaker. This he found was evident by the "extremely intricate doodles that filled their notes, finishing overdue correspondence or expert demonstration of the eyes-open-shallow-slumber techniques." However, reported Cruichshank, Kennedy, and Myers (1974, p. 154), the teachers still reported a desire for inservice education "if changes and improvements are made that make the procedures more responsive to their needs."

Needs Assessment of Teachers

Ingersoll's Teacher Needs Assessment Survey was developed at Indiana University by Gary Ingersoll. The purpose for developing the instrument was to provide a format which was reliable and had a convenient form through which a variety of school systems

could gather data on inservice needs using that data to plan inservice activities. The forty-three item instrument was developed and later revised in 1976. The two primary resources used to generate the assessment were: (1) categories of teaching skills from existing catalogs of teacher competencies and (2) previous responses from prior attempts to categorize teachers' needs. Using these sources a series of forty-three items were chosen for use in the assessment. Five judges were asked to sort the items into seven clusters that shared a common concept. They were as follows:

1. Interpersonal Communication and Administration
2. Developing Pupil Self
3. Individualizing Instruction
4. Assessment
5. Discipline
6. Developing Personal Self
7. Classroom Management
8. Non-Factor Related Items

Using the Likert-type Scale, teachers were asked to indicate on a scale from one to five to what degree inservice education in a specific area or skill would be beneficial. Demographic data were also collected to indicate years of teaching experience, grade level of teaching, sex of teacher, and subject matter speciality.

The concepts of needs assessment to more effective inservice education was becoming a more useful and popular tool for decision making at all levels of education. Patterson and Czajkowski (1976) outlined the steps they felt were important for conducting such an assessment. Included are the goals, the tools, performance indicators, data, and evaluation.

Kaufman and English (1975) also outlined the steps involved in a needs assessment. These steps involved a simple model: "what is" and "what should be." The "need" was referred to as a "gap" which was first identified by Tyler (1975, p. 16) in his curriculum work at the University of Chicago.

Anderson (1980, p. 20) presented needs-assessment strategies for effective workshops. He outlined the advantages for this process in addition to formulating questions and applying this concept.

A holistic approach to a needs assessment was advocated by Kaufman and Stakenas (1981). They felt that the basic "gaps" were those found in society's values, standards, and morals. They maintained that educators needed to think of these internal and external gaps when doing a needs assessment. They found that the holistic approach which goes beyond school boundaries provided a needed link between curriculum, instruction, and improvement.

Kaufman, Stakman, Wagner, and Moyer (1981, p. 19) differentiated among several different types of needs assessments. It was their desire upon completion of a paper that one would be able to describe the process of external and internal needs assessment relating to organizational efforts and results. They employed the various models and techniques to develop a program of intervention based on perceived needs.

Needs assessment had been seen by Kuh, Hutson, Orbough, and Byers (1980, p. 16) as a "continuum of problem identification, negotiations, and resolutions." They pointed out that creativity, hardwork, and common sense had been under-emphasized, and these

qualities were crucial in generating needed information for decision makers.

Other Needs-Assessment Models

Kimpston and Stockton (1981, p. 17) presented five needs-assessment models which were representative of those employed by school districts throughout the United States. Each involved community and students as well as educational professionals. While needs assessment models existed, they did not prioritize or point educational planners to problems "where to begin (priorities) or where to end (goals)." They assisted readers in outlining approaches and techniques for setting priorities.

Related Studies

Borgealt (1969) investigated the problem of whether teachers with different professional backgrounds and experiences agreed on the degree of effectiveness of inservice education activities for improving their professional competency.

Data were gathered by means of a questionnaire designed for teachers which were sent to teachers in randomly selected buildings in randomly selected school districts of Iowa.

The following conclusions were made on the findings of the study:

1. In terms of effectiveness, the inservice activities were ranked in the following descending order: interclassroom visitations, conferences and clinics, individual inservice conferences with specialists, directed professional reading, county and state workshops, local workshops, and faculty meetings.

2. Beginning inexperienced and beginning experienced teachers agreed on the degree of effectiveness of all seven inservice activities.

3. Teachers within the elementary or secondary grade level from large, medium, and small school districts agreed on the degree of effectiveness of each of the seven activities except directed professional reading.

4. Elementary and secondary teachers agreed on the degree of effectiveness of only two activities: interclassroom visits and demonstrations and individual inservice conference with specialists. Elementary teachers saw the remaining inservice activities as more effective than did secondary teachers.

5. Teachers with one to seven years of teaching experience saw more inservice activities as less effective than do teachers with eighteen or more years of teaching experience.

6. Except for the activities of the local workshop and directed professional reading, teacher involvement in the planning stages of an activity was preferred by teachers at all levels of teaching experience.

7. For most inservice activities, elementary and secondary teachers favored teacher-planned activities over administrative planned activities.

Bigelow (1969) designed a study to establish guidelines for organizing and implementing a program of inservice education for professional staff members. The study attempted to obtain criteria for effective techniques of evaluating and for concepts of new innovations for inservice education.

A questionnaire was prepared and submitted to 152 public schools with a student population K-12 of 2,000 to 10,000 pupils in six midwestern states. Inservice coordinators were requested to (1) identify the technique currently utilized in their school district, (2) assert their opinion regarding the beneficial techniques, and (3) identify the three most effective inservice techniques and the three least effective techniques currently employed in their district.

Some of the findings were as follows:

1. Supervision of instruction and curriculum planning was being combined into one unit, the inservice program.
2. Many schools were implementing planned inservice programs executed on a year-around basis.
3. A need existed for more school time in which to plan and implement an inservice program.
4. There was a tendency for school systems to provide the teachers with an inservice curriculum.
5. The use of college consultants was becoming more prevalent in the public schools.
6. The building principal had a great responsibility in the inservice program.
7. There was a need for more systematic and objective evaluations of inservice education programs.
8. Professional growth for teachers was entering a new era and teacher involvement was becoming an important part of the professional growth program.
9. Money budgeted for inservice programs was far below that recommended in the literature.

10. A written philosophy was a very important aspect of the inservice education program.

Pitts (1975) attempted to identify the perceived inservice needs of selected experienced elementary teachers and beginning elementary teachers in a selected urban school district. She sought to answer the following questions with a questionnaire:

Is there a relationship between teacher characteristics as perceived by teachers for inservice education?

Is there a relationship between student characteristics as perceived by their teachers and teacher-perceived needs for inservice education?

The following were Pitts' conclusions:

1. The school system should administer the inservice instrument to elementary teachers to ascertain their needs for inservice education.

2. Consideration should be given to providing inservice education to specific groups of teachers in the school system.

3. Further research should be conducted with beginning classroom teachers and experienced classroom teachers.

4. Additional research was needed to determine more effective ways of administering differentiated inservice programs.

5. A study should be conducted to identify the perceived needs of graduating seniors (enrolled in teacher preparatory training).

6. A study should be conducted to ascertain the needs of teachers who have not attended colleges, seminars, workshops, and other professional training in the last five years.

Post (1975) investigated the perceptions of teachers and supervisory staff concerning inservice education as it was related to the skill needs of the individual teacher. An effort was made to determine the needs of teachers at various grade levels of the school system and to compare the teachers' stated needs with those that the supervisory staff at the same level perceived teachers as needing.

The conclusions of this study showed the following: (1) The majority of teachers and supervisory staff were not satisfied with present efforts at providing inservice. (2) The perceptions of the supervisory staff concerning teachers' skill needs and teachers' perceptions concerning their own skill needs were not always in agreement.

Bronson (1981) sought to determine if teachers and administrators in Seventh-day Adventist school systems differed in their perceptions regarding the appropriateness of inservice education programs.

The findings of Bronson's study indicated: (1) Of the 120 comparisons that could be made between administrators and teachers as to the value of selected inservice programs, sixteen showed significant differences with administrators rating the inservice programs significantly higher than teachers. (2) In eighty-seven other comparisons, the administrators' ratings were equal to or higher than the teachers but not at significant levels. (3) Other significant differences were between male and female, various secondary teaching areas, and between elementary and secondary teachers.

Summary

The review of the literature on inservice education discussed under the seven headings: Historical Overview, Purposes, Characteristics of Successful and Unsuccessful Programs, Delivery Systems, Cooperative Programs, Planning Strategies, and the Varying Needs of Teachers, revealed the following:

Historical Overview

Over the last 120 to 130 years inservice education has seen a shift from being an administratively planned program of remediation to a teacher-administrator program based on the assessed needs of the teachers involved. A fundamental questioning of all the aspects of inservice education was carried out during the 1970s and 1980s.

Purposes of Education

Inservice education was basically aimed at the improvement of pupil achievement to be achieved via the creative motivation of a skillful teacher whose knowledge of the course content and of student learning were updated in a continuous program of inservice education. As such the purposes of inservice training were varied by the completion of formal education, updating of knowledge and skills in the onward search of the knowledge explosion. Other purposes listed were salary improvement, certification, teacher morale, socialization, and problem solving.

Characteristics of Successful and Unsuccessful Inservice Programs

Successful programs were marked by teacher partnership in planning, were for both teachers and administrators, were purpose-

ful, and were based on the assessed needs of a community, the curriculum, and the teacher. They were of a "high experience impact" kind and had immediate application to the classroom, combining subject matter with methodology and often including teacher-made materials. It was found in most cases that programs held at school giving released time worked well. Continuous and on-going programs worked best, particularly when scheduled at convenient times. The unsuccessful programs were such because of dullness, poor timing, poor funding, lack of structure, unrelatedness to the needs of the teacher (no intrinsic motivation), and inept presentation having little if any teacher involvement in the planning, implementation, and evaluation.

Delivery Systems

The suggested delivery modes ranged from workshops, institutes, seminars, university courses, extension courses, correspondence courses, lectures, forums, travel, conferences, teachers' meetings, teacher visitations, outside agencies, professional publications, clinics, and teacher centers. The desired length of time for any of these programs depended on the subject matter. The best time for these programs was after school with released time rather than weekends or over vacations. The kind of programs that modeled or provided skill development in a classroom setting worked best.

Cooperative Inservice Programs

Cooperative programs arose where schools, school districts, universities, or teacher centers provide both the revenue and the planning for the program.

Planning Strategies

Planning strategies included teacher participation involved, where possible, other interested parties. Specific goals were kept in mind ensuring adequate, yet intensive, time provision for audio-visual aids, a variety of activities, a suitable location, adequate fundings, and provision for the varied needs of all the participants. The planning should be long range in scope.

Varying Needs of Teachers

The literature revealed that the needs of teachers varied depending on their actual teaching assignment and number of years of service. Findings indicated teachers should be canvassed for their opinions on teacher inservice needs. Several researchers had developed instruments for measuring these needs. Among these the recently developed Ingersoll Teacher Needs Assessment Survey proved promising. Studies to date indicated researchers had found quite different perceived needs between administrators and teachers. Differences were even found between teachers at various grade levels.

The review of the literature appeared to strongly support the concept of the teacher as a participative planner and determinant of the inservice education program at all levels.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

OF THE STUDY

This chapter contains information on the sample, the instruments used to gather data for this study, and the method employed in the analysis of the data.

The Sample

The present study was delimited to currently employed K-12 teachers in the geographical area in the United States known as the Lake Union Conference of Seventh-day Adventists. The Lake Union Conference in turn consists of the four geographical areas in the United States known as the states of Illinois, Indiana, Michigan, and Wisconsin. (See figure 1, p. 69.) For denominational administrative purposes, four conferences named after the states, and one conference known as the Lake Regional Conference of Seventh-day Adventists administered by a black church constituency and covering all four of the states make up the Lake Union Conference of Seventh-day Adventists.

The sample 289 of both black and white teachers studied consisted of 153 elementary school teachers, 63 secondary school teachers, 56 teachers who teach both elementary and secondary, and 17 principal/teachers. The latter were included because some

Fig. 1. The geographical area referred to as the Lake Union Conference of Seventh-day Adventists.

principals have the additional task of teaching. The distribution of teachers from the five administrative areas of the church were as follows: (see fig. 2, p. 71).

Illinois Conference	-	83
Indiana Conference	-	52
Lake Regional Conference	-	59
Michigan Conference	-	245
Wisconsin Conference	-	51

Since the sample of teachers studied comprised the total teacher population of the Lake Union Conference of Seventh-day Adventists, the teachers came from small schools and large schools located throughout the four states in rural, suburban, and metropolitan areas.

Description of the Instrument

The instrument used in this study was the Lake Union Conference Inservice Assessment (see appendix A). The instrument was initially authored by Gary Ingersoll of Indiana University, Bloomington, Indiana, and is known as Teacher Needs Assessment Survey. The researcher modified one section of the research instrument with the permission of the author in order to accommodate the religious aspect of the curriculum which is a natural component of the curriculum in Seventh-day Adventist schools.

The Lake Union Conference Inservice Assessment (LUCIA)

The LUCIA instrument spread over four pages consists of three sections. The first section on the front page gathers demographic

Fig. 2. Teachers employed by individual conferences of the Lake Union Conference for the school year 1982-83.

information from the respondent. The second section (pp. 2, 3) contained the actual needs-assessment survey. The third section on the back page provides space for the respondents' suggestions on additional inservice ideas.

A closer examination of the various sections of the survey instrument is as follows:

Section I, Demographic Data, was further subdivided into the following four parts:

1. "Years of Teaching Experience" asked the respondents to mark the appropriate years of experience on a grid.

2. "Teaching Assignment in the Elementary School (grade or combination of more than one)" presented the respondents with nine different grade levels from which to choose and mark accordingly.

3. "Teaching Assignment in the Secondary School (content area)" presented the respondent with twenty different subject or content areas and asked him/her to indicate the subject area(s) by marking the appropriate code.

4. "Conference" where teacher was employed presented the five different conferences of the Lake Union Conference of Seventh-day Adventists and required each respondent to indicate the appropriate conference by marking the grid.

Section II contained forty-six questions grouped unevenly into nine categories. These questions constituted the actual needs-assessment survey. Each category contained from two to twelve questions. Each of the item statements was followed by the response categories of "strongly disagree," "disagree,"

"undecided," "agree," and "strongly disagree." The nine categories of questions were deemed by the instrument developer to cover the total spectrum of the educational experience. The nine categories of questions are:

1. Interpersonal Communication and Administration
2. Developing Pupil Self
3. Individualizing Instruction
4. Assessment (of students and teaching)
5. Discipline
6. Developing Personal Self
7. Classroom Management
8. Non-Factor Related Items
9. Integration of Faith, Learning, and Practice

The categories and the appropriate items are as follows:

- I. Interpersonal Communication and Administration
 25. Knowing where to refer student problems beyond what can be handled by the teacher
 28. Communicating and interacting with parents
 29. Counselling and conferring with students
 30. Involving others in the school program
- II. Developing Pupil Self
 35. Facilitating pupil self-concept and worth
 36. Facilitating pupil social interaction
 37. Facilitating development of pupil responsibility
 38. Stimulating growth of pupil attitudes and values
 39. Instilling in the students the will to learn on their own initiative

13. Motivating students to learn on their own

III. Individualizing Instruction

9. Developing the use of computers in the classroom
11. Creating useful remedial material
15. Selecting and developing materials, activities appropriate for individualized instruction
16. Implementing and supervising individualized instruction

IV. Assessment

2. Constructing and using tests for evaluating academic progress
5. Establishing appropriate performance standards
6. Involving students in self-evaluation
12. Evaluating instruction/instructional design
33. Selecting and specifying performance goals and objectives
40. Developing or modifying instructional procedures to suit your own strengths

V. Discipline

26. Useful methods of classroom discipline and when to use it
27. Maintaining classroom control without appearing as an ogre to students

VI. Developing Personal Self

31. Developing a personal self-evaluation method
32. Developing a broad acceptance of self
34. Developing a capacity of accepting others' feelings

VII. Classroom Management

7. Student-teacher verbal interaction
20. General presentation of information and direction
21. Deciding on appropriate pupil-grouping procedures for instruction

VIII. Non-factor Related Items

1. Diagnosing basic learning difficulties
3. Identifying student disabilities that need referral to special remedial work
4. Identifying student attitudes in order to better relate to problems
8. Deciding what teaching technique is best for a particular intended outcome
10. Planning teaching activities with other teachers or administrators
14. Keeping abreast of developments in your own subject matter areas
17. Using questioning procedures that promote discussion
18. Utilization of audiovisual equipment and other mechanical aids
19. Gearing instruction to problem solving
23. Constructively using evaluation in helping student progress
24. Managing classroom affairs in order to get maximum benefit from supervising, aids, tutors, etc.
41. Identifying the gifted and talented students

IX. Integration of Faith, Learning and Practice

42. Developing better understanding of the theory of interpreting faith, learning, and practice and what makes it work
43. Knowing how to achieve faith, learning, and practice from the curriculum through written objectives and evaluating results
44. Constructing and implementing a Christian witness program for students and teachers together
45. Transforming faith into action by vicarious experience, developing Christian values and attitudes
46. Making Bible instruction more applicable to everyday life

The questionnaire which is self-administering requires only twenty to thirty minutes for completion and serves to indicate what areas of inservice education are perceived to be the respondent's specific needs.

Validation of the Lake Union
Inservice Assessment (LUCIA)

After developing the initial Teacher Needs Assessment Survey, Ingersoll tried out the instrument on 745 teachers--364 elementary school teachers, 187 junior high-school teachers, and 188 high-school teachers. Of these 745 teachers, 204 had one to four years teaching experience, 195 teachers had five to nine years teaching experience, and 364 had ten or more years teaching experience. Ingersoll stated the following:

Teachers were asked to respond to each item of the Assessment in two ways, indicating (1) how they saw each training area as a need of teachers in general, (2) how they saw each training area as a personal need. The purpose of this dual rating was to determine whether any major discrepancy existed between the two points of view. The teachers were asked to indicate on a Likert-type scale whether or not inservice training in a specific area or skill would be beneficial.

Estimates of internal consistency for the instrument were exceptionally high. The reliability estimate for ratings of training needs for "self" was .95 while the comparable estimate for perceived training needs of "others" was .97 for the needs assessment instrument. In spite of the high reliability coefficient for "others' needs," however certain statistical findings and conceptual problems led to a decision to remove that dimension of the questionnaire from further analysis. An inspection of the adjusted mean ratings for "selves" and "others" indicated that of the 43 identified training needs areas, all 43 were viewed as being needed more by "others" than by "self." Further, the correlation between the mean rating for "selves" and "others" over 43 skill areas was $r_{xy} = .96$ suggesting that the differences in rating of "selves" and "others" reduce to a nearly perfect linear transformation. (Ingersoll, 1976, p. 169)

Teacher responses were submitted to factor analysis to identify clusters of perceived inservice needs. The resultant matrix of rotated factors yielded seven factors accounting for 95 percent of identifiable common variance, identification, and labeling of categories.

Subsequent to this the same instrument was successfully used by other researchers such as Pitts (1975).

For use in this study, the researcher constructed the items in Category IX with the aid of a classroom teacher, an elementary school principal, a university professor, and the researcher's committee chairman after reviewing the articles authored by Akers and Moon (1980), "Integration of Faith, Learning, and Practice," Journal of Adventist Education. This modification was done with the permission of the author of the instrument, Dr. Gary Ingersoll.

Section III, Additional Inservice Ideas, asked the respondents

to add any additional inservice ideas they may have which were not provided for in the forty-six item statements contained in Section II.

Data Gathering Procedures

Initial permission from the superintendent of schools in the Lake Union Conference of Seventh-day Adventists opened the way for the researcher to explain the forthcoming survey and the purpose to the five conference superintendents of schools in the Lake Union Conference of Seventh-day Adventists. They gave their support.

In August 1982, the researcher sought and obtained the permission and cooperation of the administrators of the Lake Union Conference of Seventh-day Adventist via the Lake Union Conference Principals/Superintendents Council (appendix B).

Permission was then obtained to administer the survey to all of the secondary-school teachers of the Lake Union Conference of Seventh-day Adventists at a teachers' conference. During one of the general sessions, time was allowed for introduction of the research and questionnaire. The questionnaire was distributed at that time and collected at the start of the next general session. The respondents were instructed to mark with a pencil the degree to which they agreed or disagreed to each inservice education need.

At the conclusion of the conference, each attending educational superintendent took the instrument to the elementary-school teachers of his conference for completion. An introductory letter accompanied each packet (appendix C). Due to the fact that one of the educational superintendents was not in attendance at the

teachers' conference, the instrument was mailed to each teacher of that conference with a cover letter explaining the instrument and purpose of research (appendix D). To insure proper return, a stamped self-addressed envelope accompanied each instrument. Three weeks later, a letter of reminder was sent to the educational superintendent of the conference asking for his additional support to have the survey instruments returned (appendix E). A letter of reminder was also sent to each teacher who had previously received an instrument for completion (appendix F).

By December 15, 1982 the researcher began to process and analyze the data that had come in via the Lake Union Conference Inservice Assessment.

Data Analysis

The response items were processed by the Xerox Sigma Vi used for educational research at the Andrews University Computer Center, Berrien Springs, Michigan. The responses for each item on the Likert-type scale were weighted giving strongly disagree - 1, disagree - 2, undecided - 3, agree - 4, and strongly agree - 5, which provided an indication of the degree to which respondents agreed or disagreed with the statement. This weight of 1 to 5 to the alternative answers gave the same numerical values to the responses that showed the greatest favorableness toward the concept. A computer summarization of each item gave to it a weighted score. The possible weighted score was derived by multiplying the number of respondents in that group times five. The responses to the items were divided into the following percentage groups: 89-90, 79-70,

69-60, and 59-50. The percentage groups gave a clearer description of the different items and categories. The items were ranked using the weighted scores. The nine categories were ranked according to the mean score of each category, then using the weighted score, each item within the category was ranked. The ranking of the items in the category were described and tabulated in graphic form.

In analyzing the data the researcher sought answers to the following twenty-one research questions:

1. What are the perceived inservice needs of the K-12 Lake Union Conference teachers?
2. What are the perceived inservice needs of the Lake Union Conference elementary teachers who teach grades K-8?
3. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades K-2?
4. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades 3-5?
5. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades 6-8?
6. What are the perceived inservice needs of Lake Union Conference secondary teachers who teach grades 9-12?
7. What are the perceived inservice needs of Lake Union Conference secondary teachers who teach the different disciplines (i.e., math, Bible, history)?
8. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 0-5 years?
9. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 6-10 years?

10. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 11-15 years?

11. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 16-20 years?

12. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 21 + years?

13. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 0-5 years?

14. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 6-10 years?

15. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 11-15 years?

16. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 16-20 years?

17. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 21 + years?

18. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach three or fewer grades?

19. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach more than three grades?

20. What are the perceived inservice needs of the Lake Union Conference teachers who teach elementary and secondary grades?

21. What are the perceived inservice needs of Lake Union Conference principals who also function as teachers?

Chapter IV contains the presentation and analysis of the data gathered by way of the Lake Union Conference Inservice Assessment.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this study was to identify the perceived inservice educational needs of the K-12 teachers of the Lake Union Conference. In this chapter the data are presented according to the procedures outlined in chapter III. In the first section the findings are summarized with respect to the assessment instrument returns. The second section presents answers relative to the data collected for the twenty-one questions posed by the study in chapter III.

The Findings

Of the 490 teachers assessed in the Lake Union Conference of Seventh-day Adventists, a total of 289 teachers returned their completed assessment questionnaires. None of these questionnaires were discarded as spoiled or as incomplete. The net result reflects a 59 percent usable return of questionnaires. A calculation of the percentage returns from the various conferences in the Lake Union Conference of Seventh-day Adventists revealed the following:

Illinois Conference:	72.3 percent (60 out of 83 teachers)
Indiana Conference:	80.8 percent (42 out of 52 teachers)
Lake Region Conference:	23 percent (14 out of 59 teachers)
Michigan Conference:	52.4 percent (133 out of 245 teachers)
Wisconsin Conference:	78.4 percent (40 out of 51 teachers)

Description of the Data

The following data are based upon the responses of the 289 K-12 Lake Union Conference teachers. The findings of the research are organized and presented in descriptive narrative, tables, and graphs. The returned raw data are displayed in appendix G showing the total responses to each item, the ranking of the items, and the weighted score of the item.

Item and Ranked Categories for All K-12 Elementary and Secondary Teachers

Ranked Items--K-12 Teachers

The description of the items is presented in ranked order and put into percentage groups. By ranking the findings (table 2) it was found that of the 46 items on the assessment survey, there were 5 items which scored between the 89-80 percent level of the possible weighted score of 1445 (289 teachers x 5). Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked the highest with a weighted score of 1215, which was 84 percent of the possible weighted score. The remaining 4 items in this percentage group had a range of weighted scores from 1183 to 1173. Item 39, Instilling in the Student the Will to Learn on His Own, ranked second. Item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, and item 13, Motivating Students to Learn on Their Own, had an equal number of totally agreed and strongly agreed responses (237). Of the 5 items in this group, 3 came from the category of Integration of Faith, Learning, and Practice, and 2 came from the category of Developing Pupil Self.

TABLE 2
RANKED ITEMS FOR ALL K-12 TEACHERS

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
46	Making Bible more applicable to everyday life	1	1215	006	022	015	110	136
39	Instilling in the student the will to learn on his own initiative	2	1183	008	022	020	124	115
44	Constructing and implementing a Christian witnessing program for students and teachers together	3	1179	006	019	030	125	109
45	Transforming faith into action by vicarious experience-developing Christian values and attitudes	4	1176	006	016	030	137	100
13	Motivating students to learn on their own	5	1173	006	025	021	131	106
38	Stimulating growth of pupil attitudes and values	6	1134	008	029	023	146	083
42	Developing a better understanding of the theory of IFLP and what makes it work	7	1133	006	030	039	120	094
09	Developing the use of the computer in the classroom	8	1128	011	023	058	088	109
01	Diagnosing basic learning difficulties	9	1121	008	027	030	151	073
14	Keeping abreast of developments in your own subject area	10	1105	006	044	033	118	088
35	Facilitating pupil self-concept and worth	11	1098	009	039	022	150	069
37	Facilitating development of pupil responsibility	12	1080	011	038	037	133	070

TABLE 2--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
03	Identifying student disabilities that need referral or special remedial work	13	1073	007	044	041	130	067
15	Selecting and developing materials-activities appropriate for individualized instruction	14	1067	008	038	045	142	067
43	Knowing how to achieve IFLP from the curriculum through written objectives and evaluation	15	1064	013	038	044	127	067
26	Useful methods of classroom discipline and when to use them	16	1061	015	050	026	122	076
11	Creating useful remedial materials	17	1056	009	048	042	125	056
23	Constructively using evaluation in helping student progress	18	1049	006	039	054	147	043
16	Implementing and supervising individualized instruction	19	1049	010	039	049	141	050
19	Gearing instruction to problem solving	20	1040	006	045	045	156	037
27	Maintaining classroom control without . . .	21	1019	017	061	031	106	074
31	Developing a personal self-evaluation method	22	1019	009	051	056	125	048
30	Involving others in the school program	23	1016	019	059	063	098	050
29	Counselling and conferring with students	24	1016	013	063	029	130	054
28	Communicating and interacting with parents	25	1016	016	063	029	118	063
17	Using questioning procedures that promote discussion	26	1015	014	057	038	127	053

TABLE 2--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
40	Developing or modifying instructional procedures to suit your own strengths	27	1012	008	053	056	130	042
04	Identifying student attitudes in order to better relate to problems	28	1010	012	055	046	130	046
06	Involving students in self-evaluation	29	1004	012	049	051	144	033
24	Managing classroom affairs in order to get maximum benefit from supervising aides, tutors, and etc.	30	993	011	063	050	119	046
10	Planning teaching activities with other teachers or administrators	31	991	011	063	052	117	046
25	Knowing where to refer student problems beyond what can be handled by the teacher	32	989	018	061	045	111	054
36	Facilitating pupil social interaction	33	980	010	060	059	127	033
12	Evaluating instruction/instructional design	34	978	006	055	077	124	027
08	Deciding what teaching technique is best for a particular intended outcome	35	976	011	058	058	135	027
32	Developing a broad acceptance of self	36	968	019	059	063	098	050
02	Constructing and using tests for evaluating academic progress	37	956	015	074	039	129	032
05	Establishing appropriate performance standards	38	954	010	067	065	120	027
33	Selecting and specifying performance goals and objectives	39	949	016	061	065	119	028

TABLE 2--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
21	Providing for reinforcement	40	948	014	069	061	112	033
34	Developing a capacity of accepting others' feelings	41	941	019	073	050	109	038
18	Utilization of audiovisual equipment and other mechanical aids	42	941	022	071	045	113	038
41	Identifying the gifted and talented student	43	933	018	068	062	112	029
07	Teacher-pupil verbal interaction	44	903	024	077	052	111	025
22	Deciding on appropriate pupil grouping procedures for instruction	45	894	019	085	062	096	027
20	General presentation of information and directions	46	797	034	106	059	076	014

The next 22 items were between the 79-70 percent level of the possible weighted score of 1445, with weighted scores ranging from 1134 to 1012. Item 38, Stimulating Growth of Pupil's Attitudes and Values, ranked first. Item 42, Developing a Better Understanding of the Theory of IFLP and What Makes It Work, ranked second, and item 09, Developing the Use of Computers in the Classroom, ranked third in this percentage group. All three of the above items clustered together with only a 6-point range within the weighted scores. The range between the items was from 1 to 21 points. Item 30, Involving Others in School Programs; item 29, Counseling and Conferring with Parents; and item 28, Communicating and Interacting with Parents, each had the same weighted score of 1016. Two items, 27, Maintaining Classroom Control, and 31, Developing a Personal Self-Evaluation Method, had weighted scores of 1019. The 22 items in this percentage group came from all the categories except Classroom Management.

The third group which consisted of 18 items were in the 69-60 percent group and had weighted scores which ranged from 1010 to 894. Items within this percentage group had a 2 to 30 point spread. Item 34, Developing a Capacity of Accepting Others' Feelings, and item 18, Utilizing A.V. Equipment, had the same weighted score of 941. Within this group, item 22, deciding on Appropriate Pupil-Grouping Procedures for Instruction, had the largest number of disagreed with 85 responses, while item 12, Evaluating Instruction/Instructional Design, had the largest number of undecided responses (77). These perceived inservice needs came from six of the nine categories.

The fourth group consisted of item 20, General Presentation of Information and Direction, which ranked 46 with a weighted score of 797. This was below the 60 percent level of the possible weighted score of 1445. It had the largest number of disagree and strongly disagree with a total of 140 responses out of the possible total of 289 K-12 teachers. This item came from the category of Classroom Management.

Of the 46 items on the assessment, 45 items were above the 60 percent level of the possible weighted score, 28 items were above 70 percent of the possible weighted score, and 5 items were above 80 percent of the possible weighted score of 1445.

The top five perceived inservice needs of all the K-12 teachers of the Lake Union Conference were as follows:

1. Making Bible Instruction More Applicable to Everyday Life
2. Instilling in the Students the Desire to Learn on His Own Initiative
3. Constructing and Implementing a Christian Witnessing Program for Students and Teachers Together
4. Developing Christian Values and Attitudes through Vicarious Experience
5. Motivate Students to Learn on Their Own.

Three of the items, 1, 3, and 4, were from Category IX, Integration of Faith, Learning, and Practice (see table 1). The other two items 2 and 5, were from Category II, Developing Pupil Self.

Ranked Categories--All K-12 Teachers

The description of the categories is presented in ranked order (table 3). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses (table 4).

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 246 totalled agreed and strongly agreed responses. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked second. Item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked third in the category with the highest number of agreed responses (137). Item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, ranked last with an 82 total of undecided and disagreed responses. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 1153, shown in table 3, was 80 percent of the possible weighted score of 1445 (289 teachers x 5).

Category II, Developing Pupil Self, ranked second among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with a total of 239 agreed and strongly agreed responses. Item 13, Motivating Students to Learn On Their Own, ranked second. Item 35, Facilitating Pupil Self-Concept and Worth, ranked third in the category with the highest number agreed responses (150), whereas,

TABLE 3
RANKED CATEGORIES FOR ALL K-12 LAKE UNION CONFERENCE TEACHERS

Rank	Categories	* Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	** Mean of Weighted Scores	*** Percentage
1	IX Integration of Faith, Learning and Practice							1153	80
	46 Making Bible instruction more applicable to everyday life	006	022	015	110	136	1215		
	44 Constructing and implementing a Christian witness program for students and teachers together	006	019	030	125	109	1179		
	45 Transforming faith into action--by vicarious experience--developing Christian values and attitudes	006	016	030	137	100	1176		
	42 Developing a better understanding of the theory of integrating faith, learning and practice and what makes it work	006	030	039	120	094	1133		
	43 Knowing how to achieve faith, learning and practice from the curriculum through written objectives and evaluating results	013	038	044	127	067	1064		
2	II Developing Pupil Self							1108	77
	39 Instilling in the student the will to learn on his own initiative	008	022	020	124	115	1183		
	13 Motivating students to learn on their own	006	025	021	131	106	1173		
	38 Stimulating growth of pupil attitudes and values	008	029	023	146	083	1134		
	35 Facilitating pupil self-concept and worth	009	039	022	150	069	1098		
	37 Facilitating development of pupil responsibility	011	038	037	133	070	1080		
	36 Facilitating pupil social interaction	010	060	059	127	033	980		

TABLE 3--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
3	III Individualized Instruction							1075	74
	09 Developing the use of the computer in the classroom	011	023	058	088	109	1128		
	15 Selecting and developing materials activities appropriate for individualized instruction	008	038	045	142	056	1067		
	11 Creating useful remedial materials	009	048	042	125	065	1056		
	16 Implementing and supervising individualized instruction	010	039	049	141	050	1049		
4	V Discipline							1044	72
	26 Useful methods of classroom discipline and when to use them	015	050	026	122	076	1061		
	27 Maintaining classroom control without appearing as an ogre to the students	017	061	031	106	074	1026		
5	VIII Non-factor Related Items							1021	71
	01 Diagnosing basic learning difficulties	008	027	030	151	073	1121		
	14 Keeping abreast of developments in your own subject matter area	006	044	033	118	088	1105		
	03 Identifying student disabilities that need referral or special remedial work	007	044	041	130	067	1073		
	23 Constructively using evaluation in helping student progress	006	039	054	147	043	1049		
	19 Gearing instruction to problem solving	006	045	045	156	037	1040		
	17 Using questioning procedures that promote discussion	014	057	038	127	053	1015		

TABLE 3--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
	04 Identifying student attitudes in order to better relate to problems	012	055	046	130	046	1010		
	24 Managing classroom affairs in order to get maximum benefit from supervising, aids, tutors, etc.	011	063	050	119	046	993		
	10 Planning teaching activities with other teachers or administrators	011	063	052	117	046	991		
	08 Deciding what teaching technique is best for a particular intended outcome	011	058	058	135	027	964		
	18 Utilization of audio-visual equipment and other mechanical aids	022	071	045	113	038	941		
	41 Identifying the gifted and talented students	018	068	062	112	029	933		
6	I Interpersonal Communication and Administration							1009	70
	28 Communicating and interacting with parents	016	063	029	118	063	1016		
	29 Counseling and conferring with students	013	063	029	130	054	1016		
	30 Involving others in the school program	010	040	063	143	033	1016		
	25 Knowing where to refer student problems beyond what can be handled by the teacher	018	061	045	111	054	989		
7	IV Assessment							975	68
	40 Developing or modifying instructional procedures to suit your own strengths	008	053	056	130	042	1012		
	06 Involving students in self-evaluation	012	049	051	144	033	1004		
	12 Evaluating instruction/instructional design	006	055	077	124	027	978		

TABLE 3--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
	02 Constructing and using tests for evaluating academic progress	015	074	039	129	032	956		
	05 Establishing appropriate performance standards	010	067	065	120	027	954		
	33 Selecting and specifying performance goals and objectives	016	061	065	119	028	949		
8	VI Developing Personal Self							926	68
	31 Developing a personal self-evaluation method	009	051	056	125	048	1019		
	32 Developing a broad acceptance of self	019	059	063	098	050	968		
	34 Developing a capacity of accepting others' feelings	019	073	050	109	088	941		
9	VII Classroom Management							886	61
	21 Providing for reinforcement	014	069	061	112	033	948		
	07 Teacher-pupil verbal interaction	024	077	052	111	025	903		
	22 Deciding on appropriate pupil grouping procedures for instruction	019	085	062	096	027	894		
	20 General presentation of information and directions	034	106	059	076	014	797		

* Raw Scores

** Mean of the weighted score for the category

*** Percent of the possible weighted score

TABLE 4
A SUMMARY OF THE RANKED CATEGORIES FOR ALL K-12 LAKE UNION
CONFERENCE TEACHERS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	1153	80
II Developing Pupil Self	2	1108	77
III Individualized Instruction	3	1075	74
V Discipline	4	1044	72
VIII Non-factor Related Items	5	1021	71
I Interpersonal Communication and Administration	6	1009	70
IV Assessment	7	975	68
VI Developing Personal Self	8	926	68
VII Classroom Management	9	886	61

*Maximum weighted score for this table was 1445 [five times the number of teachers in the group].

item 36, Facilitating Pupil Social Interaction, ranked last with the highest number of disagree and undecided responses. Category II consisted of 6 questionnaire items--13, 35, 36, 37, and 39. The mean score of 1108, shown in table 3, was 77 percent of the possible weighted score of 1445.

Category III, Individualized Instruction, ranked third among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 109 strongly agreed responses. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked second with the highest number of agreed responses (142). Category III consisted of 4 questionnaire items--9, 11, 15 and 16. The mean score of 1075, shown in table 3, was 74 percent of the possible weighted score of 1445.

Category V, Discipline, ranked fourth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first with 198 totalled agreed and strongly agreed responses. Item 27, Maintaining Classroom Control Without Appearing as an Ogre to the Students, ranked last. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 1044, shown in table 3, was 72 percent of the possible weighted score of 1445.

Category VIII, Non-factor Related Item, ranked fifth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 224 totalled agreed and strongly agreed responses. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked second with the highest number of

strongly agreed responses (88). Item 41, Identifying the Gifted and Talented Students, ranked last with the highest undecided responses (62). Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 1021, shown in table 3, was 71 percent of the possible weighted score of 1445.

Category I, Interpersonal Communication and Administration, ranked sixth among the nine categories. Item 28, Communicating and Interacting with Parents, ranked first with 63 strongly agreed responses. Item 29, Counselling and Conferring with Students, ranked second. Item 30, Involving Others in the School Program, ranked third. All three of the forementioned items--28, 29, and 30--had the same weighted score of 1016. Item 28 and item 29 each had 29 undecided responses. Likewise both items had 63 disagreed responses. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 1009, shown in table 3, was 70 percent of the possible weighted score of 1445.

Category IV, Assessment, ranked seventh among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first with 42 strongly agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second in the category with 144 agreed responses. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 975, shown in table 3, was 68 percent of the possible weighted score of 1445.

Category VI, Developing Personal Self, ranked eighth among the nine categories. Item 31, Developing a Personal Self-

Evaluation Method, ranked first in the category with a total of 173 agreed and strongly agreed responses. Both item 32, Developing a Broad Acceptance of Self, and item 34, Developing a Capacity of Accepting Others' Feelings, had 19 strongly disagreed responses. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 926, shown in table 3, was 68 percent of the possible weighted score of 1445.

Category VII, Classroom Management, ranked last among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 33 strongly agreed responses. Item 20, General Presentation of Information and Directions, ranked last with a total of 140 disagree and strongly disagree responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 886, shown in table 3, was 61 percent of the possible weighted score of 1445.

Ranked Items--Elementary Teachers

The description of the item is presented in ranked order and put into percentage groups. By ranking the items it was found there were 4 items which scored above 80 percent of the possible weighted score of 765 (153 teachers x 5) (table 5). Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked the highest with a weighted score of 640 which is 84 percent of the possible weighted score. The remaining 3 items in this group had a range of weighted scores from 631 to 613. Item 13, Motivating Students to Learn on Their Own, and item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values

TABLE 5
RANKED ITEMS FOR ALL ELEMENTARY LAKE UNION CONFERENCE TEACHERS

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
46	Making Bible more applicable to everyday life	1	640	003	015	007	054	074
39	Instilling in the student the will to learn on his own initiative	2	631	004	012	009	064	064
13	Motivating students to learn on their own	3	613	003	014	015	068	053
45	Transforming faith into action by vicarious experience-developing Christian values and attitudes	4	613	003	011	019	069	051
38	Stimulating growth of pupil attitudes and values	5	605	004	013	014	077	045
44	Constructing and implementing a Christian witnessing program for students and teachers together	6	604	004	014	019	065	051
01	Diagnosing basic learning difficulties	7	599	004	015	013	079	042
42	Developing a better understanding of the theory of IFLP and what makes it work	8	595	005	014	022	064	043
09	Developing the use of the computer in the classroom	9	583	009	012	034	042	056
35	Facilitating pupil self-concept and worth	10	581	003	020	014	084	032
11	Creating useful remedial materials	11	579	003	024	017	068	041
37	Facilitating development of pupil responsibility	12	577	004	018	021	076	034
03	Identifying student disabilities that need referral or special remedial work	13	573	002	031	013	065	042

TABLE 5--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
15	Selecting and developing materials-activities appropriate for individualized instruction	14	567	004	022	019	078	030
26	Useful methods of classroom discipline and when to use them	15	562	005	030	015	063	040
16	Implementing and supervising individualized instruction	16	562	004	023	017	084	025
14	Keeping abreast of developments in your own subject area	17	561	001	029	023	067	033
43	Knowing how to achieve IFLP from the curriculum through written objectives and evaluation	18	560	009	018	025	065	036
30	Involving others in the school program	19	548	003	021	031	080	018
19	Gearing instruction to problem solving	20	543	003	026	029	074	021
23	Constructively using evaluation in helping student progress	21	542	002	027	029	076	019
28	Communicating and interacting with parents	22	541	007	033	013	071	029
27	Maintaining classroom control without . . .	23	540	005	030	015	063	040
24	Managing classroom affairs in order to get maximum benefit from supervising aides, tutors, and etc.	24	540	004	032	025	063	029
29	Counseling and conferring with students	25	539	005	033	017	073	025
31	Developing a personal self-evaluation method	26	537	004	028	030	068	023
25	Knowing where to refer student problems beyond what can be handled by the teacher	27	533	007	035	021	057	033

TABLE 5--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Saw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
36	Facilitating pupil social interaction	28	532	004	027	030	076	016
40	Developing or modifying instructional pro- cedures to suit your own strengths	29	531	005	027	031	071	019
04	Identifying student attitudes in order to better relate to problems	30	525	007	031	021	077	017
10	Planning teaching activities with other teachers or administrators	31	522	005	037	027	058	026
17	Using questioning procedures that promote discussion	32	521	010	034	017	068	024
06	Involving students in self evaluation	33	518	006	031	028	074	014
12	Evaluating instruction/instructional design	34	514	001	032	044	063	013
32	Developing a broad acceptance of self	25	511	008	034	032	056	023
21	Providing for reinforcement	36	509	006	036	030	064	017
41	Identifying the gifted and talented student	37	504	007	036	031	063	016
08	Deciding what teaching techniques is best for a particular intended outcome	38	501	005	036	030	076	006
02	Constructing and using tests for evaluating academic progress	39	495	008	040	027	061	014
34	Developing a capacity of accepting others' feelings	40	494	010	041	026	056	020

TABLE 5--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
33	Selecting and specifying performance goals and objectives	41	494	006	040	034	059	014
18	Utilization of audio-visual equipment and other mechanical aids	42	492	010	043	021	062	017
06	Involving students in self evaluation	43	491	005	042	034	060	012
22	Deciding on appropriate pupil grouping procedures for instruction	44	482	005	052	029	049	018
07	Teacher-pupil verbal interaction	45	461	013	047	025	061	007
20	General presentation of information and directions	46	433	015	058	026	046	008

and Attitudes, had the same weighted score of 613. Item 46 and item 39, Instilling in the Student the Will to Learn on His Own Initiative, had the same totalled agree and strongly agreed responses (128). Of the 4 items in this group, 2 were from category IX, Integration of Faith, Learning, and Practice, and 2 were from category II, Development of Personal Self.

The next group of 22 items was between the 79-70 percent level of the possible weighted score of 765 with the weighted scores ranging from 605 to 537. Item 38, Stimulating Growth of Pupil Attitudes and Values, ranked first in this percentage group with item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked second with weighted scores differing by only 1 point. The range between the items was from 1 to 12 points. Items were clustered together with a 1 to 2 point spread while other items had the same scores. Item 26, Useful Methods of Classroom Discipline and When to Use Them, and item 16, Implementing and Supervising Individualized Instruction, had the same weighted scores of 562. Such was the same with item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, and item 24, Managing Classroom Affairs in Order to Get Maximum Benefit from Supervising, Aids, Tutors, etc. They each had weighted scores of 540. Item 35, Facilitating Pupil Self-Concept and Worth, and item 16, Implementing and Supervising Individualized Instruction, both had 84 agreed responses. Item 9, Developing the Use of the Computer in the Classroom, had the highest strongly agreed with 56 responses in this percentage

group, as well as the highest number of undecided responses (34). The items in this group fell into all the nine categories except Assessment and Classroom Management.

The next 19 items were between the 69 and 60 percentage level of the possible weighted score of 765 with weighted scores ranging from 533 to 461. The range between the weighted scores was from 1 to 9 points except for a range of 21 points between the last 2 items. Several items had the same number of responses such as item 36, Facilitating Pupil Social Interaction, and item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, each had 27 disagreed responses. Item 17, Using Questioning Procedures that Promote Discussion, had 34 disagreed responses as did item 12, Evaluating Instruction/Instructional Design. Item 21, Providing for Reinforcement, item 41, Identifying the Gifted and Talented Students, and item 8, Deciding What Teaching Technique is Best for a Particular Intended Outcome, had 36 disagreed responses each. Item 2, Constructing and Using Tests for Evaluating Academic Progress, and item 33, Selecting and Specifying Performance Goals and Objectives, had the highest undecided with 44 responses. The responses in this group fell into all of the nine categories except category III, Individualized Instruction, and category V, Discipline.

The last and fourth group consisted of item 20, General Presentation of Information and Directions, ranking last with a weighted score of 433. This score was below the 60 percent level of the possible weighted score of 765. This item comes under the category of Classroom Management.

Forty-five items of the questionnaire were above the 60 percent level of the possible weighted score. Twenty-six were above the 70 percent level, while four were above the 80 percent level of the possible weighted score of 765.

The top four perceived inservice needs of the elementary teachers (K-8) of the Lake Union Conference were as follows:

1. Making Bible Instruction More Applicable to Everyday Life
2. Instilling in the Student the Will to Learn on His Own Initiative
3. Motivating the Students to Learn on Their Own
4. Transforming Faith Into Action--by Vicarious Experience--Developing Christian Values and Attitudes.

Items 1 and 4 were from Category IX, Integration of Faith, Learning, and Practice, while items 2 and 3 were from Category II, Developing Pupil Self.

Ranked Categories--Elementary Teachers

The description of the categories is presented in ranked order (table 6). Likewise, the description of the items within the categories is presented in ranked order, according to the responses (table 7).

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 74 strongly agreed responses. Both items 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, and 44, Constructing and Implementing a Christian Witnessing Program for Students and Teachers Together, had the same

TABLE 6
RANKED CATEGORIES FOR ALL ELEMENTARY LAKE UNION
CONFERENCE TEACHERS

Rank	Categories	* Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	** Mean of Weighted Scores	*** Percentage
1	IX Integration of Faith, Learning, and Practice							602	79
	46 Making Bible instruction more applicable to everyday life	003	015	007	054	074	640		
	45 Transforming faith into action--by vicarious experience--developing Christian values and attitudes	003	011	019	069	051	613		
	44 Constructing and implementing a Christian witness program for students and teachers together	004	014	019	065	051	604		
	42 Developing a better understanding of the theory of integrating faith, learning and practice and what makes it work	005	014	022	064	043	595		
	43 Knowing how to achieve faith, learning and practice from the curriculum through written objectives and evaluating results	009	018	025	065	036	560		
2	II Developing Pupil Self							590	77
	39 Instilling in the student the will to learn on his own initiative	004	012	009	064	064	631		
	13 Motivating students to learn on their own	003	014	015	068	053	613		
	38 Stimulating growth of pupil attitudes and values	004	013	014	077	045	605		
	35 Facilitating pupil self-concept and worth	003	020	014	084	032	581		
	37 Facilitating development of pupil responsibility	004	018	021	076	034	577		
	36 Facilitating pupil social interaction	004	027	030	076	016	532		

TABLE 6--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
3	III Individualized Instruction -----							573	75
	09 Developing the use of the computer in the classroom	009	012	034	042	056	583		
	11 Creating useful remedial materials	003	024	017	068	041	579		
	15 Selecting and developing materials activities appropriate for individualized instruction	004	022	019	078	030	567		
	16 Implementing and supervising individualized instruction	004	023	017	084	025	562		
4	V Discipline -----							554	72
	26 Useful methods of classroom discipline and when to use them	005	030	015	063	040	562		
	27 Maintaining classroom control without appearing as an ogre to the students	007	033	019	054	040	540		
5	I Interpersonal Communication and Administration -----							540	71
	30 Involving others in the school programs	003	021	031	080	018	548		
	28 Communicating and interacting with parents	007	033	013	071	029	541		
	29 Counseling and conferring with students	005	033	017	073	025	539		
	25 Knowing where to refer student problems beyond what can be handled by the teacher	007	035	021	057	033	533		
6	VIII Non-factor Related Items -----							535	70
	01 Diagnosing basic learning difficulties	004	015	013	079	042	599		
	03 Identifying student disabilities that need referral or special remedial work	002	031	013	065	042	573		

TABLE 6--Continued

Ran.	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
	14 Keeping abreast of developments in your own subject matter area	001	029	023	067	033	561		
	19 Gearing instruction to problem solving	003	026	029	074	021	543		
	23 Constructively using evaluation in helping student progress	002	027	029	076	019	542		
	24 Managing classroom affairs in order to get maximum benefit from supervising, aids, tutors, etc.	004	032	025	063	029	540		
	04 Identifying student attitudes in order to better relate to problems	007	031	021	077	017	525		
	10 Planning teaching activities with other teachers or administrators	005	037	027	058	026	522		
	17 Using questioning procedures that promote discussion	010	034	017	068	024	521		
	41 Identifying the gifted and talented students	007	036	031	063	016	504		
	08 Deciding what teaching technique is best for a particular intended outcome	005	036	030	076	006	501		
	18 Utilization of audio-visual equipment and other mechanical aids	010	043	021	062	017	492		
7	VI Developing Personal Self							514	67
	31 Developing a personal self-evaluation method	004	028	030	068	023	537		
	32 Developing a broad acceptance of self	008	034	032	056	023	511		
	34 Developing a capacity of accepting others' feelings	010	041	026	056	020	494		

TABLE 6--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
8	IV Assessment							507	66
	40 Developing or modifying instructional procedures to suit your own strengths	005	027	031	071	019	531		
	06 Involving students in self-evaluation	006	031	028	074	014	518		
	12 Evaluating instruction/instructional design	001	032	044	063	013	514		
	02 Constructing and using tests for evaluating academic progress	008	040	027	064	014	495		
	33 Selecting and specifying performance goals and objectives	006	040	034	059	014	494		
	05 Establishing appropriate performance standards	005	042	034	060	012	491		
9	VII Classroom Management							471	62
	21 Providing for reinforcement	006	036	030	064	017	509		
	22 Deciding on appropriate pupil grouping procedures for instruction	005	052	029	049	018	482		
	07 Teacher-pupil verbal interaction	013	047	025	061	007	461		
	20 General presentation of information and directions	015	058	026	046	008	433		

* Raw Scores

** Mean of the weighted score for the category

*** Percent of the possible weighted score

TABLE 7
A SUMMARY OF THE RANKED CATEGORIES FOR ALL ELEMENTARY
LAKE UNION CONFERENCE TEACHERS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	602	79
II Developing Pupil Self	2	590	77
III Individualized Instruction	3	573	75
V Discipline	4	554	72
I Interpersonal Communication and Administration	5	540	71
VIII Non-factor Related Item	6	535	70
VI Developing Personal Self	7	514	67
IV Assessment	8	507	66
VII Classroom Management	9	471	62

*Maximum weighted score for this table was 765 [five times the number of teachers in the group].

number of strongly agreed responses (51) and the same number of undecided responses (19). Item 44 and item 43, Knowing How to Achieve Faith, Learning and Practice from the Curriculum through Written Objectives and Evaluating Results, had the same number of 65 agreed responses. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 602, shown in table 7, was 79 percent of the possible weighted score of 765.

Category II, Developing Pupil Self, ranked second among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with both agree and strongly agree having 64 responses. Item 35, Facilitating Pupil Self-Concept and Worth had the highest number of agree with 84 responses. Item 36, Facilitating Pupil Social the highest number of undecided responses (30). Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 590, shown in table 7, was 77 percent of the possible weighted score of 765.

Category III, Individualized Instruction, ranked third among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 98 totally agreed and strongly agreed responses. However, item 11, Creating Useful Remedial Materials, and item 16, Implementing and Supervising Individualized Instruction, both had 109 totally agreed and strongly agreed responses. Both items 11 and 16 also had the highest number of disagreed responses. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 573, shown in table 7, was 75 percent of the possible weighted score of 765.

Category V, Discipline, ranked fourth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 103 totalled agree and strongly agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second. However, both items had the same number of strongly agreed responses (40). Category V consisted of 2 questionnaire items--26 and 27. The mean score of 554, shown in table 7, was 72 percent of the possible weighted score of 765.

Category I, Interpersonal Communication and Administration, ranked fifth among the nine categories. Item 30, Involving Others in the School Program, ranked first in the category with 80 agreed responses. Item 28, Communicating and Interacting with Parents, ranked second. Item 25, Knowing Where to Refer Student Problems beyond What Can be Handled by the Teacher, ranked last in the category with the highest strongly agree responses (33) and disagree responses (35). Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 540, shown in table 7, was 71 percent of the possible weighted score of 765.

Category VIII, Non-factor Related Items, ranked sixth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 79 agreed responses. Item 3, Identifying Student Disabilities that Need Referral or Special Remedial Work, ranked second. Both items 1 and 3 had the same number of strongly agreed (42) and undecided (13) responses. Item 18, Utilization of Audio-Visual Equipment and Other Mechanical Aids, ranked last in the category with 43 disagree responses. Category VIII

consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 535, shown in table 7, was 70 percent of the possible weighted score of 765.

Category VI, Developing Personal Self, ranked seventh among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 68 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second. Both items 31 and 32 had the same number of strongly agreed responses (23). Likewise, item 32 and item 24, Developing a Capacity of Accepting Others' Feelings, had the same number of agreed responses (56). Item 34, ranked last in the category. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 514, shown in table 7, was 67 percent of the possible weighted score of 765.

Category IV, Assessment, ranked seventh among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with a total of 90 agreed and strongly agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second with 74 agreed responses. Item 2, Constructing and Using Tests for Evaluating Academic Progress, and item 33, Selecting and Specifying Performance Goals and Objectives, had the same number of disagreed responses (40). Item 5, Establishing Appropriate Performance Standards, ranked last with 42 disagreed responses. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 507, shown in table 7, was 66 percent of the possible weighted score of 765.

Category VII, Classroom Management, ranked last out of the nine categories. Item 21, Providing for Reinforcement ranked highest in the category with 64 agreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked second. Item 20, General Presentation of Information and Directions ranked last in the category with 58 disagree responses. Category VII consisted of 4 questionnaire items, 7, 20, 21, and 22. The mean score of 471, shown in table 7, was 62 percent of the possible weighted score of 765.

Ranked Items--Secondary Teachers

The description of the items is presented in ranked order and put into percentage groups. By ranking the items it was found there were 7 items which scored between 89-80 percent of the possible weighted score of 315 (63 teachers x 5) (table 8). Item 13, Motivating Students to Learn on Their Own, ranked the highest with a weighted score of 273 which was 87 percent of the possible weighted score. The remaining 6 items in this percentage group had a range of weighted scores from 269 to 253. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked second with the highest number of strongly agreed responses (36). There were 5 items in this percentage group which had the same totalled number of agreed and strongly agreed responses (53). They were: item 46, Making Bible Instruction More Applicable to Everyday Life; item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes; item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together; item 39, Instilling in the Student the Will to Learn on His

TABLE 8
RANKED ITEMS FOR ALL SECONDARY LAKE UNION CONFERENCE TEACHERS

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
13	Motivating students to learn on their own	1	273	000	003	003	027	030
14	Keeping abreast of developments in your own subject area	2	269	003	005	000	019	036
46	Making Bible more applicable to everyday life	3	264	002	003	004	024	029
45	Transforming faith into action by vicarious experience-developing Christian values and attitudes	4	259	002	005	003	027	026
44	Constructing and implementing a Christian witnessing program for students and teachers together	5	259	002	003	005	029	024
39	Instilling in the student the will to learn on his own initiative	6	258	002	005	004	026	027
38	Stimulating growth of pupil attitudes and values	7	253	002	005	003	033	020
42	Developing a better understanding of the theory of IFLP and what makes it work	8	251	001	007	008	023	024
35	Facilitating pupil self-concept and worth	9	247	002	008	004	028	021
23	Constructively using evaluation in helping student progress	10	245	001	003	012	033	014

TABLE 8--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
09	Developing the use of the computer in the classroom	11	242	002	008	004	019	023
19	Gearing instruction to problem solving	12	241	001	007	006	037	012
37	Facilitating development of pupil responsibility	13	240	003	008	008	023	021
43	Knowing how to achieve IFLP from the curriculum through written objectives and evaluation	14	239	002	008	008	028	017
15	Selecting and developing materials-activities appropriate for individualized instruction	15	236	002	005	013	030	013
01	Diagnosing basic learning difficulties	16	235	002	007	011	039	014
26	Useful methods of classroom discipline and when to use them	17	235	005	005	005	035	013
17	Using questioning procedures that promote discussion	18	233	002	007	013	027	014
04	Identifying student attitudes in order to better relate to problems	19	232	002	011	011	020	019
29	Counseling and conferring with students	20	231	004	010	005	028	016
31	Developing a personal self-evaluation method	21	230	004	006	010	031	012
06	Involving students in self evaluation	22	230	003	005	011	036	008
40	Developing or modifying instructional procedures to suit your own strengths	23	229	002	009	012	027	013
27	Maintaining classroom control without . . .	24	228	004	010	004	029	015

TABLE 8--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
03	Identifying student disabilities that need referral of special remedial work	25	227	001	009	014	029	010
08	Deciding what teaching techniques is best for a particular intended outcome	26	225	003	011	008	029	012
10	Planning teaching activities with other teachers or administrators	27	225	004	011	008	029	010
11	Creating useful remedial materials	28	221	003	010	014	024	012
32	Developing a broad acceptance of self	29	220	005	008	014	023	013
16	Implementing and supervising individualized instruction	30	220	003	007	019	024	010
28	Communicating and interacting with parents	31	215	005	015	006	023	014
33	Selecting and specifying performance goals and objectives	32	215	004	006	018	030	005
12	Evaluating instruction/instructional design	33	215	003	007	017	033	003
07	Teacher-pupil verbal interaction	34	212	004	013	011	026	009
30	Involving others in the school program	35	210	005	006	020	027	005
34	Developing a capacity of accepting others' feelings	36	209	005	012	014	022	010
05	Establishing appropriate performance standards	37	209	002	015	013	027	006
21	Providing for reinforcement	38	206	005	012	017	019	010

TABLE 8--Continued

Item Number	Inservice Needs	Rank Order	Weighted Score	Raw Scores (Responses)				
				SD-1	D-2	U-3	A-4	SA-5
36	Facilitating pupil social interaction	39	206	003	015	014	024	007
02	Constructing and using tests for evaluating academic progress	40	206	004	019	004	028	008
25	Knowing where to refer student problems beyond what can be handled by the teacher	41	205	007	011	013	023	009
18	Utilization of audio-visual equipment and other mechanical aids	42	200	009	011	012	022	009
24	Managing classroom affairs in order to get maximum benefit from supervising aides, tutors, etc.	43	194	005	016	016	021	005
41	Identifying the gifted and talented student	44	194	006	013	017	024	003
22	Deciding on appropriate pupil grouping procedures for instruction	45	189	007	014	018	020	004
20	General presentation of information and directions	46	165	011	019	020	009	004

Own Initiative; and item 38, Stimulating Growth of Pupil Attitudes and Values. Of the 7 items in this percentage group, 3 items--46, 45, and 44--came from Category IX, Integration of Faith, Learning, and Practice, 3 items--13, 39, and 38--came from category II, Developing Pupil Self and one item--14--was from category VIII, Non-Factor Related Items.

The next 23 items were between the 79-70 percent level of the possible weighted score of 315 with weighted scores which ranged from 251 to 220. Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, ranked first in this percentage group with 24 strongly agreed responses. There was a 31 point range between the 23 items in this percentage group. The items were clustered together with no more than a 4-point spread. Four sets of items which had the same weighted score were item 1, Diagnosing Basic Learning Difficulties, and item 26, Useful Methods of Classroom Discipline and When to Use Them (235). Item 31, Developing a Personal Self-Evaluation Method, and item 6, Involving Students in Self-Evaluation, had the same weighted score of 230. Item 8, Deciding What Teaching Techniques Best for a Particular Intended Outcome, and item 19, Planning Teaching Activities with Other Teachers or Administrators, had the same weighted score of 225. Item 32, Developing a Broad Acceptance of Self, and item 16, Implementing and Supervising Individualized Instruction, had weighted scores of 220. Four items which ranked seventeenth, eighteenth, nineteenth, and twentieth in this percentage group had equal numbers of 29 agreed responses. The 23 items in this percentage group came from all of the categories except Classroom Management, category VII.

The third group which consisted of 15 items was in the 69 to 60 percent group and had weighted scores which ranged from 215 to 189, a spread of 36 points. The items were clustered together with four sets of items having the same weighted score. Item 28, Communicating and Interacting with Parents, item 33, Selecting and Specifying Performance Goals and Objectives, and item 12, Evaluating Instruction/Instructional Design, ranked first, second, and third in this percentage group and had the same weighted score of 215. Others in the group that had the same weighted scores were items 34 and 5 with 209, items 21, 36, and 2 with 206, and items 24 and 41 with 194. The 15 items came from six of the nine categories.

The fourth group consisted of item 20, General Presentation of Information and Directions, which ranked 46 with a weighted score of 165. This was below the 60 percent level of the possible weighted score of 315. It had the largest number of strongly disagreed with 11 responses. This item came from category VII, Classroom Management.

Of the 46 items on the assessment, 45 were above the 60 percent level of the possible weighted score, 30 items were above the 70 percent level of the possible weighted score, and 7 items were above 80 percent of the possible weighted score of 315.

The top 7 perceived inservice needs of the secondary teachers (9-12) of the Lake Union Conference were as follows:

1. Motivating Students to Learn on Their Own
2. Keeping Abreast of Developments in Your Own Subject

Matter Area

3. Making Bible Instruction More Applicable to Everyday Life

4. Transforming Faith into Action--By Vicarious Experience--
Developing Christian Values and Attitudes
5. Constructing and Implenting a Christian Witnessing
Program for Students and Teachers Together
6. Instilling in the Student the Will to Learn on His Own
7. Stimulating Growth of Pupil Attitudes and Values

Ranked Categories--Secondary Teachers

The description of the categories is presented in ranked order (table 9). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses (table 10).

Category IX, Integration of Faith, Learning, and Practice ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 29 strongly agreed responses. Item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked second. Items 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, and item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, had 24 strongly agreed responses each. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 254, shown in table 10, was 81 percent of the possible weighted score of 315 (63 teachers x 5).

Category II, Developing Pupil Self ranked second among the nine categories. Item 13, Motivating Students to Learn on Their Own, ranked first in the category with 30 strongly agree responses.

TABLE 9
RANKED CATEGORIES OF ALL SECONDARY LAKE UNION CONFERENCE TEACHERS

Rank	Categories	* Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	** Mean of Weighted Scores	*** Percentage
1	IX Integration of Faith, Learning, and Practice							254	81
	46 Making Bible instruction more applicable to everyday life	002	003	005	021	029	264		
	45 Transforming faith into action--by vicarious experience--developing Christian values and attitudes	002	005	003	027	026	259		
	44 Constructing and implementing a Christian witness program for students and teachers together	002	003	005	029	024	259		
	42 Developing a better understanding of the theory of integrating faith, learning and practice and what makes it work	001	007	008	023	024	251		
	43 Knowing how to achieve faith, learning and practice from the curriculum through written objectives and evaluating results	002	008	008	028	017	239		
2	II Developing Pupil Self							246	78
	13 Motivating students to learn on their own	000	003	003	027	030	273		
	39 Instilling in the student the will to learn on his own initiative	002	005	004	026	027	258		
	38 Stimulating growth of pupil attitudes and values	002	005	003	033	020	253		
	35 Facilitating pupil self-concept and worth	002	008	004	028	021	240		
	37 Facilitating development of pupil responsibility	003	008	008	023	021	240		
	36 Facilitating pupil social interaction	003	015	014	024	007	206		

TABLE 9--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
3	V Discipline -----							232	73
	26 Useful methods of classroom discipline and when to use them	005	005	005	035	013	235		
	27 Maintaining classroom control without appearing as an ogre to the students	005	010	004	029	015	228		
4	III Individualized Instruction -----							230	73
	09 Developing the use of the computer in the classroom	002	008	004	019	023	242		
	i5 Selecting and developing materials activities appropriate for individualized instruction	002	005	013	030	013	236		
	11 Creating useful remedial materials	003	010	014	024	012	221		
	16 Implementing and supervising individualized instruction	003	007	019	024	010	220		
5	VIII Non-factor Related Items -----							226	72
	14 Keeping abreast of developments in your own subject matter area	003	005	000	019	036	269		
	23 Constructively using evaluation in helping student progress	001	003	012	033	014	245		
	19 Gearing instruction to problem solving	001	007	006	037	012	241		
	01 Diagnosing basic learning difficulties	002	007	011	029	014	235		
	17 Using questioning procedures that promote discussion	002	007	013	027	014	233		
	04 Identifying student attitudes in order to better relate to problems	002	011	011	020	019	232		

TABLE 9--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
	03 Identifying student disabilities that need referral or special remedial work	001	009	014	029	010	227		
	08 Deciding what teaching technique is best for a particular intended outcome	003	011	008	029	012	225		
	10 Planning teaching activities with other teachers or administrators	005	011	008	029	010	225		
	18 Utilization of audio-visual equipment and other mechanical aids	009	011	012	022	009	200		
	24 Managing classroom affairs in order to get maximum benefit from supervising, aids, tutors, etc.	005	016	016	021	005	194		
	41 Identifying the gifted and talented students	006	013	017	024	003	194		
6	VI Developing Personal Self							220	70
	31 Developing a personal self-evaluation method	004	006	010	031	012	230		
	32 Developing a broad acceptance of self	005	008	014	023	013	220		
	34 Developing a capacity of accepting others' feelings	005	012	014	022	010	209		
7	IV Assessment								
	06 Involving students in self-evaluation	003	005	011	036	008	230		
	40 Developing or modifying instructional procedures to suit your own strengths	002	009	012	027	013	229		
	33 Selecting and specifying performance goals and objectives	004	006	018	030	005	215		
	12 Evaluating instruction/instructional design	003	007	017	033	003	215		

TABLE 9--Continued

Rank	Categories	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Weighted Scores	Mean of Weighted Scores	Percentage
	05 Establishing appropriate performance standards	002	015	013	027	006	209		
	02 Constructing and using tests for evaluating academic progress	004	019	004	028	008	206		
8	I Interpersonal Communication and Administration							215	68
	29 Counseling and conferring with students	004	010	005	028	016	231		
	28 Communicating and interacting with parents	005	015	006	023	014	215		
	30 Involving others in the school programs	005	006	020	027	005	210		
	25 Knowing where to refer student problems beyond what can be handled by the teacher	007	011	013	023	009	205		
9	VII Classroom Management							193	61
	07 Teacher-pupil verbal interaction	004	013	011	026	009	212		
	21 Providing for reinforcement	005	012	017	019	010	206		
	22 Deciding on appropriate pupil grouping procedures for instruction	007	014	018	020	004	189		
	20 General presentation of information and directions	011	019	020	009	004	165		

* Raw Scores

** Mean of the weighted score for the category

*** Percent of the possible weighted score

TABLE 10
A SUMMARY OF RANKED CATEGORIES FOR ALL SECONDARY LAKE UNION
CONFERENCE TEACHERS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	254	81
II Developing Pupil Self	2	246	78
V Discipline	3	232	73
III Individualized Instruction	4	230	73
VIII Non-factor Related Items	5	226	72
VI Developing Personal Self	6	220	70
IV Assessment	7	217	69
I Interpersonal Communication and Administration	8	215	68
VII Classroom Management	9	193	61

*Maximum weighted score for this table was 315 [five times the number of teachers in the group].

Item 38, Stimulating Growth of Pupil Attitudes and Values, had the highest agreed responses (33) and ranked third in the category.

Item 36, Facilitating Pupil Social Interaction, ranked last in the category with 15 disagreed responses. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 246, shown in table 10, was 78 percent of the possible weighted score of 315.

Category V, Discipline, ranked third among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 48 totalled agreed and strongly agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked last in the category. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 232, shown in table 10, was 73 percent of the possible weighted score of 315.

Category III, Individualized Instruction, ranked third among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, had 42 totalled agree and strongly agreed responses. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked second in the category. Item 11, Creating Useful Remedial Materials, and item 16, Implementing and Supervising Individualized Instruction, ranked third and fourth in the category each with 24 agreed responses. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 230, shown in table 10, was 73 percent of the possible weighted score of 315.

Category VIII, Non-factor Related Items, ranked fifth among

the nine categories. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked first in the category with 36 strongly agreed responses. Item 19, Gearing Instruction to Problem Solving, ranked third with the highest number of agreed responses (37) in the category. Items in the category grouped together with the same number of agree, disagree and strongly disagree responses. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 226, shown in table 10, was 72 percent of the possible weighted score of 315.

Category VI, Developing Personal Self, ranked sixth among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 43 totalled agreed and strongly agreed responses. Item 32, Developing a Broad Acceptance of Self, and item 34, Developing a Capacity of Accepting Others' Feelings, ranked second and third with 14 undecided responses each. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 220, shown in table 10, was 70 percent of the possible weighted score of 315.

Category IV, Assessment, ranked seventh among the nine categories. Item 6, Involving Students in Self-Evaluation, ranked first in the category with 36 agree responses. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked second with 13 strongly agreed responses. Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked last with 19 disagreed responses. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 217, shown in table 10, was 69 percent of the possible weighted score of 315.

Category I, Interpersonal Communication and Administration, ranked eighth among the nine categories. Item 29, Counseling and Confering with Students, ranked first in the category with the highest agreed (28) and strongly agreed (16) responses. Item 28, Communicating and Interacting with Parents, ranked second with the highest disagreed (15) responses. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 215, shown in table 10, was 68 percent of the possible weighted score of 315.

Category VII, Classroom Management, ranked last among the nine categories. Item 7, Teacher-Pupil Verbal Interaction, ranked first in the category with 26 agreed responses. Item 21, Providing for Reinforcement, ranked second with 10 strongly agree responses. Item 20, General Presentation of Information and Directions, ranked last in the category with a total of 30 disagree and strongly disagree responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 193, shown in table 10, was 61 percent of the possible weighted score of 315.

Summary--K-12, Elementary and Secondary Teachers Perceived Needs

Research questions 1 (What are the perceived inservice needs of the K-12 Lake Union Conference teachers?), 2 (What are the perceived inservice needs of the Lake Union Conference elementary teachers who teach grades K-8?), and 6 (What are the perceived inservice needs of the Lake Union Conference secondary teachers who teach grades 9-12?), as posed in chapter III, are addressed

in the presentation of the responses of three groups; all K-12, elementary, and secondary teachers (table 11 and fig. 3).

TABLE 11
A COMPARISON OF RANKED CATEGORIES FOR ALL K-12,
ELEMENTARY, AND SECONDARY TEACHERS

	I	II	III	IV	V	VI	VII	VIII	IX
All K-12 Teachers	6	2	3	7	4	8	9	5	1
All Secondary Teachers	8	2	4	7	3	6	9	5	1
All Elementary Teachers	5	2	3	8	4	7	9	6	1

Category IX, Integration of Faith, Learning, and Practice, was identified as the first perceived inservice need by all the K-12, elementary and secondary teachers (fig. 3). Category II, Developing Pupil-Self, was ranked second by the three groups. Category III, Individualized Instruction, was ranked third by the K-12 and elementary teachers, whereas the secondary teachers ranked Category III, Individualized Instruction, fourth. Category V, Discipline, was ranked fourth by all the K-12 and elementary teachers and third by the secondary teachers. The remaining categories varied by one or two rankings except Category VII, Classroom Management, which was ranked last by all three groups.

Ranked Categories of Elementary Teachers
by Teaching Assignment

Ranked Categories of K-2
Elementary Teachers

The description of the categories is presented in ranked order (table 12). Likewise, the description of the items within

Fig. 3. Comparison of the ranked categories for all K-12, elementary, and secondary teachers.

TABLE 12
A SUMMARY OF RANKED CATEGORIES OF K-2 ELEMENTARY LAKE UNION
CONFERENCE TEACHERS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	111	79
II Developing Pupil Self	2	111	76
III Individualized Instruction	3	107	73
V Discipline	4	102	72
I Interpersonal Communication and Administration	5	101	72
VIII Non-factor Related Items	6	99	71
IV Assessment	7	95	68
VI Developing Personal Self	8	93	66
VII Classroom Management	9	87	62

*Maximum weighted score for this table was 140 [five times the number of teachers in the group].

the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 11 strongly agreed and 15 agreed responses. Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning and Practice and What Makes It Work, ranked second in the category. Both item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, and item 43, Knowing How to Achieve Faith, Learning and Practice from the Curriculum through Written Objectives and Evaluating Results, had 14 agreed responses. Item 45 ranked third while item 43 ranked last in the category. Items 46, 42, and 45 had no teacher who strongly disagreed with the item. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 111, shown in table 12, was 79 percent of the possible weighted score of 140 (28 teachers x 5).

Category II, Developing Pupil Self, ranked second among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 12 agreed and 12 strongly agreed responses. Item 13, Motivating Students to Learn on Their Own, ranked second with 12 agreed and 11 strongly agreed responses. Both of the above items had weighted scores of 116. Item 35, Facilitating Pupil Self-Concept and Worth, ranked third with 18 agreed responses which was the highest number for the category. Two other items, 37, Facilitating Development

of Pupil Responsibility, and 38, Stimulating Growth of Pupil Attitudes and Values, also had 12 agreed responses as did the top 2 ranking items. Of the 6 items in the category no teacher strongly disagreed with any of the items. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 111, shown in table 12, was 76 percent of the possible weighted score of 140.

Category III, Individualized Instruction, ranked third among the nine categories. Item 11, Creating Useful Remedial Materials, ranked first in the category with 12 agreed and 9 strongly agreed responses. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked second with 20 agreed responses which was the highest number of responses in the category. Item 9, Developing the Use of the Computer in the Classroom, ranked last in the category with 7 undecided responses and 9 strongly agreed responses. The first and last ranking item had the same number of strongly agreed responses. Category III consisted of 5 questionnaire items--9, 11, 15, and 16. The mean score of 107, shown in table 12, was 73 percent of the possible weighted score of 140.

Category V, Discipline, ranked fourth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first with 12 agreed and 8 strongly agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked last with 6 undecided and a total of 6 disagree and strongly disagree responses. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 102,

shown in table 12, was 72 percent of the possible weighted score of 140.

Category I, Interpersonal Communication and Administration, ranked fifth among the nine categories. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked first in the category with a total of 20 agree and strongly agree responses. Item 30, Involving Others in the School Program, ranked second with the same totaled number of agreed and strongly agreed responses as item 25 which ranked first in the category. Only one teacher strongly disagreed with any of the items in this category. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 101, shown in table 12, was 72 percent of the possible weighted score of 140.

Category VIII, Non-factor Related Items, ranked sixth among the nine categories. Item 3, Identifying Student Disabilities that Need Referral or Special Remedial Work, ranked first in the category with 23 totaled agree and strongly agreed responses. Item 24, Managing Classroom Affairs in Order to Get Maximum Benefit from Supervising, Aids, Tutors, etc., ranked second in the category with the highest number of strongly agreed responses (9). Item 19, Gearing Instruction to Problem Solving, ranked fourth in the category with the highest number of agreed responses (18) in the category. Item 23, Constructively Using Evaluation in Helping Student Progress, item 41, Identifying the Gifted and Talented Students, and item 4, Identifying Student Attitudes in Order to Better Relate to Problems, all had 6 undecided responses which was the highest for the category. There were 6 of the 12 items with

which no teacher strongly disagreed. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 99, shown in table 12, was 71 percent of the possible weighted score of 140.

Category IV, Assessment, ranked seventh among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 7 strongly agreed and 7 disagreed responses. Item 12, Evaluating Instruction/Instructional Design, ranked second. Item 5, Establishing Appropriate Performance Standards, ranked third with the highest number of agreed responses (15). Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked fifth in the category and item 6, Involving Students in Self-Evaluation, ranked sixth in the category. Each had the same number of agreed responses (13) as did item 12 which ranked second. Category IV consisted of 5 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 95, shown in table 12, was 68 percent of the possible weighted score of 140.

Category VI, Developing Personal Self, ranked eighth among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 4 strongly agreed responses and 11 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with the highest number of undecided responses (9). Item 34, Developing a Capacity of Accepting Others' Feelings, ranked last in the category with the highest number of agreed responses (13). Category VI consisted of 3

questionnaire items--31, 32, and 34. The mean score of 93, shown in table 12, was 66 percent of the possible weighted score of 140.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked first in the category with 5 strongly agreed responses which was highest number for the strongly agreed responses. Item 21, Providing for Reinforcement, ranked second in the category with the highest number of agreed responses (12). Both item 22 and item 21 had 7 undecided responses while item 20, General Presentation of Information and Directions, and item 7, Teacher-Pupil Verbal Interaction, had the same number of disagreed responses (14). No teacher strongly disagreed with items 20 or 21. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 87, shown in table 12, was 62 percent of the possible weighted score of 140.

Ranked Categories of 3-5 Elementary Teachers

The description of the categories is presented in ranked order (table 13). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category II, Developing Pupil Self, ranked first among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 14 strongly agreed and 15 agreed responses. Item 38, Stimulating Growth of Pupil Attitudes and Values, ranked second in the category with 13 strongly agreed responses. Item 36, Facilitating Pupil Social

TABLE 13
A SUMMARY OF RANKED CATEGORIES OF 3-5 ELEMENTARY LAKE UNION
CONFERENCE TEACHERS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
II Developing Pupil Self	1	140	80
III Individualized Instruction	2	137	78
IX Integration of Faith, Learning, and Practice	3	131	75
V Discipline	4	130	75
I Interpersonal Communication and Administration	5	126	72
VIII Non-factor Related Items	6	122	70
VI Developing Personal Self	7	118	67
IV Assessment	8	116	66
VII Classroom Management	9	106	61

*Maximum weighted score for this table was 175 [five times the number of teachers in the group].

Interaction, ranked last in the category with the highest number of agreed responses (22). Of the 6 items in category III, item 37, Facilitating Development of Pupil Responsibility, item 35, Facilitating Pupil Self-Concept and Worth, and item 36, Facilitating Pupil Social Interaction, had no teacher strongly disagree with the concepts. The other 3 items, item 30, Instilling in the Student the Will to Learn on His Own Initiative, item 38, Stimulating Growth of Pupil Attitudes and Values, and item 13, Motivating Students to Learn on Their Own, had only one teacher strongly disagree with the item. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 140, shown in table 13, was 80 percent of the possible weighted score of 175 (35 teachers x 5).

Category III, Individualized Instruction, ranked second among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 17 strongly agreed and 6 agreed responses. The item also had the highest number of undecided responses (9). Item 11, Creating Useful Remedial Materials, ranked second in the category with 17 agreed and 10 strongly agreed responses. Likewise item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, also had 17 agreed responses. Item 16, Implementing and Supervising Individualized Instruction, ranked last in the category with the highest number of agreed responses (19). Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 137, shown in table 13, was 78 percent of the possible weighted score of 175.

Category IX, Integration of Faith, Learning, and Practice,

ranked third among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 15 strongly agreed and 14 agreed responses. Item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, ranked second in the category with the highest number of agreed responses (19). No teacher strongly disagreed with this item. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 131, shown in table 13, was 75 percent of the possible weighted score of 175.

Category V, Discipline, ranked fourth among the nine categories. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked first in the category with 12 strongly agreed and 12 agreed responses. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked second in the category with 13 agreed responses which is the highest of the category. Both items mentioned above had 4 undecided responses and no teacher who strongly disagreed with the items. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 130, shown in table 13, was 75 percent of the possible weighted score of 175.

Category I, Interpersonal Communication and Administration, ranked fifth among the nine categories. Item 30, Involving Others in the School Program, ranked first in the category with 3 strongly agreed and 21 agreed responses. Item 29, Counseling and Conferring with Students, ranked second in the category. Item 28 ranked third in the category with 8 strongly agreed responses which was the highest number of strongly agreed responses for the category.

Each of the above 3 items had one teacher who strongly disagreed. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 126, shown in table 13, was 72 percent of the possible weighted score of 175.

Category VIII, Non-Factor Related Items, ranked sixth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 12 strongly agreed and 15 agreed responses. Item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, ranked second in the category. Four of the 12 items, item 4, Identifying Student Attitudes in Order to Better Relate to Problems, item 23, Constructively Using Evaluation in Helping Student Progress, item 19, Gearing Instruction to Problem Solving, and item 41, Identifying the Gifted and Talented Students, all had 19 agreed responses which was the highest number for the category. They ranked fourth, sixth, seventh, and eighth, respectively. Item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, item 24, Managing Classroom Affairs in Order to Get Maximum Benefit from Supervising, Aids, Tutors, etc., item 4, Identifying Student Attitudes in Order to Better Relate to Problems, item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, item 23, Constructively Using Evaluation in Helping Student Progress, and item 19, Gearing Instruction to Problem Solving, had no teacher disagree with the items. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 122, shown in table 13, was 70 percent of the possible weighted score of 175.

Category VI, Developing Pupil Self, ranked seventh among

the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 4 strongly agreed and 18 agreed responses. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked second in the category with 8 strongly agree responses which was the highest for the strongly agreed responses. Both of the above items had 9 disagreed responses. Item 32, Developing a Broad Acceptance of Self, ranked last in the category. Category VI consisted of 3 questionnaire items-- 31, 32, and 34. The mean score of 118, shown in table 13, was 67 percent of the possible weighted score of 175.

Category IV, Assessment, ranked eighth among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 4 strongly agreed and 18 agreed responses. Item 12, Evaluating Instruction/Instructional Design, ranked second in the category. Of the two top items, no teacher strongly disagreed. Both item 12, Evaluating Instruction/Instructional Design, and item 13, Motivating Students to Learn on Their Own, had 13 agreed and 4 strongly agree responses. Item 6, Involving Students in Self-Evaluation, ranked last in the category with 18 agreed responses which was the same number of agreed responses on item 40 which ranked first. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 116, shown in table 13, was 66 percent of the possible weighted score of 175.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked first in the category with 4

strongly agreed and 12 agreed responses. Item 21, Providing for Reinforcement, ranked second in the category with 17 agreed responses which was the highest for the category. Neither item 21 nor item 7, Teacher-Pupil Verbal Interaction, which ranked third in the category, had any teachers who strongly agreed with the item. Category VII consisted of 3 questionnaire items--31, 32, and 34. The mean score of 106, shown in table 13, was 61 percent of the possible weighted score of 175.

Ranked Categories of 6-8 Elementary Teachers

The description of the categories is presented in ranked order (table 14). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 19 strongly agreed, 8 agreed, and 0 strongly disagree responses. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked second in the category with 15 strongly agree, 12 agree, and 0 strongly disagreed responses. Both item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, and item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, ranked third and fourth, respectively, had 13 strongly agreed and 5 undecided responses. Item 43, Knowing How to Achieve Faith,

TABLE 14
A SUMMARY OF RANKED CATEGORIES OF 6-8 ELEMENTARY LAKE UNION
CONFERENCE TEACHERS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	131	79
III Individualized Instruction	2	128	77
II Developing Pupil Self	3	127	77
V Discipline	4	119	72
VIII Non-factor Related Item	5	117	71
VI Developing Personal Self	6	116	71
I Interpersonal Communication and Administration	7	114	69
IV Assessment	8	112	68
VII Classroom Management	9	105	64

*Maximum weighted score for this table was 165 [five times the number of teachers in the group].

Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, ranked last in the category. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 131, shown in table 14, was 79 percent of the possible weighted score of 165 (37 teachers x 5).

Category III, Individualized Instruction, ranked second among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 14 strongly agreed and 13 agreed responses. Item 11, Creating Useful Remedial Materials, ranked second in the category with 14 agreed and no strongly disagreed responses. Item 16, Implementing and Supervising Individualized Instruction, had 20 agreed responses which was the highest number for the category. Both item 16 and item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, had 6 undecided responses. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 128, shown in table 14, was 77 percent of the possible weighted score of 165.

Category II, Developing Pupil Self, ranked third among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 16 strongly agreed and 12 agreed responses. Item 13, Motivating Students to Learn on Their Own, ranked second in the category with 16 strongly agreed responses which was the highest number for the strongly agreed responses. Both of the above items had 4 disagreed responses. Likewise, item 35, Facilitating Pupil Self-Concept and Worth, item 37, Facilitating Development of Pupil

Responsibility, item 38, Stimulating Growth of Pupil Attitudes and Values, had the same number of disagreed responses (4), and items 13, 35, 37, and 38 all had 3 undecided responses. Item 37, Facilitating Development of Pupil Responsibility, and item 38, Stimulating Growth of Pupil Attitudes and Values, had the same number of responses in each cell of the Likert-type scale.

Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 127, shown in table 14, was 77 percent of the possible weighted score of 165.

Category V, Discipline, ranked fourth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 10 strongly agreed and 13 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 119, shown in table 14, was 72 percent of the possible weighted score of 165.

Category VIII, Non-Factor Related Items, ranked fifth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 8 strongly agreed and 18 agreed responses. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked second in the category with 11 strongly agreed and 11 agreed responses. Neither of the above items had any teacher who strongly disagreed with them. Likewise as number one, item 23, Constructively Using Evaluation in Helping Student Progress, item 3, Identifying Student Disabilities that Need Referral or Special Remedial Work, and item 19, Gearing Instruction

to Problem Solving, had the same number of strongly agreed responses (8) while items 3, 19, and 10, Planning Teaching Activities with Other Teachers or Administrators and item 8, Deciding What Teaching Technique Is Best for a Particular Intended Outcome, all had 8 disagreed responses. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 117, shown in table 14, was 71 percent of the possible weighted score of 165.

Category VI, Developing Personal Self, ranked sixth among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 7 strongly agreed and 14 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with the highest number of strongly agreed response (9). The two items mentioned above and item 34, Developing a Capacity of Accepting Others' Feelings, all had 7 undecided responses. Likewise, both items 31 and 32 each had 2 strongly disagree responses, as did item 32 and item 34 which had 5 disagreed responses each. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 116, shown in table 14, was 71 percent of the possible weighted score of 164.

Category I, Interpersonal Communication and Administration, ranked seventh among the nine categories. Item 29, Counseling and Conferring with Students, ranked first in the category with 9 strongly agreed and 13 agreed responses. Item 30, Involving Others in the School Program, ranked second in the category with 17 agreed responses which was the highest for the category. Both of the above items had one teacher who strongly disagreed with each item.

Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked last in the category with 10 agree and 10 disagree responses. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 114, shown in table 14, was 60 percent of the possible weighted score of 165.

Category IV, Assessment, ranked eighth among the nine categories. Item 6, Involving Students in Self-Evaluation, ranked first in the category with 7 strongly agreed and 15 agreed responses. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked second in the category. Both of the above items had one teacher who strongly disagreed with each item. Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked last in the category with 18 agreed responses which was the highest for the category but also received a total of 10 disagree and strongly disagree responses. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 112, shown in table 14, was 68 percent of the possible weighted score of 165.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 7 strongly agreed and 13 agreed responses. Item 7, Teacher-Pupil Verbal Interaction, ranked second in the category with 14 agreed and 4 strongly agreed responses. The above item and item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, which ranked third, all had 5 undecided responses with an equal number of strongly disagreed and disagreed

as agreed and strongly agreed responses (14). Item 20, General Presentation of Information and Directions, also had a total of 14 disagreed and strongly disagreed responses. Category VII consisted of four questionnaire items--7, 20, 21, and 22. The mean score of 105, shown in table 14, was 64 percent of the possible weighted score of 165.

Summary--Elementary Teachers by Teaching Assignment

Research questions 3 (What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades K-2?), 4 (What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades 3-5?), and 5 (What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades 6-8?), as posed in chapter III are addressed in the presentation of the responses of three groups of elementary teachers who have taught grades K-2, elementary teachers who have taught grades 3-5, and elementary teachers who have taught grades 6-8. In addition, the above responses were compared to all the elementary teachers of the Lake Union Conference (fig. 4 and table 15).

Category IX, Integration of Faith, Learning, and Practice was identified as the first perceived inservice need by the K-2 and 6-8 teachers, but it was perceived as the third inservice need by the 3-5 teachers whereas the category was ranked first by all the elementary teachers.

Category II, Developing Pupil Self, was ranked second by the K-2, first by the 3-5, and third by the 6-8 teachers, whereas

Fig. 4. Comparison of the ranked categories of the K-2, 3-5, 6-8 teachers, and all elementary teachers by teaching assignment.

the category was ranked second by all the elementary teachers.

Category III, Individualized Instruction, was ranked third by the K-2 teachers, but the 3-5 and 6-8 teachers ranked the category second whereas the category was ranked third by all the elementary teachers.

Category V, Discipline, was ranked fourth by all groups.

The remaining categories varied by over two ranking except for category VII, Classroom Management which was ranked last by all three groups.

Elementary Teachers by Years
of Experience

Ranked Categories of Elementary Teachers
with 0-5 Years of Experience

The description of the categories is presented in ranked order (table 16). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses (table 15).

TABLE 15

A COMPARISON OF RANKED CATEGORIES OF K-2, 3-5, 6-8 TEACHERS
AND ALL ELEMENTARY TEACHERS BY TEACHING ASSIGNMENT

Teaching Assignment	I	II	III	IV	V	VI	VII	VIII	IX
All Elementary	5	2	3	8	4	7	9	6	1
K-2	5	2	3	7	4	8	9	6	1
3-5	5	1	2	8	4	7	9	6	3
6-8	7	3	2	8	4	6	9	5	1

TABLE 16
A SUMMARY OF THE RANKED CATEGORIES OF ELEMENTARY TEACHERS WITH 0-5 YEARS
OF EXPERIENCE

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
II Developing Pupil Self	1	138	81
IX Integration of Faith, Learning, and Practice	2	135	79
V Discipline	3	134	79
III Individualized Instruction	4	130	77
I Interpersonal Communication and Administration	5	124	73
VIII Non-factor Related Items	6	119	70
IV Assessment	7	118	69
VI Developing Personal Self	8	113	67
VII Classroom Management	9	110	65

*Maximum weighted score for this table was 170 [five times the number of teachers in the group].

Category II, Developing Pupil Self, ranked first among the nine categories. Item 39; Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 16 strongly agreed and 14 agreed responses. Item 13, Motivating Students to Learn on Their Own, ranked second in the category. Item 36, Facilitating Pupil Social Interaction, ranked last in the category with 22 agreed responses which was the highest for the category. No teacher strongly disagreed with any one of the 6 items in the category. Category II consisted of 6 questionnaire items-- 13, 35, 36, 37, 38, and 39. The mean score of 138, shown in table 16, was 81 percent of the possible weighted score of 170 (34 teachers x 5).

Category IX, Integration of Faith, Learning, and Practice, ranked second among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 18 strongly agreed and 12 agreed responses. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked second in the category with 15 agreed responses which was the highest number of agreed responses. Item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning and Practice and What Makes it Work, and item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, all had the same number of agreed responses (14). Only item 45 and item 43 had one teacher who strongly disagreed with each item. Category IX consisted

of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 135, shown in table 16, was 79 percent of the possible weighted score of 170.

Category V, Discipline, ranked third among the nine categories. Item 26, *Useful Methods of Classroom Discipline and When to Use Them*, ranked first in the category with 13 strongly agreed and 14 agreed responses. Item 27, *Maintaining Classroom Control without Appearing as an Ogre to the Students*, ranked second in the category with 16 agreed responses which was the highest in the category. Neither of the above items had a teacher who strongly disagreed with the items. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 134, shown in table 16, was 79 percent of the possible weighted score of 170.

Category III, Individualized Instruction, ranked fourth among the nine categories. Item 11, *Creating Useful Remedial Materials*, ranked first in the category with 13 strongly agreed and 13 agreed responses. Item 9, *Developing the Use of the Computer in the Classroom*, ranked second in the category with 16 strongly agree responses. Item 16, *Implementing and Supervising Individualized Instruction*, ranked last in the category with 17 agreed responses which was the highest responses for the category. No teacher strongly disagreed with any of the 4 items in this category. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 130, shown in table 16, was 77 percent of the possible weighted score of 170.

Category I, Interpersonal Communication and Administration, ranked fifth among the nine categories. Item 30, *Involving Others*

in the School Program, ranked first in the category with 6 strongly agreed and 17 agreed responses. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked second in the category with 9 strongly agreed responses. Of the above 2 items, no teacher strongly disagreed with either item. Item 28, Communicating and Interacting with Parents, ranked third in the category with the highest number of agreed responses (18) and 2 strongly disagreed responses. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 124, shown in table 16, was 73 percent of the possible weighted score of 170.

Category VIII, Non-Factor Related Items, ranked sixth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 10 strongly agreed and 21 agreed responses. Item 24, Managing Classroom Affairs in Order to Get Maximum Benefit from Supervising, Aids, Tutors, etc., ranked second and third in the category with 8 strongly agreed and 14 agreed responses each. Likewise, item 17, Using Questioning Procedures that Promote Discussion, item 19, Gearing Instruction to Problem Solving, item 41, Identifying the Gifted and Talented Students, and item 8, Deciding What Teaching Technique Is Best for a Particular Intended Outcome, all had 18 agreed responses. No teacher strongly disagreed with the following 7 (of 12) items: item 1, Diagnosing Basic Learning Difficulties, item 24, Managing Classroom Affairs in Order to Get Maximum Benefit from Supervising, Aids, Tutors, etc., item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, item 19, Gearing Instruction

to Problem Solving, item 23, Constructively Using Evaluation in Helping Student Progress, item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, and item 4, Identifying Student Attitudes in Order to Better Relate to Problems. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 119, shown in table 16, was 70 percent of the possible weighted score of 170.

Category IV, Assessment, ranked seventh among the nine categories. Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked first in the category with 4 strongly agreed, 19 agreed, and 0 strongly agreed responses. Item 33, Selecting and Specifying Performance Goals and Objectives, ranked second in the category with 6 strongly agreed responses which was the highest number for those responses. Both items 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, and item 12, Evaluating Instruction/Instructional Design, had same number of strongly agreed responses (5), while item 33, Selecting and Specifying Performance Goals and Objectives, and item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, both had 8 undecided responses. Likewise, item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, item 12, Evaluating Instruction/Instructional Design, item 6, Involving Students in Self-Evaluation, item 5, Establishing Appropriate Performance Standards, all had 7 disagreed responses. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 118, shown in table 16, was 69 percent of the possible weighted score of 170.

Category VI, Developing Personal Self, ranked eighth among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 7 strongly agreed and 14 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category. The above item had the same number of disagreed responses (10) as did item 34, Developing a Capacity of Accepting Others' Feelings. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 113, shown in table 16, was 67 percent of the possible weighted score of 170.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 5 strongly agreed and 16 agreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked second in the category with 8 strongly agreed responses. Both items 20, General Presentation of Information and Directions, and item 7, Teacher-Pupil Verbal Interaction, which ranked last in the category, had 13 agreed responses. Item 7, Teacher-Pupil Verbal Interaction, also had a total of 14 agreed and strongly agreed and 14 disagree and strongly disagree responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 110, shown in table 16, was 65 percent of the possible weighted score of 170.

Ranked Categories of Elementary Teachers with 6-10 Years of Experience

The description of the categories is presented in ranked order (table 17). Likewise, the description of the items within

TABLE 17
A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE ELEMENTARY
TEACHERS WITH 6-10 YEARS OF EXPERIENCE

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	162	81
II Developing of Pupil Self	2	152	76
III Individualized Instruction	3	146	73
I Interpersonal Communication and Administration	4	145	73
VIII Non-factor Related Item	5	141	71
V Discipline	6	141	70
VI Developing Personal Self	7	135	68
IV Assessment	8	133	66
VII Classroom Management	9	121	60

*Maximum weighted score for this table was 200 [five times the number of teachers in the group].

the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 21 strongly agreed and 14 agreed responses. Item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, ranked second in the category with 19 agreed responses, which was the highest for the category. Of the above two items, no teacher strongly disagree with either item. Both item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, and item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, had 16 agreed and one strongly agreed responses. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 162, shown in table 17, was 81 percent of the possible weighted score of 200 (40 teachers x 5).

Category II, Developing Pupil Self, ranked second among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 13 strongly agreed and 21 agreed responses. Item 38, Stimulating Growth of Pupil Attitudes and Values, ranked second in the category with 22 agreed responses, which was the highest number of responses for the category. Of the two items mentioned above, no teacher strongly disagreed with the items. Item 35, Facilitating Pupil Self-Concept and Worth, which ranked fourth in the category, also

had 22 agreed and 0 strongly disagreed responses. Item 36, Facilitating Pupil Social Interaction, ranked last with the highest number of undecided responses (10). Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 152, shown in table 17, was 76 percent of the possible weighted score of 200.

Category III, Individualized Instruction, ranked third among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 15 strongly agreed and 12 agreed responses. The item also had 8 which was the highest for undecided responses. Item 11, Creating Useful Remedial Materials, ranked second in the category. Both item 16, Implementing and Supervising Individualized Instruction, and item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, had 6 undecided responses with item 15 ranking last in the category. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 146, shown in table 17, was 73 percent of the possible weighted score of 200.

Category I, Interpersonal Communication and Administration, ranked fourth among the nine categories. Item 28, Communicating and Interacting with Parents, ranked first in the category with 9 strongly agreed and 19 agreed responses. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked second in the category with the highest number of strongly agree responses (10). Both of the above items had 3 undecided responses. Item 29, Counseling and Conferring with Studnets, had

the highest number of agreed responses (21), while ranking last in the category. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 145, shown in table 17, was 73 percent of the possible weighted score of 200.

Category VIII, Non-Factor Related Items, ranked fifth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 14 strongly agreed and 19 agreed responses. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked second in the category. Item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, had the same number of agreed and strongly agreed responses (14) while ranking third in the category. Item 17, Using Questioning Procedures that Promote Discussion, ranked fourth and had the highest number of agreed responses (24). Both item 41, Identifying the Gifted and Talented Students, and item 8, Deciding What Teaching Technique Is Best for a Particular Intended Outcome, had the highest number of undecided responses (10). Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 141, shown in table 17, was 71 percent of the possible weighted score of 200.

Category V, Discipline, ranked sixth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 9 strongly agreed and 19 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with equal number of strongly agreed responses as item 26 (9). Each of the items had 2 teachers who strongly disagreed. Category V

consisted of 2 questionnaire items--26 and 27. The mean score of 141, shown in table 17, was 70 percent of the possible weighted score of 200.

Category VI, Developing Personal Self, ranked seventh among the nine categories. Item 32, Developing a Broad Acceptance of Self, ranked first in the category with 5 strongly agreed, 18 agreed, and 11 undecided responses. Item 31, Developing a Personal Self-Evaluation Method, ranked second in the category with the same number of undecided, agreed, and strongly agreed as item 32. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked last in the category with 17 disagreed responses. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 135, shown in table 17, was 68 percent of the possible weighted score of 200.

Category IV, Assessment, ranked eighth among the nine categories. Item 12, Evaluating Instruction/Instructional Design, ranked first in the category with 4 strongly agreed and 22 agreed responses. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked second in the category with same number of strongly agreed responses as item 12. Item 2, Constructing and Using Tests for Evaluating Academic Progress, and item 5, Establishing Appropriate Performance Standards, both had 17 agreed responses, while item 33, Selecting and Specifying Performance Goals and Objectives, had 13 agreed and 13 disagreed responses while ranking last in the category. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean

score of 133, shown in table 17, was 66 percent of the possible weighted score of 200.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 3 strongly agreed and 18 agreed responses. Item 7, Teacher-Pupil Verbal Interaction, ranked second in the category with 12 undecided responses and a total of 12 disagree and strongly disagree responses. Item 21, Providing for Reinforcement, item 20, General Presentation of Information and Directions, and item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, all had 8 undecided responses while both item 20 and item 22 had 2 strongly disagreed responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 121, shown in table 17, was 61 percent of the possible weighted score of 200.

Ranked Categories of Elementary Teachers with 11-15 Years of Experience

The description of the categories is presented in ranked order (table 18). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category II, Developing Pupil Self, ranked first among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 11 strongly agreed and 11 agreed responses. Item 13, Motivating Students to Learn on Their Own, ranked second in the category with 12 agreed responses. Item 37, Facilitating Development of Pupil Responsibility,

TABLE 18
A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE ELEMENTARY
TEACHERS WITH 11-15 YEARS OF EXPERIENCE

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
II Developing Pupil Self	1	108	77
III Individualized Instruction	2	102	73
V Discipline	3	102	72
IX Integration of Faith, Learning, and Practice	4	101	72
VIII Non-factor Related Items	5	98	70
I Interpersonal Communication and Administration	6	96	69
VI Developing Personal Self	7	88	63
IV Assessment	8	87	62
VII Classroom Management	9	82	59

*Maximum weighted score for this table was 140 [five times the number of teachers in the group].

also had 12 agreed responses. The two items above and item 38, Stimulating Growth of Pupil Attitudes and Values, all had the same number of disagree (4) and undecided (2) responses. No teacher strongly disagreed with any item of the category. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 108, shown in table 18, was 77 percent of the possible weighted score of 140 (28 teachers x 5).

Category III, Individualized Instruction, ranked second among the nine categories. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked first in the category with 4 strongly agreed and 19 agreed responses. Item 16, Implementing and Supervising Individualized Instruction, ranked second in the category with highest number of agreed responses (20). Item 9, Developing the Use of the Computer in the Classroom, ranked last in the category with the same number of agreed and undecided responses (8). The item also had 3 strongly disagreed and 3 disagreed responses. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 102, shown in Table 18, was 73 percent of the possible weighted score of 140.

Category V, Discipline, ranked third among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 6 strongly agreed and 12 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with the highest number of strongly agree responses (10). Category V consisted of 2 questionnaire items--26 and 27. The mean score of 102, shown in table 18, was 72 percent of the possible weighted score of 140.

Category IX, Integration of Faith, Learning, and Practice, ranked fourth among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 10 strongly agreed and 10 agreed responses. Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, ranked second in the category with the highest number of undecided responses (7). Item 42 also had 2 strongly disagree and 2 disagreed responses. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked last with the highest number of agreed responses (16). Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 101, shown in table 18, was 72 percent of the possible weighted score of 140.

Category VIII, Non-Factor Related Items, ranked fifth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 8 strongly agreed and 12 agreed responses. Item 3, Identifying Student Disabilities That Need Referral of Special Remedial Work, ranked second in the category with the same number of agreed and strongly agreed responses as item 1. Item 4, Identifying Student Attitudes in Order to Better Relate to Problems, ranked third with the highest number of agreed responses (16). Both item 23, Constructively Using Evaluation in Helping Student Progress, and item 19, Gearing Instruction to Problem Solving, had the same number of undecided (4), agreed (14), and strongly agreed (4) responses. Item 17, Using Questioning Procedures that Promote Discussion, had the highest number of dis-

agreed responses (12). Item 8, Deciding What Teaching Technique Is Best for a Particular Intended Outcome, had equal number of undecided and agreed responses (10). Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 98, shown in table 18, was 70 percent of the possible weighted score of 140.

Category I, Interpersonal Communication and Administration, ranked sixth among the nine categories. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked first in the category with 6 strongly agreed and 11 agreed responses. Item 28, Communicating and Interacting with Parents, ranked second in the category with the highest number of agreed responses (15). Items 25, 28, and 29, Counseling and Conferring with Students, had one teacher who strongly disagreed with each item. Likewise, items 28, 29, and 30, Involving Others in the School Program, all have 3 strongly agree responses. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 96, shown in table 18, was 69 percent of the possible weighted score of 140.

Category VI, Developing Personal Self, ranked seventh among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 3 strongly agreed and 11 agreed responses. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked second in the category with the highest number of strongly agreed responses (5). Both item 34 and item 32, Developing a Broad Acceptance of Self, had 3 strongly disagree, 7 undecided, and 8 agreed responses. Category VI con-

sisted of 3 questionnaire items--31, 32, and 34. The mean score of 88, shown in table 18, was 63 percent of the possible weighted score of 140.

Category IV, Assessment, ranked eighth among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 3 strongly agreed and 13 agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second in the category with the same number of strongly agreed responses as item 40. Item 12, Evaluating Instruction/Instructional Design, had the highest number of undecided of responses (11), while item 33, Selecting and Specifying Performance Goals and Objectives, ranked last in the category with the highest number of disagreed responses (13). Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 87, shown in table 18, was 62 percent of the possible weighted score of 140.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with one strongly agreed and 11 agreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked second in the category with a total of 10 agreed and strongly agreed responses. Both item 22 and item 20, General Presentation of Information and Directions, had 8 undecided responses. Item 7, Teacher-Pupil Verbal Interaction, ranked third in the category with the highest number of disagreed responses (13). Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 82, shown in table 18, was 59 percent of the possible weighted score of 140.

Ranked Categories of Elementary
Teachers with 16-20 Years of
Experience

The description of the categories is presented in ranked order (table 19). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 9 strongly agreed and 5 agreed responses. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked second in the category with 9 strongly agreed, 4 agreed, and 2 undecided responses. Item 44 and item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, had the same number of agreed (4) and undecided responses (2). Likewise item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, also had 2 undecided responses. Item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, ranked last with the highest number of agreed (6) and undecided (3) responses. No teacher strongly disagreed with any item in this category. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 64, shown in table 19, was 86 percent of the possible weighted score of 75 (15 teachers x 5).

Category II, Developing Pupil Self, ranked second among the

TABLE 19
A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE ELEMENTARY
TEACHERS WITH 16-20 YEARS OF EXPERIENCE

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	64	86
II Developing Pupil Self	2	63	83
III Individualized Instruction	3	59	78
V Discipline	4	57	76
I Interpersonal Communication and Administration	5	55	73
VI Developing Personal Self	6	54	72
VIII Non-factor Related Items	7	53	71
IV Assessment	8	50	66
VII Classroom Management	9	48	64

*Maximum weighted score for this table was 75 [five times the number of teachers in the group].

nine categories. Item 30, Involving Others in the School Program, ranked first in the category with 10 strongly agreed and 5 agreed responses. Item 13, Motivating Students to Learn on Their Own, ranked second in the category with no strongly disagreed or disagreed responses. Item 38, Stimulating Growth of Pupil Attitudes and Values, item 37, Facilitating Development of Pupil Responsibility, and item 35, Facilitating Pupil Self-Concept and Worth, all had 8 agreed responses. Two of the above items, 13 and 38, both had 6 strongly agreed responses. Also item 35 and item 36, Facilitating Pupil Social Interaction, had 3 strongly agreed responses. No teacher strongly disagreed with any item of this category. Category II consisted of 6 questionnaire items--13, 30, 35, 36, 37, and 38. The mean score of 63, shown in table 19, was 83 percent of the possible weighted score of 75.

Category III, Individual Instruction, ranked third among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 7 strongly agreed and 3 agreed responses. Item 11, Creating Useful Remedial Materials, ranked second in the category with 9 agreed and 4 strongly agreed responses. Both items 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, which ranked third in the category, and 16, Implementing and Supervising Individualized Instruction, which ranked last in the category, had 13 strongly agreed, 2 disagreed, and 0 strongly agreed responses. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 59, shown in table 19, was 78 percent of the possible weighted score of 75.

Category V, Discipline, ranked fourth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 7 strongly agreed and 4 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with the same number strongly agreed (4) and undecided responses (3). No teacher strongly disagreed with any item of this category. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 57, shown in table 19, was 76 percent of the possible weighted score of 75.

Category I, Interpersonal Communication and Administration, ranked fifth among the nine categories. Item 30, Involving Others in the School Program, ranked first in the category with 2 strongly agreed and 10 agreed responses. Item 28, Communicating and Interacting with Parents, ranked second in the category with the highest number of strongly agreed responses (5). Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked third in the category with the same number of strongly agreed (4) and undecided (3) responses as item 29, Counseling and Conferring with Students, which ranked last in the category. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 55, shown in table 19, was 73 percent of the possible weighted score of 75.

Category VI, Developing Personal Self, ranked sixth among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 4 strongly agreed and 7 agreed responses. Item 32, Developing a Broad Acceptance of Self,

ranked second in the category with 4 strongly agreed, agreed, and undecided responses each. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked last with 3 strongly agreed, agreed, and disagreed responses each. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 54, shown in table 19, was 72 percent of the possible weighted score of 75.

Category VIII, Non-Factor Related Items, ranked seventh among the nine categories. Item 23, Constructively Using Evaluation in Helping Student Progress, ranked first in the category with 3 strongly agreed and 7 agreed responses. Item 24, Managing Classroom Affairs in Order to Get Maximum Benefit from Supervising, Aids, Tutors, etc., ranked second in the category with the highest number of strongly agreed responses (5). Item 19, Gearing Instruction to Problem Solving, item 10, Planning Teaching Activities with Other Teachers or Administrators, item 4, Identifying Student Attitudes in Order to Better Relate to Problems, item 41, Identifying the Gifted and Talented Students, item 18, Utilization of Audio-visual Equipment and Other Mechanical Aids, all had 6 agreed responses each. Whereas items 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, item 10, Planning Teaching Activities with Other Teachers or Administrators, item 17, Using Questioning Procedures That Promote Discussion, item 1, Diagnosing Basic Learning Difficulties, item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, item 8, Deciding What Teaching Technique Is Best for a Particular Intended Outcome, all had one undecided response. No teacher strongly disagreed with any item in this category. Category VIII consisted of 12

questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 53, shown in table 19, was 71 percent of the possible weighted score of 75.

Category IV, Assessment, ranked eighth among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 3 strongly agreed and 6 agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second in the category with a total of 9 strongly agreed and agreed responses. Item 5, Establishing Appropriate Performance Standards, ranked fourth with the highest number of agreed responses (9). Item 12, Evaluating Instruction/Instructional Design, ranked last in the category with 0 strongly agreed and 0 strongly disagreed responses, 7 agreed and 7 disagreed responses and one undecided response. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 50, shown in table 19, was 66 percent of the possible weighted score of 75.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 2 strongly agreed, 6 agreed, and 0 strongly disagreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked second in the category with the same number of agreed (6), strongly agreed (2), and strongly disagreed (0) responses as item 21. Item 7, Teacher-Pupil Verbal Interaction, ranked third in the category with 9 agreed and the same number of strongly agreed as strongly disagreed responses (1). Likewise, item 20, General Presentation of Information and

Directions, also had the same number of strongly agreed as strongly disagreed (1), with 3 agreed and 3 undecided responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 48, shown in table 19, was 64 percent of the possible weighted score of 75.

Ranked Categories of Elementary
Teachers with 21+ Years of
Experience

The description of the categories is presented in ranked order (table 20). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, ranked first in the category with 12 strongly agreed and 18 agreed responses. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked second in the category with the highest number of strongly agreed responses (16). Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, ranked third in the category with the same number of agreed responses (18) as item 45, which ranked first in the category. Of the 5 items in category IX, 2 teachers strongly disagreed with item 46, Making Bible Instruction More Applicable to Everyday Life, item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers

TABLE 20
A SUMMARY OF THE RANKED CATEGORIES OF ELEMENTARY TEACHERS WITH
21+ YEARS OF EXPERIENCE

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	140	78
II Developing Pupil Self	2	137	76
III Individualized Instruction	3	136	76
VIII Non-factor Related Items	4	124	69
VI Developing Personal Self	5	123	68
IV Assessment	6	121	67
I Interpersonal Communication and Administration	7	120	67
V Discipline	8	120	67
VII Classroom Management	9	110	61

*Maximum weighted score for this table was 180 [five times the number of teachers in the group].

Together, and item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results. One teacher disagreed with item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 140, shown in table 20, was 78 percent of the possible weighted score of 180 (36 teachers x 5).

Category II, Developing Pupil Self, ranked second among the nine categories. Item 13, Motivating Students to Learn on Their Own, ranked first in the category with 14 strongly agreed and 12 agreed responses. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked second in the category with 14 strongly agreed responses. Both of the above items had 4 disagreed responses. Item 35, Facilitating Pupil Self-Concept and Worth, and item 38, Stimulating Growth of Pupil Attitudes and Values, each had 8 strongly agreed responses. Item 36, Facilitating Pupil Social Interaction, had 7 disagreed and 7 undecided responses. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 137, shown in table 20, was 76 percent of the possible weighted score of 180.

Category III, Individualized Instruction, ranked third among the nine categories. Item 11, Creating Useful Remedial Materials, ranked first in the category with 9 strongly agreed and 18 agreed responses. Item 9, Developing the Use of the Computer in the Classroom, ranked second in the category with the highest number of strongly agreed responses (12). Item 9, item 15, Selecting and

Developing Materials Activities Appropriate for Individualized Instruction, and item 16, Implementing and Supervising Individualized Instruction, each had 3 strongly disagreed and 2 disagreed responses. Item 16 had 22 agreed responses which was the highest number of responses in the category. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 136, shown in table 20, was 76 percent of the possible weighted score of 180.

Category VIII, Non-Factor Related Items, ranked fourth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 9 strongly agreed and 17 agreed responses. Item 3, Identifying Student Disabilities that Need Referral or Special Remedial Work, ranked second in the category with the same number of responses as item 1 which ranked first. Because the items had identical responses the two items were listed numerically. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked third in the category with the same number of strongly agreed responses (9) and strongly disagreed responses (1) as items 1 and 3. Item 19, Gearing Instruction to Problem Solving, and item 4, Identifying Student Attitudes in Order to Better Relate to Problems, ranked sixth and seventh with 19 agreed and 5 strongly agreed responses each. Item 17, Using Questioning Procedures That Promote Discussion, ranked last in the Category with 7 strongly disagreed and 7 disagreed responses each. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 124, shown in table 20, was 69 percent of the possible weighted score of 180.

Category VI, Developing Personal Self, ranked fifth among the nine categories. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked first in the category with 7 strongly agreed and 16 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with 7 strongly agreed and 7 disagreed responses. Item 31, Developing a Personal Self-Evaluation Method, ranked last in the category with the highest number of agreed responses. Both items 34 and 32 had 3 strongly disagreed and 4 undecided responses. Item 32 and item 31 each had 7 disagreed responses. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 123, shown in table 20, was 68 percent of the possible weighted score of 180.

Category IV, Assessment, ranked sixth among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 4 strongly agreed and 20 agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second in the category with the same number of strongly agreed (4), disagreed (6), and strongly disagreed (2) responses as item 40, which ranked first in the category. Item 12, Evaluating Instruction/Instructional Design, ranked third in the category with no teacher who strongly disagreed with the item. Item 33, Selecting and Specifying Performance Goals and Objectives, had 3 strongly agreed and 3 strongly disagreed responses, while item 5, Establishing Appropriate Performance Standards, and item 2, Constructing and Using Tests for Evaluating Academic Progress, each had 15 agreed responses. Category IV consisted of 6 question-

naire items--2, 5, 6, 12, 33, and 40. The mean score of 121, shown in table 20, was 67 percent of the possible weighted score of 180.

Category I, Interpersonal Communication and Administration, ranked seventh among the nine categories. Item 29, Counseling and Conferring with Students, ranked first in the category with 8 strongly agreed and 18 agreed responses. Item 30, Involving Others in the School Program, ranked second in the category with 3 strongly agree and 3 strongly disagree responses each. The category also had the highest number of agreed responses (19). Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, had 11 agreed and disagreed responses each. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 120, shown in table 20, was 67 percent of the possible weighted score of 180.

Category V, Discipline, ranked eighth among the nine categories. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked first in the category with 7 strongly agreed and 13 agreed responses. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked second in the category with the highest number of strongly agreed responses (8) in the category. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 120, shown in table 20, was 67 percent of the possible weighted score of 180.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 6 strongly agreed and 13 agreed responses.

Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked second in the category. Both item 7, Teacher-Pupil Verbal Interaction, and item 20, General Presentation of Information and Directions, had 2 strongly agreed and 4 strongly disagreed responses each. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 110, shown in table 20, was 61 percent of the possible weighted score of 180.

Summary--Elementary Teachers by Years of Experience

Research questions 8 (What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 0-5 years?), 9 (What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 6-10 years?), 10 (What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 11-15 years?), 11 (What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 16-20 years?), and 12 (What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 21 + years?) as posed in chapter III are addressed in the presentation of the responses of 5 groups of Lake Union Conference elementary teachers; those who had taught 0-5 years, 6-10 years, 11-15 years, 16-20 years, and 21+ years. In addition, the above responses were compared to all the elementary teachers of the Lake Union Conference (fig. 5 and table 21).

Category IX, Integration of Faith, Learning, and Practice, was identified as the first perceived inservice need by elementary teachers who had taught 6-10, 16-20, and 21+ years. Teachers with

Fig. 5. Comparison of the ranked categories of all elementary teachers and elementary teachers who had taught 0-5, 6-10, 11-15, 16-20, and 21+ years.

TABLE 21

A COMPARISON OF RANKED CATEGORIES OF ALL ELEMENTARY TEACHERS
AND ELEMENTARY TEACHERS WHO HAD TAUGHT 0-5, 6-10,
11-15, 16-20, AND 21+ YEARS

Years of Experience	Categories								
	I	II	III	IV	V	VI	VII	VIII	IX
All Elementary	6	2	3	7	4	8	9	5	1
0-5	5	1	4	7	3	8	9	6	2
6-10	4	2	3	8	6	7	9	5	1
11-15	6	1	2	8	3	7	9	5	4
16-20	5	2	3	8	4	6	9	5	1
21+	7	2	3	6	8	5	9	4	1

0-5 years experience ranked it second, teachers with 11-15 years of experience ranked the category fourth, whereas all elementary teachers ranked it first.

Category II, Developing Pupil Self, was ranked second by teachers who had taught 6-10, 16-20, and 21+ years. Elementary teachers who had taught 0-5 and 11-15 years ranked the category first, whereas all elementary teachers ranked it second.

Category III, Individualized Instruction, was ranked third by teachers who had taught 6-10 years, 16-20 years, and 21+ years. The category was ranked fourth by teachers who had taught 0-5 years and second by teachers who had taught 11-15 years, whereas all elementary teachers ranked it third.

The remaining categories varied by one or two rankings except category VII, Classroom Management, was ranked last by all

the elementary teachers with the different years of experience as well as all elementary teachers as a group.

Secondary Teachers by Teaching
Assignment

Ranked Items by Secondary Subject
Matter Teachers

Of the 142 secondary teachers employed by the Lake Union Conference, a total of 63 teachers returned their completed questionnaire. Three of the questionnaires were not used: one respondent who was the only respondent from that subject matter field "strongly agreed" with all items except eight and those were marked "agreed." The other two respondents indicated they taught in the social service area which does not exist in the Lake Union Conference secondary schools.

The secondary subjects are listed in alphabetical and numerical order. A breakdown of the returns subject matter is as follows:

1. Art	- 2
2. Bible	- 2
3. Business Education	- 1
4. Counsellors	- 5
5. English	- 4
6. Home Economics	- 3
7. Industrial Arts	- 3
8. Librarian	- 2
9. Mathematics	- 3
10. Music	- 2

11. Physical Education	-	7
12. Science	-	10
13. Foreign Language	-	2
14. Social Studies	-	9
15. Vocational Education	-	2
16. Other	-	2

Identified as the first perceived inservice need, item 13, Motivating Students to Learn on Their Own, was ranked in the top six inservice needs by teachers in eleven of the sixteen disciplines (table 22). This item was also ranked as the first perceived inservice need by all the secondary teachers and as the second most important inservice need by all the K-12 teachers. Item 13 is from category II, Developing Pupil Self.

Identified as the second perceived inservice need, item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, was ranked in the top six inservice needs by teachers in nine of the sixteen disciplines. This was two fewer disciplines than item 13 which ranked first. The item was also ranked second by the secondary teachers, but first by all the K-12 teachers. Item 14, is from category VIII, Non-Factor Related Items.

Identified as the third perceived need were item 9, Developing the Use of Computers in the Classroom, item 29, Counseling and Confering with Students, and item 44, Constructing and Implementing a Christian Witnessing Program for Students and Teachers Together. The above three items tied for third place. Each item was ranked in the top six by teachers from five of the sixteen disciplines. Item 9 was ranked seventh by all the K-12 teachers and eleventh by the

TABLE 22

TOP SIX ITEMS AS RANKED BY SECONDARY SUBJECT TEACHERS

Items	Secondary Subject															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1													6			
2																
3					1											
4	1	1											1			1
5																
6	6	6								2						
7						4										
8					2				6							
9							6	1	1			3		3		
10																
11					5		1							2		
12																
13		2	1	1	3	2		2	2	3		5	2	1		
14		2	1	5		1		3				1	3	4	1	
15			2				2							5		
16																
17																
18															6	
19				4												
20				1												
21																
22																
23					4					4				6		
24																
25										5						
26			3								6		4			
27										6			5			
28	2															2
29		3			6	5					4					3
30																
31									3							
32		4														
33																
34																
35						3	3									
36																
37	3		4				4	4								
38	4			6			1					4				
39	5							5	5			2				
40									4							
41			5													
42							5	6			5	6				
43			6												2	4
44				2						1	3				3	5
45		5													4	6
46				3							2				5	

secondary teachers, whereas, item 29 was ranked twentieth by the secondary teachers and twenty-fourth by the K-12 teachers. Item 44 was ranked fifth by the secondary teachers and sixth by the K-12 teachers. The above items are from category III, Individualized Instruction; category I, Interpersonal Communication and Administration; and category IX, Integration of Faith, Learning, and Practice.

Summary--Secondary Teachers by Teaching Assignment

Research question number 7 (What are the perceived inservice needs of Lake Union Conference secondary teachers who teach the different disciplines [i.e., math, Bible, history]?), as posed in chapter III, is addressed in the presentation of the responses of the secondary teachers who teach different disciplines such as art, Bible, English, social studies, etc. (table 23).

Category IX, Integration of Faith, Learning, and Practice, was identified as the first perceived inservice need by the teachers who teach Bible, business education, English, and vocational education, and others (table 23). The category was also perceived as the first inservice need by counselors and librarians. Perceiving it as the second inservice need were the physical education, science, foreign language, and social studies teachers.

Category III, Individualized Instruction, was identified as the first perceived inservice need by the industrial arts, math, and social studies teachers, whereas Category V, Discipline, was identified as the first perceived inservice need by the home economics, physical education, and foreign language teachers.

TABLE 23

A COMPARISON OF RANKED CATEGORIES OF
SECONDARY SUBJECT MATTER TEACHERS

Secondary Subjects	Categories								
	I	II	III	IV	V	VI	VII	VIII	IX
All K-12	6	2	3	7	4	8	9	5	1
All secondary	8	2	4	7	3	6	9	5	1
1. Art	2	1	8	7	4	5	9	6	3
2. Bible	5	2	6	7	9	3	8	4	1
3. Business Education	4	3	8	6	2	7	9	5	1
4. Counsellor	6	3	7	8	2	4	9	5	1
5. English	7	2	4	6	9	8	5	3	1
6. Home Economics	7	2	9	5	1	3	8	6	4
7. Industrial Arts	4	2	1	7	9	5	8	6	3
8. Librarian	7	2	3	6	4	8	9	5	1
9. Mathematics	8	3	1	7	4	2	9	6	5
10. Music	1	5	7	4	2	9	8	6	3
11. Physical Education	4	9	3	8	1	5	7	6	2
12. Science	8	1	4	6	3	7	9	5	2
13. Foreign Language	9	4	5	6	1	7	8	3	2
14. Social Studies	8	3	1	5	7	6	9	4	2
15. Vocational Education	7	5	8	6	2	3	9	4	1
16. Other	2	3	9	7	5	4	6	8	1

Category II, Developing Pupil Self, was ranked second by Bible, English, home economics, industrial arts teachers, and librarians. The other rankings of the category varied with the art teachers ranking category II as the first perceived inservice need and the physical education teachers ranking the category last.

The remaining categories varied in perceived need rankings. Category VII, Classroom Management, was ranked eighth or ninth by teachers of all subjects except English teachers who ranked the category fifth, others who ranked it sixth, and physical education teachers who ranked it seventh.

Ranked Categories of Secondary Teachers
by Years of Experience

Ranked Categories of Secondary
Teachers with 0-5 Years of
Experience

The description of the categories is presented in ranked order (table 24). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 8 strongly agreed and 8 agreed responses. Item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked second in the category with the same number of strongly agreed (8) and undecided responses (2) as the item which ranked first in the category. Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning,

TABLE 24
A SUMMARY OF RANKED CATEGORIES OF SECONDARY TEACHERS
WHO HAD TAUGHT 0-5 YEARS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	77	85
II Developing Pupil Self	2	75	84
VI Developing Personal Self	3	70	78
V Discipline	4	69	77
VIII Non-factor Related Items	5	68	76
III Individualized Instruction	6	67	75
I Interpersonal Communication and Administration	7	66	73
IV Assessment	8	65	73
VII Classroom Management	9	61	68

*Maximum weighted score for this table was 90 [five times the number of teachers in the group].

and Practice and What Makes It Work, ranked third in the category with the highest number of strongly agreed responses (9) in the category. The item also had 4 each of agreed and undecided responses. Item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, ranked last in the category with the highest number of agreed responses (11). Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 77, shown in table 24, was 85 percent of the possible weighted score of 90 (18 teachers x 5).

Category II, Developing Pupil Self, ranked second among the nine categories. Item 13, Motivating Students to Learn on Their Own, ranked first in the category with 10 strongly agreed and 7 agreed responses. Item 35, Facilitating Pupil Self-Concept and Worth, ranked second in the category with 7 agreed and 9 strongly agreed responses. The above items had no teachers who were undecided or strongly disagreed with these items. Item 36, Facilitating Pupil Social Interaction, ranked last in the category. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 75, shown in table 24, was 84 percent of the possible weighted score of 90.

Category VI, Developing Personal Self, ranked third among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 3 strongly agreed and 11 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with 4 strongly agreed responses. Both item 32 and item 34, Developing a Capacity of Accepting Others' Feelings, had 6 undecided responses. Category VI consisted of

3 questionnaire items--31, 32, and 34. The mean score of 70, shown in table 24, was 78 percent of the possible weighted score of 90.

Category V, Discipline, ranked fourth among the nine categories. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked first in the category with 4 strongly agreed and 10 agreed responses. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked second in the category. Both items had 10 agreed, 2 undecided, and 2 disagreed responses. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 69, shown in table 24, was 77 percent of the possible weighted score of 90.

Category VIII, Non-Factor Related Items, ranked fifth among the nine categories. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked first in the category with 14 Strongly agreed and 4 agreed, 0 undecided, and 9 disagreed responses. Item 23, Constructively Using Evaluation in Helping Student Progress, ranked second in the category with the highest number of agreed responses (11) and 0 strongly disagreed responses. Six items, item 19, Gearing Instruction to Problem Solving, item 1, Diagnosing Basic Learning Difficulties, item 10, Planning Teaching Activities with Other Teachers or Administrators, item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, item 18, Utilization of Audiovisual Equipment and Other Mechanical Aids, and item 4, Identifying Student Attitudes in Order to Better Relate to Problems, which ranked fourth through ninth all had 4 strongly agreed responses. Category VIII consisted

of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 68, shown in table 24, was 76 percent of the possible weighted score of 90.

Category III, Individualized Instruction, ranked sixth among the nine categories. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked first in the category with 3 strongly agreed and 9 agreed responses. Item 9, Developing the Use of the Computer in the Classroom, ranked second in the category with the highest number of strongly agreed responses (7). Item 16, Implementing and Supervising Individualized Instruction, ranked third with 8 undecided, 2 strongly agreed, and a total of 2 strongly disagreed responses. Item 11, Creating Useful Remedial Materials, had 5 agreed, 5 undecided, and 5 disagreed responses and ranked last in the category. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 67, shown in table 24, was 75 percent of the possible weighted score of 90.

Category I, Interpersonal Communication and Administration, ranked seventh among the nine categories. Item 29, Counseling and Confering with Students, ranked first in the category with 7 strongly agreed and 8 agreed responses. Item 28, Communicating and Interacting with Parents, ranked second in the category with 5 strongly agreed, 4 undecided, and 4 disagreed responses. Item 30, Involving Others in the School Program, and item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, had 3 disagreed and 6 undecided responses each. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean

score of 66, shown in table 24, was 73 percent of the possible weighted score of 90.

Category IV, Assessment, ranked eighth among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 4 strongly agreed and 7 agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second in the category with 3 strongly agreed, 3 undecided, and 3 disagreed responses. No teacher strongly disagreed with the above two items. Both item 12, Evaluating Instruction/Instructional Design, and item 2, Constructing and Using Tests for Evaluating Academic Progress, had 10 agreed responses. Item 2 also had 2 strongly agreed and 2 strongly disagreed items. Item 5, Establishing Appropriate Performance Standards, which ranked last had no teacher who strongly disagreed or strongly agreed with the item. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 65, shown in table 24, was 73 percent of the possible weighted score of 90.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 7, Teacher-Pupil Verbal Interaction, ranked first in the category with 4 strongly agreed and 9 agreed responses. Item 21, Providing for Reinforcement, ranked second in the category with 3 strongly agreed and 3 disagreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, had one strongly agreed and one strongly disagreed response. Item 20, General Presentation of Information and Directions, ranked last with 10 undecided responses which was the highest for the category. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22.

The mean score of 61, shown in table 24, was 68 percent of the possible weighted score of 90.

Ranked Categories of Secondary
Teachers with 6-10 Years of
Experience

The description of the categories is presented in ranked order (table 25). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked first in the category with 7 strongly agreed and 6 agreed responses. Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, ranked second in the category with the same number of strongly agreed (7) and agreed responses (6) as item 44 which ranked first in the category. Both item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, and item 46, Making Bible Instruction More Applicable to Everyday Life, had the same number of strongly disagreed (0), disagreed (1), undecided (1), agreed (7), strongly agreed (6) responses. Item 43, Knowing How to Achieve Faith, Learning and Practice from the Curriculum through Written Objectives and Evaluating Results, ranking fifth in the category also had 6 strongly agreed responses. No teacher strongly disagreed with any item in the category. Category IX consisted of 5 questionnaire items--42, 43,

TABLE 25
A SUMMARY OF RANKED CATEGORIES OF THE LAKE UNION CONFERENCE SECONDARY
TEACHERS WHO TAUGHT 6-10 YEARS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	63	84
II Developing Pupil Self	2	60	80
IV Assessment	3	56	74
III Individualized Instruction	4	55	74
VIII Non-factor Related Items	5	55	73
V Discipline	6	54	73
I Interpersonal Communication and Administration	7	54	72
VI Developing Personal Self	8	52	69
VII Classroom Management	9	46	61

*Maximum weighted score for this table was 75 [five times the number of teachers in the group].

44, 45, and 46. The mean score of 63, shown in table 25, was 84 percent of the possible weighted score of 75 (15 teachers x 5).

Category II, Developing Pupil Self, ranked second among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 8 strongly agreed and 5 agreed responses. Item 13, Motivating Students to Learn on Their Own, ranked second in the category with the highest number of agreed responses (10). Item 37, Facilitating Development of Pupil Responsibility, and item 38, Stimulating Growth of Pupil Attitudes and Values, had the same number of strongly disagreed (1), disagreed (1), undecided (0), agreed (7), and strongly agreed (6) responses. Item 35, Facilitating Pupil Self-Concept and Worth, also had only one strongly disagreed, one disagreed, and 0 undecided responses as the above two items. Item 36, Facilitating Pupil Social Interaction, ranked last in the category with 5 agreed and 5 disagreed responses. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 60, shown in table 25, was 80 percent of the possible weighted score of 75.

Category IV, Assessment, ranked third among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 3 strongly agreed and 10 agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second in the category with the same number of agreed (9) and strongly agreed (3) responses as item 33, Selecting and Specifying Performance Goals and Objectives, which ranked third in the category. Item 2, Constructing and Using Tests

for Evaluating Academic Progress, had 2 strongly agreed and 2 undecided responses and ranked last in the category. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 56, shown in table 25, was 74 percent of the possible weighted score of 75.

Category III, Individualized Instruction, ranked fourth among the nine categories. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked first in the category with 3 strongly agreed and 8 agreed responses. Item 11, Creating Useful Remedial Materials, ranked second in the category with 3 strongly agreed and 3 undecided responses each. Item 16, Implementing and Supervising Individualized Instruction, ranked third with the highest number of undecided responses (4). Item 9, Identifying Student Attitudes in Order to Better Relate to Problems, ranked last with 3 agreed and 3 undecided responses and the highest number of strongly agreed responses (5). Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 55, shown in table 25, was 74 percent of the possible weighted score of 75.

Category VIII, Non-Factor Related Items, ranked fifth among the nine categories. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked first in the category with 7 strongly agreed and 6 agreed responses. Item 10, Planning Teaching Activities with Other Teachers or Administrators, ranked second in the category. Item 23 ranked third in the category with the highest number of agreed responses (9). Item 8, Deciding What Teaching Technique Is Best for a Particular Intended Outcome,

which ranked fourth in the category, and item 1, Diagnosing Basic Learning Difficulties, which ranked sixth in the category, and item 4, which ranked sixth in the category, all had 5 strongly agreed responses. Of the twelve items in this category there were 8 of the items with which no teacher strongly disagreed. They were items 14, Keeping Abreast of Developments in Your Own Subject Matter Area; item 23, Constructively Using Evaluation in Helping Student Progress; item 1, Diagnosing Basic Learning Difficulties; item 4, Identifying Student Attitudes in Order to Better Relate to Problems; item 19, Gearing Instruction to Problem Solving; item 17, Using Questioning Procedures That Promote Discussion; item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work; and item 41, Identifying the Gifted and Talented Students. Category VIII consisted of 12 questionnaire items-- 1, 3, 4, 8, 10, 14, 17, 18, 19, 23, and 24. The mean score of 55, shown in table 25, was 73 percent of the possible weighted score of 75.

Category V, Discipline, ranked sixth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 2 strongly agreed and 10 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with 2 strongly agreed and 2 strongly disagreed responses. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 54, shown in table 25, was 73 percent of the possible weighted score of 75.

Category I, Interpersonal Communication and Administration,

ranked seventh among the nine categories. Item 29, Counseling and Conferring with Students, ranked first in the category with 4 strongly agreed and 6 agreed responses. Item 30, Involving Others in the School Program, ranked second in the category with 6 agreed and 3 strongly agreed responses. Both of the above had only one teacher who strongly disagreed with each item. Item 28, Communicating and Interacting with Parents, had the highest number of agreed responses (8). The item had 2 disagreed and 2 strongly disagreed responses each. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 54, shown in table 25, was 72 percent of the possible weighted score of 75.

Category VI, Developing Personal Self, ranked eighth among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 3 strongly agreed and 7 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with the highest number of strongly disagreed responses (4). Both of the above items had 3 undecided and disagreed responses. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked last with 3 strongly agreed, 3 agreed, and 3 disagreed responses. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 52, shown in table 25, was 69 percent of the possible weighted score of 75.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 3 strongly agreed and 3 agreed responses. Item 7, Teacher-Pupil Verbal Interaction, ranked second in the

category with 6 agreed and one strongly agreed responses. Both of the above items had 4 undecided and one strongly disagreed response each. Items 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, and item 20, General Presentation of Information and Directions, had one strongly agreed response and 5 agreed responses each, while ranking fourth and fifth in the category. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 46, shown in table 25, was 61 percent of the possible weighted score of 75.

Ranked Categories of Secondary
Teachers with 11-15 Years of
Experience

The description of the categories is presented in ranked order (table 26). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category II, Developing Pupil Self, ranked first among the nine categories. Item 13, Motivating Students to Learn on Their Own, ranked first in the category with 7 strongly agreed and 3 agreed responses. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked second in the category with 5 agreed and 6 strongly agreed responses. Both of the above items had one disagreed response each. Item 38, Stimulating Growth of Pupil Attitudes and Values, and item 37, Facilitating Development of Pupil Responsibility, ranking third and fourth, had 4 agreed responses each. Item 36, Facilitating Pupil Social Interaction, ranked last in the category with 5 agreed and 5 disagreed responses each. No teacher strongly disagreed with any item in this

TABLE 26
A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE SECONDARY
TEACHERS WHO HAVE TAUGHT 11-15 YEARS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
II Developing Pupil Self	1	48	80
III Individualized Instruction	2	47	79
IX Integration of Faith, Learning, and Practice	3	47	78
V Discipline	4	44	73
VI Developing Personal Self	5	43	72
I Interpersonal Communication and Administration	6	43	71
VIII Non-factor Related Items	7	43	71
IV Assessment	8	40	66
VII Classroom Management	9	36	60

*Maximum weighted score for this table was 60 [five times the number of teachers in the group].

category. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 48, shown in table 26, was 80 percent of the possible weighted score of 60.(12 teachers x 5).

Category III, Individualized Instruction, ranked second among the nine categories. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked first in the category with 6 strongly agreed and 5 agreed responses. Item 9, Developing the Use of the Computer in the Classroom, ranked second in the category with 5 strongly agree and 3 agreed and 3 undecided responses each. Item 11, Creating Useful Remedial Materials, ranked last with 3 agreed and disagreed responses each. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 47, shown in table 26, was 79 percent of the possible weighted score of 60.

Category IX, Integration of Faith, Learning, and Practice, ranked third among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 7 strongly agreed and 2 agreed responses. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked second in the category with 4 strongly agree and 7 agreed responses. Item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked third with 5 strongly agreed and 5 agreed responses. Both item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning and Practice and What Makes It Work, and item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives

and Evaluating Results, had 2 undecided and 2 disagreed responses. No teacher strongly disagreed with any of the items of this category. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 47, shown in table 26, was 78 percent of the possible weighted score of 60.

Category V, Discipline, ranked fourth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 3 strongly agreed and 6 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with 3 strongly agreed and 5 agreed responses. Both items of this category had no teacher who was undecided or who strongly disagreed with any item of this category. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 44, shown in table 26, was 73 percent of the possible weighted score of 60.

Category VI, Developing Personal Self, ranked fifth among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 2 strongly agreed and 8 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with 5 agreed and 3 strongly agreed responses. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked last in the category. Category VI consisted of 3 questionnaire items--31, 32, and 33. The mean score of 43, shown in table 26, was 72 percent of the possible weighted score of 60.

Category I, Interpersonal Communication and Administration, ranked sixth among the nine categories. Item 25, Knowing Where to

Refer Student Problems beyond What Can Be Handled by the Teacher, ranked first in the category with 2 strongly agreed and 7 agreed responses. Item 30, Involving Others in the School Program, ranked second in the category with 9 agreed, 0 strongly agreed, and 0 strongly disagreed responses. Neither item 29, Counseling and Conferring with Students, nor item 28, Communicating and Interacting with Parents, had any teacher who was undecided with the items. No teacher strongly disagreed with any item in this category. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 43, shown in table 26, was 71 percent of the possible weighted score of 60.

Category VIII, Non-Factor Related Items, ranked seventh among the nine categories. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked first in the category with 6 strongly agreed and 4 agreed responses. Item 4, Identifying Student Attitudes in Order to Better Relate to Problems, ranked second in the category with 5 strongly agreed, 3 agreed, and 3 undecided responses. Item 19, Gearing Instruction to Problem Solving, ranked fifth in the category with the highest number of agreed responses (10). Item 18, Utilization of Audiovisual Equipment and Other Mechanical Aids, and item 41, Identifying the Gifted and Talented Students, which ranked tenth and eleventh in the category had the same number of strongly agreed (0), agreed (6), undecided (2), disagreed (3), and strongly disagreed (1) responses. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of

43, shown in table 26, was 71 percent of the possible weighted score of 60.

Category IV, Assessment, ranked eighth among the nine categories. Item 33, Selecting and Specifying Performance Goals and Objectives, ranked first in the category with 0 strongly agreed, 9 agreed, and 0 strongly disagreed responses. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked second in the category with highest number of strongly agreed responses (4). Item 6, Involving Students in Self-Evaluation, which ranked third, had 0 teachers who strongly agree or strongly disagreed with this item. Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked third with one teacher who strongly agreed and one teacher who strongly disagreed. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 40, shown in table 26, was 66 percent of the possible weighted score of 60.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 7, Teacher-Pupil Verbal Interaction, ranked first in the category with 1 strongly agreed and 6 agreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked second in the category with 6 agreed responses. No teacher strongly agreed or strongly disagreed with this item. The above 2 items had six teachers who agreed, four teachers who disagreed, and no teachers who strongly disagreed. Item 20, General Presentation of Information and Directions, ranked last with one teacher who strongly disagreed and one teacher who strongly agreed with this item. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean

score of 36, shown in table 26, was 60 percent of the possible weighted score of 60.

Ranked Categories of Secondary
Teachers with 16-20 Years of
Experience

The description of the categories is presented in ranked order (table 27). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category VIII, Non-Factor Related Items, ranked first among the nine categories. Item 4, Identifying Student Attitudes in Order to Better Relate to Problems, ranked first in the category with 4 strongly agreed and 4 agreed responses. Item 8, Deciding What Teaching Technique Is Best for a Particular Intended Outcome, ranked second in the category with 4 strongly agreed and 3 agreed responses. Item 3, Identifying Student Disabilities that Need Referral or Special Remedial Work, also had 4 strongly agreed responses. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked fourth and had the highest number of strongly agreed responses (5). Item 19, Gearing Instruction to Problem Solving, ranked seventh in the category and had the highest agreed responses (6). Item 10, Planning Teaching Activities with Other Teachers or Administrators, item 18, Utilization of Audio-visual Equipment and Other Mechanical Aids, and item 41, Identifying the Gifted and Talented Students, which were the last 3 items of the category, all had 3 strongly disagreed responses and 0 disagreed responses each. Category VIII consisted of 12 questionnaire items--

TABLE 27

A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE SECONDARY
TEACHERS WHO HAD TAUGHT 16-20 YEARS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
VIII Non-factor Related Items	1	29	72
IX Integration of Faith, Learning, and Practice	2	29	72
V Discipline	3	29	71
II Developing Pupil Self	4	28	71
III Individualized Instruction	5	27	68
IV Assessment	6	25	62
VI Developing Personal Self	7	24	61
I Interpersonal Communication and Administration	8	24	59
VII Classroom Management	9	23	58

*Maximum weighted score for this table was 40 [five times the number of teachers in the group].

1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 29, shown in table 27, was 72 percent of the possible weighted score of 40 (8 teachers x 5).

Category IX, Integration of Faith, Learning, and Practice, ranked second among the nine categories. Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, ranked first in the category with 3 strongly agreed, 3 agreed, 1 undecided, 1 strongly disagreed, and 0 disagreed responses. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked second in the category with the same number of responses as item 42 which ranked first in the category. Item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked third in the category. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked fourth with 2 strongly agreed and 2 strongly disagreed responses each. Item 43, Knowing How to Achieve Faith, Learning and Practice from the Curriculum through Written Objectives and Evaluating Results, ranked last in the category with 3 strongly agreed and 3 strongly disagreed responses each. No teacher disagreed with any item in this category. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 29, shown in table 27, was 72 percent of the possible weighted score of 40.

Category V, Discipline, ranked third among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 3 strongly agreed and 3 agreed

responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with 4 strongly agreed and 1 agreed response. Both of the above items had two teachers who strongly disagreed with the items of the category. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 29, shown in table 27, was 71 percent of the possible weighted score of 40.

Category II, Developing Pupil Self, ranked fourth among the nine categories. Item 13, Motivating Students to Learn on Their Own, ranked first in the category with 5 strongly agreed and 2 agreed responses. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked second in the category with 4 agreed, 1 agreed, and 1 undecided responses. Item 38, Stimulating Growth of Pupil Attitudes and Values, ranked third in the category with the highest number of agreed responses (7). Item 35, Facilitating Pupil Self-Concept and Worth, and item 37, Facilitating Development of Pupil Responsibility, each had 2 strongly agreed, 3 agreed, and 1 undecided responses. These two items ranked fourth and fifth in the category. Item 36, Facilitating Pupil Social Interaction, ranked last in the category. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 28, shown in table 27, was 71 percent of the possible weighted score of 40.

Category III, Individualized Instruction, ranked fifth among the nine categories. Item 11, Creating Useful Remedial Materials, ranked first in the category with 2 strongly agreed and 4 agreed responses. Item 9, Developing the Use of the Computer in the

Classroom, ranked second in the category with 4 strongly agreed, 2 agreed, 0 undecided, and a total of 2 disagreed and strongly disagreed responses. Items 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, and item 16, Implementing and Supervising Individualized Instruction, ranked third and fourth having 0 strongly agree and 2 strongly disagreed responses each. Item 16 also had 3 agreed and 3 undecided responses each. Category III consisted of 4 questionnaire items-- 9, 11, 15, and 16. The mean score of 27, shown in table 27, was 68 percent of the possible weighted score of 40.

Category IV, Assessment, ranked sixth among the nine categories. Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked first in the category with 3 strongly agreed and 3 agreed responses. Item 6, Involving Students in Self-Evaluation, ranked second in the category with the highest number of agreed responses (5). Item 6, item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, item 12, Evaluating Instruction/Instructional Design, and item 5, Establishing Appropriate Performance Standards, all had 1 strongly agreed response and 2 strongly disagreed responses. Item 33, Selecting and Specifying Performance Goals and Objectives, ranked last with the highest number of strongly disagreed responses (3). Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 25, shown in table 27, was 62 percent of the possible weighted score of 40.

Category VI, Developing Personal Self, ranked seventh among the nine categories. Item 31, Developing a Personal Self-

Evaluation Method, ranked first in the category with 3 strongly agreed and 3 strongly disagreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with 1 strongly agreed, 3 agreed, 1 undecided, 1 disagreed, and 2 strongly disagreed responses. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked third and last with the same number of responses as item 32, which ranked second in the category. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 24, shown in table 27, was 61 percent of the possible weighted score of 40.

Category I, Interpersonal Communication and Administration, ranked eighth among the nine categories. Item 29, Counseling and Conferring with Students, ranked first in the category with 2 strongly agreed, 4 agreed, and 7 strongly disagreed responses. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked second in the category with 2 agreed and 2 strongly agreed responses. Item 28, Communicating and Interacting with Parents, ranked third with 1 agreed, 1 undecided, and 1 disagreed response. Item 30, Involving Others in the School Program, ranked last with 3 agreed and 3 strongly disagreed responses. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 24, shown in table 27, was 59 percent of the possible weighted score of 40.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 7, Teacher-Pupil Verbal Interaction, ranked first in the category with 3 strongly agreed and 2 agreed responses. Item 21, Providing for Reinforcement, ranked second in the category

with 2 agreed, 1 strongly agreed, and the highest number of undecided responses (3). Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked third in the category with 3 strongly disagreed and a total of 3 agreed and strongly disagreed responses. Item 20, General Presentation of Information and Directions, ranked last with 0 strongly agreed and the highest number of strongly disagreed (4) responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 23, shown in table 27, was 58 percent of the possible weighted score of 40.

Ranked Categories of Secondary
Teachers with 21+ Years of
Experience

The description of the categories is presented in ranked order (table 28). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked first in the category with 5 strongly agreed and 4 agreed responses. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked second in the category with the same number of strongly agreed (5), agreed (4), undecided (0), disagreed (0), strongly disagreed (0) responses. Item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, ranked third and no teacher undecided, disagreed, or strongly disagreed with the item. No

TABLE 28
A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE SECONDARY
TEACHERS WHO HAD TAUGHT 21+ YEARS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	39	86
V Discipline	2	36	79
II Developing Pupil Self	3	35	78
VIII Non-factor Related Items	4	32	72
III Individualized Instruction	5	32	71
IV Assessment	6	32	70
VI Developing Personal Self	7	30	67
I Interpersonal Communication and Administration	8	29	64
VII Classroom Management	9	27	59

*Maximum weighted score for this table was 45 [five times the number of teachers in the group].

teacher strongly disagreed with any item of the category. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 39, shown in table 28, was 86 percent of the possible weighted score of 45 (9 teachers x 5).

Category V, Discipline, ranked second among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 2 strongly agreed and 6 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with 4 agreed and 2 strongly disagreed. No teacher strongly disagreed with either item of the category. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 36, shown in table 28, was 79 percent of the possible weighted score of 45.

Category II, Developing Pupil Self, ranked third among the nine categories. Item 13, Motivating Students to Learn on Their Own, ranked first in the category with 4 strongly agreed and 5 agreed responses. Item 38, Stimulating Growth of Pupil Attitudes and Values, ranked second in the category with 9 agreed responses. No teacher strongly agreed, was undecided, disagreed or strongly disagreed with this item. Item 35, Facilitating Pupil Self-Concept and Worth, and item 36, Facilitating Pupil Social Interaction, had 5 agreed responses and 3 undecided responses each. No teacher strongly disagreed with any item of this category. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 35, shown in table 28, was 78 percent of the possible weighted score of 45.

Category VIII, Non-Factor Related Items, ranked fourth among

the nine categories. Item 14, Keeping Abreast of Development in Your Own Subject Matter Area, ranked first in the category with 4 strongly agreed and 4 agreed responses. Item 19, Gearing Instruction to Problem Solving, ranked second in the category with 3 strongly agreed and 5 agreed responses. Item 1, Diagnosing Basic Learning Difficulties, ranked third in the category with 1 strongly agreed, 1 disagreed, 0 undecided, and 0 strongly agreed responses. Item 17 ranked fourth in the category and had the same number of strongly agreed (1), undecided (0), disagreed (1), and strongly disagreed (0) responses. Item 24 ranked last in the category with 0 strongly agreed and 0 agreed responses. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 32, shown in table 28, was 72 percent of the possible weighted score of 45.

Category III, Individualized Instruction ranked fifth among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 2 strongly agreed and 6 agreed responses. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked second in the category with 4 agreed and 1 strongly agreed response. Item 16, Implementing and Supervising Individualized Instruction, ranked third with 3 agreed and 3 undecided responses. No teacher strongly disagreed with any of the above three items. Item 11, Creating Useful Remedial Materials, ranked last in the category. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 32, shown in table 28, was 71 percent of the possible weighted score of 45.

Category IV, Assessment, ranked sixth among the nine categories. Item 6, Involving Students in Self-Evaluation, ranked first in the category with 1 strongly agreed and 6 agreed responses. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked second in the category. Item 5, Establishing Appropriate Performance Standards, ranked third in the category with 2 strongly agree, 2 undecided, and 2 disagree responses. Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked last in the category with 4 agree, 4 disagree, 1 undecided, 0 strongly agree, and 0 strongly disagree responses. No teacher strongly disagreed with any item of this category. Category IV consisted of 6 questionnaire items--2, 3, 6, 12, 33, and 40. The mean score of 32, shown in table 28, was 70 percent of the possible weighted score of 45.

Category VI, Developing Personal Self, ranked seventh among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 1 strongly agreed and 4 agreed responses. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked second in the category with the same number of strongly agreed responses (1) and agreed responses (4) as item 31 which ranked first in the category. Both of the above items had 2 undecided responses each. Item 32, Developing a Broad Acceptance of Self, ranked last in the category with 3 agreed and 3 undecided responses each. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 30, shown in table 28, was 67 percent of the possible weighted score of 45.

Category I, Interpersonal Communication and Administration,

ranked eighth among the nine categories. Item 29, Counseling and Conferring with Students, ranked first in the category with 1 strongly agreed and 4 agreed responses. Item 28, Communicating and Interacting with Parents, ranked second in the category with the same number of strongly agreed (1) and agreed (4) responses as item 29 which ranked first in the category. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked third in the category with 3 agreed, undecided, and disagreed responses each. Item 30, Involving Others in the School Program, ranked last in the category with 2 agreed, 2 disagreed, and 5 undecided responses. No teacher strongly disagreed with any item of this category. Category I consisted of 4 questionnaire items-- 25, 28, 29, and 30. The mean score of 29, shown in table 28, was 64 percent of the possible weighted score of 45.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 2 strongly agreed, 2 agreed, and 2 strongly disagreed responses. Item 20, General Presentation of Information and Directions, ranked second in the category with 2 strongly agreed, 1 agreed, and 2 undecided responses. Item 7, Teacher-Pupil Verbal Interaction, ranked last in the category with 3 agreed and 3 disagreed responses. For this category there were as many strongly disagreed as strongly agreed responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 27, shown in table 28, was 59 percent of the possible weighted score of 45.

Summary of Secondary Teachers by
Years of Experience

Research questions 13 (What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 0-5 years?), 14 (What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 6-10 years?), 15 (What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 11-15 years?), 16 (What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 16-20 years?), and 17 (What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 21+ years?), as posed in chapter III, are addressed in the presentation of the responses of five groups: secondary teachers who had taught 0-5 years, 6-10 years, 11-15 years, 16-20 years, and 21+ years. In addition, the above responses were compared to all the secondary teachers of the Lake Union Conference (fig. 6, and table 29).

Category IX, Integration of Faith, Learning, and Practice was identified as the first perceived inservice need by the secondary teachers who had taught 0-5, 6-10, and 21+ years. The category was perceived as the second inservice need by the secondary teachers who had taught 16-20 years and as the third inservice need by the secondary teachers who had taught 11-15 years, whereas the category was ranked first by all secondary teachers as a group. Category II, Developing Pupil Self, was perceived as the first inservice need for the secondary teachers who had taught 11-15 years. Category VIII, Non-Factor Related Items, was ranked first by the secondary teachers

Fig. 6. Comparison of the ranked categories of all secondary teachers and secondary teachers who had taught 0-5, 6-10, 11-15, 16-20, and 21+ years.

TABLE 29

A COMPARISON OF RANKED CATEGORIES OF ALL SECONDARY AND
SECONDARY TEACHERS WHO HAD TAUGHT 0-5, 6-10, 11-15,
16-20, AND 21+ YEARS

Years of Experience	I	II	III	IV	V	VI	VII	VIII	IX
All Secondary	8	2	4	7	3	6	9	5	1
0-5	7	2	6	8	4	3	9	5	1
6-10	7	2	4	3	6	8	9	5	1
11-15	6	1	2	8	4	5	9	7	3
16-20	8	4	5	6	3	7	9	1	2
21+	8	3	5	6	2	7	9	4	1

who had taught 16-20 years; likewise, Category II, Developing Pupil Self, was identified as the second perceived inservice need for the secondary teachers who had taught 0-5 years and 6-10 years; whereas the category was ranked second by all secondary teachers and had other rankings for the secondary teachers who had taught 11-16, 16-20, and 21+.

The remaining categories varied in rankings except category VII, Classroom Management, which was ranked last by all five groups and all the secondary teachers.

Combination of Teaching Assignments

Ranked Categories of Elementary Teachers Who Had Taught Three or Fewer Grades

The description of the categories is presented in ranked order (table 30). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

TABLE 30
A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE ELEMENTARY
TEACHERS WHO TEACH THREE OR LESS GRADES

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
II Developing Pupil Self	1	379	79
III Individualized Instruction	2	374	77
IX Integration of Faith, Learning, and Practice	3	372	77
V Discipline	4	351	73
I Interpersonal Communication and Administration	5	339	71
VIII Non-factor Related Items	6	338	70
VI Developing Personal Self	7	327	68
IV Assessment	8	323	67
VII Classroom Management	9	299	62

*Maximum weighted score for this table was 480 [five times the number of teachers in the group].

Category II, Developing Pupil Self, ranked first among the nine categories. Item 13, Motivating Students to Learn on Their Own, ranked first in the category with 46 strongly agreed and 43 agreed responses. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked second in the category. Item 35, Facilitating Pupil Self-Concept and Worth, ranked fourth in the category with the highest number of agreed responses (50). Item 36, Facilitating Pupil Social Interaction, ranked last in the category with the highest number of disagreed (17) and undecided responses (20). Category II consisted of 6 questionnaire items-- 13, 35, 36, 37, 38, and 39. The mean score of 379, shown in table 30, was 79 percent of the possible weighted score of 480 (96 teachers x 5).

Category III, Individualized Instruction, ranked second among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 40 strongly agreed and 26 agreed responses. Item 11, Creating Useful Remedial Materials, ranked second in the category with 43 agreed and 28 strongly agreed responses. Item 11 also had the same number of undecided and disagreed responses (12). Item 16, Implementing and Supervising Individualized Instruction had the highest number of agreed responses (57). Category III consisted of 4 questionnaire items, 9, 11, 15, and 16. The mean score of 374, shown in table 30, was 78 percent of the possible weighted score of 480.

Category IX, Integration of Faith, Learning, and Practice, ranked third among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 45 strongly agreed and 37 agreed responses. Item 45,

Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked second in the category with the highest number of agreed responses (45). Both of the above items had only one teacher who strongly disagreed with each item. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked third. Item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning and Practice and What Makes It Work, ranked fourth, and item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, ranked fifth in the category with the highest number of undecided, disagreed, and strongly disagreed responses. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 372, shown in table 30, was 77 percent of the possible weighted score of 480.

Category V, Discipline, ranked fourth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 27 strongly agreed and 38 agreed responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second in the category with the highest number of strongly agreed (28), undecided (14), and strongly disagreed responses (5). Category V consisted of 2 questionnaire items--26 and 27. The mean score of 351, shown in table 30, was 73 percent of the possible weighted score of 480.

Category I, Interpersonal Communication and Administration, ranked fifth among the nine categories. Item 30, Involving Others in the School Program, ranked first in the category with 11 strongly agreed and 55 agreed responses. Item 29, Counseling and Con-

ferring with Students, ranked second in the category. Both of the above items had 2 strongly disagreed responses each. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, had the highest number of strongly agreed responses (19) and disagreed responses (28). Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 339, shown in table 30, was 71 percent of the possible weighted score of 480.

Category VIII, Non-Factor Related Items, ranked sixth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 28 strongly agreed and 47 agreed responses. Item 3, Identifying Student Disabilities that Need Referral or Special Remedial Work, ranked second in the category with the lowest number of undecided responses (9). Both items 23, Constructively Using Evaluation in Helping Student Progress, and item 19, Gearing Instruction to Problem Solving, had 13 strongly agreed responses. Item 19 and item 4, Identifying Student Attitudes in Order to Better Relate to Problems, had 48 agreed responses. Three items, 41, Identifying the Gifted and Talented Students, 17, Using Questioning Procedures that Promote Discussion, and 18, Utilization of Audiovisual Equipment and Other Mechanical Aids, all had the same number of strongly agreed (9) and agreed (41) responses. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 338, shown in table 30, was 70 percent of the possible weighted score of 480.

Category VI, Developing Personal Self, ranked seventh among

the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 15 strongly agreed and 43 agreed responses which was the highest for the category. Item 32, Developing a Broad Acceptance of Self, ranked second in the category with the highest number of strongly agreed responses (17). Item 34, Developing a Capacity of Accepting Others' Feelings, ranked last with the highest number of strongly disagreed (7) and disagreed (22) responses. Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 327, shown in table 30, was 68 percent of the possible weighted score of 480.

Category IV, Assessment, ranked eighth among the nine categories. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked first in the category with 13 strongly agreed and 43 agreed responses. Item 12, Evaluating Instruction/Instructional Design, ranked second in the category with the highest undecided responses (20) and 0 strongly disagreed responses. Item 5, Establishing Appropriate Performance Standards, ranked third in the category. Item 2, Constructing and Using Tests for Evaluating Academic Progress, ranked last in the category with the highest disagreed (28) and strongly disagreed (5) responses. Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 323, shown in table 30, was 67 percent of the possible weighted score of 480.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 9 strongly agreed and 29 agreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for

Instruction, ranked second in the category with the highest number of strongly agreed (12) and agreed (42) responses. Both of the above items had 20 undecided and 3 strongly agreed responses. Both item 7, Teacher-Pupil Verbal Interaction, and item 20, General Presentation of Information and Directions, which ranked third and fourth in the category had 7 strongly disagreed responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 299, shown in table 30, was 62 percent of the possible weighted score of 480.

Ranked Categories of Elementary
Teachers Who Had Taught More than
Three Grades

The description of the categories is presented in ranked order (table 31). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first in the category with 29 strongly agreed and 17 agreed responses. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked second in the category with the highest number of agreed responses (27). Both item 45, Transforming Faith into Action--By Vicarious Experience--Developing Christian Values and Attitudes, which ranked third, and item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, which

TABLE 31

A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE ELEMENTARY
TEACHERS WHO TEACH MORE THAN THREE GRADES

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	230	81
II Developing Pupil Self	2	212	74
V Discipline	3	203	71
III Individualized Instruction	4	202	71
I Interpersonal Communication and Administration	5	201	70
VIII Non-factor Related Items	6	197	69
VI Developing Personal Self	7	187	66
IV Assessment	8	185	65
VII Classroom Management	9	173	61

*Maximum weighted score for this table was 285 [five times the number of teachers in the group].

ranked last in the category had 24 agreed responses. Both item 42, Developing a Better Understanding of the Theory of Integrating Faith, Learning, and Practice and What Makes It Work, and item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, had the highest number of undecided responses (10) each. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 230, shown in table 31, was 81 percent of the possible weighted score of 285 (57 teachers x 5).

Category II, Developing Pupil Self, ranked second among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 22 strongly agreed and 25 agreed responses. Item 13, Motivating Students to Learn on Their Own, ranked second in the category. Both of the above items had 25 agreed and 2 strongly disagreed responses. Item 35, Facilitating Pupil Self-Concept and Worth, had the highest number of agreed responses (34) and ranked third in the category. Item 36, Facilitating Pupil Social Interaction, ranked last in the category with 30 agreed, and the highest number of undecided (10) and disagreed (10) responses. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 212, shown in table 31, was 74 percent of the possible weighted score of 285.

Category V, Discipline, ranked third among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with 13 strongly agreed and 25 agreed responses. Item 27, Maintaining Classroom Control without

Appearing as an Ogre to the Students, ranked second in the category. Both items had two teachers who strongly disagreed with each item. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 203, shown in table 31, was 71 percent of the possible weighted score of 285.

Category III, Individualized Instruction, ranked fourth among the nine categories. Item 11, Creating Useful Remedial Materials, ranked first in the category with 25 strongly agreed and 13 agreed responses. Item 9, Developing the Use of the Computer in the Classroom, ranked second in the category with 16 agreed and 16 strongly agreed responses. Item 9 had the highest number of undecided responses (15) of the category. Both item 15 (Selecting and Developing Materials Activities Appropriate for Individualized Instruction, and item 16, Implementing and Supervising Individualized Instruction, had 15 disagree responses. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 202, shown in table 31, was 71 percent of the possible weighted score of 285.

Category I, Interpersonal Communication and Administration ranked fifth among the nine categories. Item 28, Communicating and Interacting with Parents, ranked first in the category with 12 strongly agreed and 27 agreed responses. Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked second in the category with the highest number of strongly agreed responses (14). Item 29, Counseling and Conferring with Students, ranked last in the category with the highest number of agreed (28)

and disagreed (12) responses. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 201, shown in table 31, was 70 percent of the possible weighted score of 285.

Category VIII, Non-Factor Related Items, ranked sixth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 14 strongly agreed and 26 agreed responses. Item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, ranked second in the category with the highest number of strongly agreed responses (15). Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, ranked third in the category with the highest number of agreed responses (30). Item 10, Planning Teaching Activities with Other Teachers or Administrators, had the same number of undecided as strongly agreed responses (10). Both item 19, Gearing Instruction to Problem Solving, and item 23, Constructively Using Evaluation in Helping Student Progress, had 26 agreed responses. Item 8, Deciding What Reaching Technique Is Best for a Particular Intended Outcome, ranked last in the category with the highest number of disagreed responses. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 197, shown in table 31, was 69 percent of the possible weighted score of 285.

Category VI, Developing Personal Self, ranked seventh among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with 8 strongly agreed and 25 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category. Item 34, Developing a Capacity of

Accepting Others' Feelings, ranked last in the category with the highest number of disagreed responses (19) and strongly disagreed responses (3). Category VI consisted of three questionnaire items--31, 32, and 33. The mean score of 187, shown in table 31, was 66 percent of the possible weighted score of 285.

Category IV, Assessment, ranked eighth among the nine categories. Item 6, Involving Students in Self-Evaluation, ranked first in the category with 6 strongly agreed and 28 agreed responses. Item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, ranked second in the category with the same number of strongly agreed (6), agreed (28), and undecided (10) responses as item 6 which ranked first in the category. Item 5, Establishing Appropriate Performance Standards, ranked last in the category with the highest number of strongly disagreed responses (4). Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 185, shown in table 31, was 65 percent of the possible weighted score of 285.

Category VII, Classroom Management, ranked ninth among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 8 strongly agreed and 22 agreed responses. Item 7, Teacher-Pupil Verbal Interaction, ranked second in the category with the highest number of agreed responses (24). Both of the above items had 10 undecided and 14 disagreed responses. Both item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, and item 20, General Presentation of Information and Directions, had 17 agreed and 9 undecided responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean

score of 173, shown in table 31, was 61 percent of the possible weighted score of 285.

Ranked Categories of Teachers Who
Taught Both Elementary and Secondary

The description of the categories is presented in ranked order (table 32). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses..

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked first in the category. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked second in the category with 25 agreed and strongly agreed responses each. Item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked third in the category also with 25 agreed responses. Item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, ranked last in the category but had the highest number of agreed responses (27) and undecided responses (11). Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 226, shown in table 32, was 81 percent of the possible weighted score of 280.

Category II, Developing Pupil Self, ranked second among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with 21 strongly agreed responses. Item 13, Motivating Students to Learn

TABLE 32

A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE TEACHERS WHO
TEACH BOTH ELEMENTARY AND SECONDARY GRADES

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	226	81
II Developing Pupil Self	2	216	77
V Discipline	3	208	74
III Individualized Instruction	4	207	74
Interpersonal Communication and Administration	5	201	72
VIII Non-factor Related Items	6	201	72
IV Assessment	7	192	68
VI Developing Personal Self	8	191	68
VII Classroom Management	9	175	62

*Maximum weighted score for this table was 280 [five times the number of teachers in the group].

on Their Own, ranked second in the category. Item 35, Facilitating Pupil Self-Concept and Worth, had the highest agreed responses (31), whereas, item 36, Facilitating Pupil Social Interaction, had the highest disagreed (10) and undecided (12) responses. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 216, shown in table 32, was 77 percent of the possible weighted score of 280.(56 teachers x 5).

Category V, Discipline, ranked third among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them, ranked first in the category with the highest agreed (21) and strongly agreed (19) responses. Item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranked second. Category V consisted of 2 questionnaire items--26 and 27. The mean score of 208, shown in table 32, was 74 percent of the possible weighted score of 280.

Category III, Individualized Instruction, ranked fourth among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first with the highest number of strongly agreed (18) and undecided responses (13). Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, ranked second in the category. Item 16, Implementing and Supervising Individualized Instruction, ranked third with the highest number of agreed responses (26), while item 11, Creating Useful Remedial Materials, ranked last with the highest number of disagreed (10) responses. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 207, shown in table 32, was 74 percent of the possible weighted score of 280.

Category I, Interpersonal Communication and Administration, ranked fifth among the nine categories. Item 28, Communicating and Interacting with Parents, ranked first in the category with 17 strongly agreed responses. Item 30, Involving Others in the School Program, and item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, had an equal number of totalled agreed and strongly agreed responses (38). Item 29, Counseling and Conferring with Students, ranked last in the category with 15 disagree responses. Category I consisted of 4 questionnaire items-- 25, 28, 29, and 30. The mean score of 201, shown in table 32, was 72 percent of the possible weighted score of 280.

Category VIII, Non-Factor Related Items, ranked sixth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with 45 totalled agreed and strongly agreed responses. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, had the highest number of strongly agreed responses (17) in the category while item 19, Gearing Instruction to Problem Solving, had the highest number of agreed responses (35) for the category. Item 24, Managing Classroom Affairs in Order to Get Maximum Benefit from Supervising, Aids, Tutors, etc., had the same number of disagreed and undecided responses as did item 18, Utilization of Audiovisual Equipment and Other Mechanical Aids. Item 10, Planning Teaching Activities with Other Teachers or Administrators, had the highest number of disagreed responses (12). Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 201, shown in table 32, was 72 percent of the possible weighted score of 280.

Category IV, Assessment, ranked seventh among the nine categories. Item 6, Involving Students in Self-Evaluation, ranked first in the category with 26 agreed and 8 strongly agreed responses. Item 5, Establishing Appropriate Performance Standards, ranked second in the category with 8 strongly agreed responses and 16 undecided responses. Item 2, Constructing and Using Tests for Evaluating Academic Progress, item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, and item 12, Evaluating Instruction/Instructional Design, all had an equal number of strongly agreed responses (6); whereas item 40 had equal number of disagree and undecided responses (12). Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 33, and 40. The mean score of 192, shown in table 32, was 68 percent of the possible weighted score of 280.

Category VI, Developing Personal Self, ranked eighth among the nine categories. Item 31, Developing a Personal Self Evaluation Method, ranked first in the category with a total of 30 agreed and strongly agreed responses. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked second in the category with 26 agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked last in the category with the highest number of strongly agreed (12) and strongly disagreed responses (5). Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 191, shown in table 32, was 68 percent of the possible weighted score of 280.

Category VII, Classroom Management, ranked last among the nine categories. Item 7, Teacher-Pupil Verbal Interaction

ranked first in the category with the highest number of strongly agreed responses (7) and strongly disagreed responses (6). Item 7 and item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, both had equal number of agreed responses (22); whereas item 21, Providing for Reinforcement, ranked second in the category and had the highest number of agreed responses (24). Item 20, General Presentation of Information and Directions, ranked last in the category. Category VII consisted of 4 questionnaire items-- 7, 20, 21, and 22. The mean score of 175, shown in table 32, was 62 percent of the possible weighted score of 280.

Ranked Categories of Principals Who
Also Served as Teachers

The description of the categories is presented in ranked order (table 33). Likewise, the description of the items within the categories is also presented in ranked order, according to the responses.

Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Item 44, Constructing and Implementing a Christian Witness Program for Students and Teachers Together, ranked first in the category with 10 strongly agreed responses. Item 45, Transforming Faith into Action--by Vicarious Experience--Developing Christian Values and Attitudes, ranked second in the category with the highest number of agreed responses (12). Item 46, Making Bible Instruction More Applicable to Everyday Life, item 43, Knowing How to Achieve Faith, Learning, and Practice from the Curriculum through Written Objectives and Evaluating Results, and item 42, Developing a Better Understanding of the

TABLE 33
A SUMMARY OF RANKED CATEGORIES OF LAKE UNION CONFERENCE PRINCIPALS
WHO ALSO SERVE AS TEACHERS

Categories	Ranking Order	Mean of Weighted Score*	Percentage of Possible Weighted Score
IX Integration of Faith, Learning, and Practice	1	70	83
III Individualized Instruction	2	66	77
IV Assessment	3	60	70
VIII Non-factor Related Items	4	59	69
II Developing Pupil Self	5	56	66
I Interpersonal Communication and Administration	6	53	62
VI Developing Personal Self	7	51	60
V Discipline	8	51	59
VII Classroom Management	9	47	55

*Maximum weighted score for this table was 85 [five times the number of teachers in the group].

Theory of Integrating Faith, Learning, and Practice and What Makes It Work, all had the same number of agreed responses (7). No principal-teacher strongly disagreed with any of the items in this category. Likewise, there were only two teachers who were undecided with any item of the category. Category IX consisted of 5 questionnaire items--42, 43, 44, 45, and 46. The mean score of 70, shown in table 33, was 83 percent of the possible weighted score of 85 (17 teachers x 5).

Category III, Individualized Instruction, ranked second among the nine categories. Item 9, Developing the Use of the Computer in the Classroom, ranked first in the category with 12 strongly agreed and 5 agreed responses. No principal teacher strongly disagreed, disagree, or was undecided with this item. Item 15, Selecting and Developing Materials Activities Appropriate for Individualized Instruction, had the highest agreed responses in the category (10). Item 11, Creating Useful Remedial Materials, was the only item in this category with which any principal teacher disagreed. Category III consisted of 4 questionnaire items--9, 11, 15, and 16. The mean score of 66, shown in table 33, was 77 percent of the possible weighted score of 85.

Category IV, Assessment, ranked third among the nine categories. Item 2, Constructing and Using Tests for Evaluating Academic Progress, and item 40, Developing or Modifying Instructional Procedures to Suit Your Own Strengths, had the same number of totalled agreed and strongly agreed responses (11). Item 12, Evaluating Instruction/Instructional Design, ranked third in the category with the highest number of strongly agreed responses

(5). Item 5, Establishing Appropriate Performance Standards, ranked last in the category with the highest number of agreed responses (10). Category IV consisted of 6 questionnaire items--2, 5, 6, 12, 13, and 40. The mean score of 60, shown in table 33, was 70 percent of the possible weighted score of 85.

Category VIII, Non-Factor Related Items, ranked fourth among the nine categories. Item 1, Diagnosing Basic Learning Difficulties, ranked first in the category with a total of 15 agreed and strongly agreed responses. Item 3, Identifying Student Disabilities That Need Referral or Special Remedial Work, ranked second in the category. Item 41, Identifying the Gifted and Talented Students, ranked last in the category with 8 disagreed responses. Category VIII consisted of 12 questionnaire items--1, 3, 4, 8, 10, 14, 17, 18, 19, 23, 24, and 41. The mean score of 59, shown in table 33, was 69 percent of the possible weighted score of 85.

Category II, Developing Pupil Self, ranked fifth among the nine categories. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked first in the category with a total of 13 agreed and strongly agreed responses. Item 39, and item 13, Motivating Students to Learn on Their Own, had the same number of agreed responses, as did item 38, Stimulating Growth of Pupil Attitudes and Values, and item 37, Facilitating Development of Pupil Responsibility. Only four principal-teachers strongly disagree with any items of the category. Item 36, Facilitating Pupil Social Interaction, ranked last in the category with 8 disagreed responses. Category II consisted of 6 questionnaire items--13, 35, 36, 37, 38, and 39. The mean score of 56, shown in

table 33, was 66 percent of the possible weighted score of 85.

Category I, Interpersonal Communication and Administration, ranked sixth among the nine categories. Item 30, Involving Others in the School Program, ranked first in the category with a total of 8 agreed and strongly agreed responses. Item 30, item 28, Communicating and Interacting with Parents, had the same number of undecided responses (4) as did item 29, Counseling and Conferring with Students, which had the same number of disagreed responses (5). Item 25, Knowing Where to Refer Student Problems beyond What Can Be Handled by the Teacher, ranked last in the category with the highest number of disagreed responses (8) in the category. Category I consisted of 4 questionnaire items--25, 28, 29, and 30. The mean score of 53, shown in table 33, was 62 percent of the possible weighted score of 85.

Category VI, Developing Personal Self, ranked seventh among the nine categories. Item 31, Developing a Personal Self-Evaluation Method, ranked first in the category with a total of 9 agree and strongly agreed responses. Item 32, Developing a Broad Acceptance of Self, ranked second in the category. Item 34, Developing a Capacity of Accepting Others' Feelings, ranked last in the category with the highest number of strongly agreed and disagreed responses. All 3 items, 31, 32, and 34, had the same number of strongly agreed responses (2). Category VI consisted of 3 questionnaire items--31, 32, and 34. The mean score of 51, shown in table 33, was 60 percent of the possible weighted score of 85.

Category V, Discipline, ranked eighth among the nine categories. Item 26, Useful Methods of Classroom Discipline and When to Use Them,

ranked first in the category with item 27, Maintaining Classroom Control without Appearing as an Ogre to the Students, ranking second. Both items in the category had equal number of totaled agreed and strongly agreed responses (7). Likewise both items had the same number of undecided responses (1). Category V consisted of 2 questionnaire items--26 and 27. The mean score of 51, shown in table 33, was 59 percent of the possible weighted score of 85.

Category VII, Classroom Management, ranked last among the nine categories. Item 21, Providing for Reinforcement, ranked first in the category with 3 undecided and a total of 6 agreed and strongly agreed responses. Item 22, Deciding on Appropriate Pupil Grouping Procedures for Instruction, ranked second with the same number of undecided, agreed, and strongly agreed responses as item 21. Item 20, General Presentation of Information and Directions, ranked last in the category with a total of 11 strongly disagreed and disagreed responses. Category VII consisted of 4 questionnaire items--7, 20, 21, and 22. The mean score of 47, shown in table 33, was 55 percent of the possible weighted score of 85.

Summary--Perceived Needs of Teachers with a Combination of Teaching Assignments

Research questions 18 (What are the perceived inservice needs of Lake Union Conference elementary teachers who teach 3 or less grades?), 19 (What are the perceived inservice needs of Lake Union Conference elementary teachers who teach more than 3 grades?), 20 (What are the perceived inservice needs of the Lake Union Conference

teachers who teach elementary and secondary grades?), and 21 (What are the perceived inservice needs of Lake Union Conference principals who also function as teachers?), as posed in chapter III, are addressed in the presentation of the responses of the 4 groups: elementary teachers who had taught three or fewer grades, elementary teachers who had taught more than three grades, teachers who had taught both elementary and secondary, and principals who also assumed the responsibility of teaching. In addition, the above responses were compared to all K-12 teachers of the Lake Union Conference (fig. 7 and table 34).

Category IX, Integration of Faith, Learning, and Practice, was identified as the first perceived inservice need by all of the groups (table 34) except the elementary teachers who had taught three or fewer grades. They perceived category IX as the third inservice need, identifying category II, Developing Pupil Self, as the first inservice need; however, the category was ranked first by all the K-12 teachers.

Category II, Developing Pupil Self, was identified as the second perceived inservice need by elementary teachers who had taught more than three grades and teachers who had taught both elementary and secondary. Category III, Individualized Instruction, was identified as the second perceived inservice need by the principals who also serve as teachers and elementary teachers who had taught three or fewer grades, whereas category II was ranked second by the K-12 teachers.

Category V, Discipline, was identified as the third perceived inservice need by the teachers who had taught both elementary

Fig. 7. Comparison of the ranked categories of teachers who had a combination of teaching assignments.

and secondary and elementary teachers who had taught more than three grades, whereas the principal teachers identified category IV, Assessment, as the third perceived need.

The remaining categories varied in rankings except category VII which was ranked last by all four groups.

TABLE 34
A COMPARISON OF RANKED CATEGORIES OF ALL K-12 TEACHERS
AND TEACHERS WITH A COMBINATION OF TEACHING
ASSIGNMENTS

Combination of Teaching Assignments	Categories								
	I	II	III	IV	V	VI	VII	VIII	IX
All K-12	6	2	3	7	4	8	9	5	1
3 or less	5	1	2	8	4	7	9	6	3
4 or more	5	2	4	8	3	7	9	6	1
Combined elementary and secondary	5	2	4	7	3	8	9	6	1
Principal teacher	6	5	2	3	8	7	9	4	1

Summary

The purpose of the study was to identify the perceived inservice needs of the K-12 teachers of the Lake Union Conference. This purpose was achieved through an analysis of the survey instrument Lake Union Conference Inservice Assessment which contained 46 items which were divided unevenly into nine categories. The teachers were analyzed as a group, and by subgroups, looking at years of experience and teaching assignment. Their responses were analyzed and ranked by items and categories. Item 46, Making Bible Instruction More Applicable to Everyday Life, ranked first among

the 46 items. Item 39, Instilling in the Student the Will to Learn on His Own Initiative, ranked second, while item 44, Constructing and Implementing a Christian Witnessing Program for Students and Teachers Together, ranked third. Category IX, Integration of Faith, Learning, and Practice, ranked first among the nine categories. Category II, Developing Pupil Self, ranked second, while Category III, Individualizing Instruction, ranked third.

Chapter V contains the summary, conclusions, and recommendations.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to identify the perceived inservice needs of the K-12 teachers in the Lake Union Conference of Seventh-day Adventists. The Lake Union Conference of Seventh-day Adventists comprises the geographical area of the United States known as Illinois, Indiana, Michigan, and Wisconsin. The population of teachers studied numbered 490 of which 289 (59 percent) responded to the questionnaire. Sixty-three secondary, one hundred thirty-five elementary, fifty-six teachers who teach both elementary and secondary, and seventeen principals who also serve as teachers made up the responding population. The questionnaire used was a modified version of Ingersoll's Teacher Needs Assessment Survey and was appropriately named the "Lake Union Conference Inservice Assessment." The modification of the original Ingersoll instrument consisted of the incorporation of five questions to deal with the concept of Integration of Faith, Learning, and Practice which is seen as a unique component in Seventh-day Adventist schools.

In addition to administering the Ingersoll survey instrument, a thorough study was made of the related literature in order to establish a theoretical base for a critical analysis of the data

and the recommendations that would result from the research. The findings were then evaluated against twenty-one research questions.

The review of literature covered the following topics:

1. Historical Overview
2. Purposes of Inservice Education
3. Characteristics of Successful and Unsuccessful Programs
4. Delivery Systems
5. Cooperative Programs
6. Planning Strategies
7. Varying Needs of Teachers

The review of the related literature consistently pointed out the team approach for planning effective inservice programs which is collaboration between administrators and teachers in planning inservice programs who will be directly affected by the programs. The basic purpose of inservice education appears to be the improvement of pupil achievement through the modified behavior of the teacher. The primary characteristics of effective inservice education were shown to consist of programs where: (1) teachers were partners in planning, (2) concepts presented were applicable to both teachers and administrators, (3) teachers actively participate in learning experiences, and (4) activities had immediate application to the classroom, combining subject matter with methodology, which often included teacher-made materials.

The kind of programs that worked best were those which modeled skill development in a classroom setting. Planning strategies should take into consideration the (1) site, (2) funds available, (3) time of year, and (4) the needs of the participants. The

literature revealed that the needs of teachers varied, depending upon their actual teaching assignment and years of experience.

Delivery systems shown to be effective ranged from (1) workshops, (2) institutes, (3) travel, (4) teacher visitation, (5) teacher centers, and (6) extension courses.

The desired length of time for any of these programs depended upon the subject matter. The best time for conducting inservice programs appeared to be during school with released time rather than weekends or over vacations.

An analysis of the data gathered by way of the survey questionnaire administered revealed the following results in answer to the twenty-one research questions posed. (Refer to pp. 81 and 82 for the questions)

Question 1. What are the perceived inservice needs of the K-12 Lake Union Conference teachers?

The K-12 teachers chose Category IX, Integration of Faith, Learning, and Practice (80 percent of the possible weighted score), as their foremost perceived inservice need, followed by Category II, Pupil Development (77 percent), with Category III, Individualized Instruction (74 percent), as their third perceived inservice need. Category V, Discipline (72 percent), was perceived as the fourth need with Category VIII, Non-factor Related Items (71 percent), perceived as the fifth inservice need.

Question 2. What are the perceived inservice needs of the elementary teachers of the Lake Union Conference?

The elementary teachers perceived somewhat the same as the K-12 teachers with Category IX, Integration of Faith, Learning, and

Practice (79 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Pupil Development (77 percent), with Category III, Individualized Instruction (75 percent), as their third perceived inservice need. Category V, Discipline (72 percent), was perceived as the fourth need with Category I, Interpersonal Communication and Administration (71 percent), was perceived as the fifth inservice need.

Question 3. What are the perceived inservice needs of the teachers who teach grades K-2?

The K-2 teachers perceived somewhat the same as the elementary teachers did as a group. Category IX, Integration of Faith, Learning, and Practice (79 percent of the possible weighted score), was perceived as their foremost inservice need followed by Category II, Developing Pupil Self (76 percent), with Category III, Individualized Instruction (73 percent), as their third perceived inservice need. Category V, Discipline (72 percent), was perceived as the fourth need with Category I, Interpersonal Communication and Administration (72 percent), perceived as the fifth inservice need.

Question 4. What are the perceived inservice needs of the teachers who teach grades 3-5?

The 3-5 teachers chose Category II, Developing Pupil Self (80 percent of the possible weighted score), as their foremost perceived inservice need followed by Category III, Individualized Instruction (78 percent), with Category IX, Integration of Faith, Learning, and Practice (75 percent), as their third perceived inservice need. Category V, Discipline (75 percent), was perceived

as their fourth need, while Category I, Interpersonal Communication and Administration (72 percent), was perceived as the fifth inservice need.

Question 5. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach grades 6-8?

The elementary teachers who teach grades 6-8 chose Category IX, Integration of Faith, Learning, and Practice (79 percent of the possible weighted score), as their foremost perceived inservice need followed by Category III, Individualized Instruction (77 percent), with Category II, Developing Pupil Self (77 percent), as their third perceived need. Category V, Discipline (72 percent), was perceived as their fourth need while Category VIII, Non-factor Related Items (71 percent), was perceived as the fifth inservice need.

Question 6. What are the perceived inservice needs of Lake Union Conference secondary teachers who teach grades 9-12?

The secondary teachers who taught grades 9-12 chose Category IX, Integration of Faith, Learning, and Practice (81 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self (78 percent), with Category V, Discipline (73 percent), as their third perceived need. Category III, Individualized Instruction (73 percent), was perceived as the fourth need, while Category VIII, Non-factor Related Items (72 percent), was perceived as the fifth inservice need.

Question 7. What are the perceived inservice needs of Lake Union Conference secondary teachers who teach the different disciplines (i.e., math, Bible, history)?

The secondary teachers in eleven of the sixteen disciplines chose item 13, Motivating Students to Learn on Their Own, as their first inservice need. Item 14, Keeping Abreast of Developments in Your Own Subject Matter Area, was chosen as the second perceived need by teachers in nine of the sixteen disciplines. Three items which were perceived by the same number of teachers in five of the sixteen disciplines were: item 9, Developing the Use of Computers in the Classroom, item 29, Counseling-Confering with Students, and item 44, Constructing and Implementing a Christian Witnessing Program for Students and Teachers Alike.

Question 8. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 0-5 years?

The elementary teachers with 0-5 years of experience chose Category II, Developing Pupil Self (81 percent of the possible weighted score), as their foremost perceived inservice need followed by Category IX, Integration of Faith, Learning, and Practice (79 percent), with Category V, Discipline (79 percent), as their third perceived inservice need. Category III, Individualized Instruction (77 percent), was perceived as the fourth need while Category I, Interpersonal Communication and Administration (73 percent), was perceived as the fifth inservice need.

Question 9. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 6-10 years?

The elementary teachers with 6-10 years of experience chose Category IX, Integration of Faith, Learning, and Practice (81 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self

(76 percent), with Category III, Individualized Instruction (73 percent), as their third perceived inservice need. Category I, Interpersonal Communication and Administration (73 percent), was perceived as the fourth need, while Category VIII, Non-factor Related Items (71 percent), was perceived as the fifth inservice need.

Question 10. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 11-15 years?

The elementary teachers with 11-15 years of experience chose Category II, Developing Pupil Self (77 percent of the possible weighted score), as their foremost perceived inservice need followed by Category III, Individualizing Instruction (73 percent), with Category V, Discipline (72 percent), as their third perceived inservice need. Category IX, Integration of Faith, Learning, and Practice (72 percent), was perceived as the fourth need while VIII, Non-factor Related Items (70 percent), was perceived as the fifth inservice need.

Question 11. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 16-20 years?

The elementary teachers with 16-20 years of experience chose category IX, Integration of Faith, Learning, and Practice (86 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self (83 percent), with Category II, Individualized Instruction (78 percent), as their third perceived inservice need. Category V,

Discipline (76 percent), was perceived as the fourth need while Category I, Interpersonal Communication and Administration (73 percent), was perceived as the fifth inservice need.

Question 12. What are the perceived inservice needs of Lake Union Conference elementary teachers who have taught 21+ years?

The elementary teachers with 21+ years of experience chose Category IX, Integration of Faith, Learning, and Practice (78 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self (76 percent), with Category III, Individualized Instruction (76 percent), as their third perceived inservice need. Category VIII, Non-factor Related Items (69 percent), was perceived as the fourth, while Category VI, Developing Personal Self (68 percent), was perceived as the fifth inservice need.

Question 13. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 0-5 years?

The secondary teachers with 0-5 years of experience chose Category IX, Integration of Faith, Learning, and Practice (85 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self (84 percent), with Category VI, Developing Personal Self (78 percent), as their third perceived inservice need. Category V, Discipline (77 percent), was perceived as the fourth, while Category VIII, Non-factor Related Items (76 percent), was perceived as the fifth inservice need.

Question 14. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 6-10 years?

The secondary teachers with 6-10 years of experience chose Category IX, Integration of Faith, Learning, and Practice (84 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self (80 percent), with Category IV, Assessment (74 percent), as their third perceived inservice need. Category III, Individualizing Instruction (74 percent), was perceived as their fourth, while Category VIII, Non-factor Related Items (73 percent), was perceived as the fifth inservice need.

Question 15. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 11-15 years?

The secondary teachers with 11-15 years of experience chose Category II, Developing Pupil Self (80 percent of the possible weighted score), as their foremost perceived inservice need followed by Category III, Individualized Instruction (79 percent), with Category IX, Integration of Faith, Learning, and Practice (78 percent), as their third perceived inservice need. Category V, Discipline (73 percent), was perceived as the fourth, while Category VI, Developing Personal Self (72 percent), was perceived as the fifth inservice need.

Question 16. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 16-20 years?

The secondary teachers with 16-20 years of experience chose Category VIII, Non-factor Related Items (72 percent of the possible weighted score), as their foremost perceived inservice need followed

by Category IX, Integration of Faith, Learning, and Practice (72 percent), with Category V, Discipline (71 percent), as their third perceived inservice need. Category II, Developing Pupil Self (71 percent), was perceived as their fourth need, while Category III, Individualizing Instruction (68 percent), was perceived as the fifth inservice need.

Question 17. What are the perceived inservice needs of Lake Union Conference secondary teachers who have taught 21+ years?

The secondary teachers with 21+ years of experience chose Category IX, Integration of Faith, Learning, and Practice (86 percent of the possible weighted score), as their foremost perceived inservice need followed by Category V, Discipline (79 percent), with Category II, Developing Pupil Self (78 percent), as their third perceived inservice need. Category VIII, Non-Factor Related Items (72 percent), was perceived as the fourth need, while Category III, Individualizing Instruction (71 percent), was perceived as the fifth inservice need.

Question 18. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach 3 or less grades?

The elementary teachers who taught three or less grades chose Category II, Developing Pupil Self (79 percent of the possible weighted score), as their foremost perceived inservice need followed by Category III, Individualizing Instruction (77 percent), with Category IX, Integration of Faith, Learning, and Practice (77 percent), as their third perceived inservice need. Category V, Discipline (73 percent), was perceived as the fourth need while Category I, Interpersonal Communication and Administration (71 percent),

was perceived as the fifth inservice need.

Question 19. What are the perceived inservice needs of Lake Union Conference elementary teachers who teach more than 3 grades?

The elementary teachers who taught more than three grades chose Category IX, Integration of Faith, Training, and Practice (81 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self (74 percent), with Category V, Discipline (71 percent), as their third perceived inservice need. Category III, Individualized Instruction (71 percent), was perceived as the fourth need while Category I, Interpersonal Communication and Administration (70 percent), was perceived as the fifth inservice need.

Question 20. What are the perceived inservice needs of the Lake Union Conference teachers who teach elementary and secondary grades?

The teachers who taught both elementary and secondary grades perceived somewhat the same as the teachers who taught more than three grades, as they chose Category IX, Integration of Faith, Learning, and Practice (81 percent of the possible weighted score), as their foremost perceived inservice need followed by Category II, Developing Pupil Self (77 percent), with Category V, Discipline (74 percent), as their third perceived inservice need. Category III, Individualized Instruction (74 percent), was perceived as the fourth need while Category I, Interpersonal Communication and Administration (72 percent), was perceived as the fifth inservice need.

Question 21. What are the perceived inservice needs of Lake Union Conference principals who also function as teachers?

The principals who also serve as teachers chose Category IX, Integration of Faith, Learning, and Practice (83 percent of the possible weighted score), as their foremost perceived inservice need followed by Category III, Individualized Instruction (77 percent), with Category IV, Assessment (70 percent), as their third perceived inservice need. Category VIII, Non-factor Related Items (69 percent), was perceived as the fourth need while Category II, Developing Pupil Self (66 percent), was perceived as the fifth inservice need.

Conclusions

A global analysis of the findings of the study revealed a two fold preponderance of evidence. On the one hand, the various categories of teachers show differing needs, dependent on

1. teaching assignment, as well as
2. the number of years of teaching experience. On the other hand again, there seems to be a golden thread running clear through the findings namely, that the majority of teachers have an awareness of needing to know more on how to better integrate the student's faith and learning, how to academically develop their students, and how to individualize instruction.

Starting with the latter conclusion it is not clear whether teachers selected the category of Integration of Faith, Learning, and Practice, as a priority need for reasons of their perception of their role expectation or because they had had so much theory and

ideology with respect to Integration of Faith, Learning, and Practice at the expense of being exposed to workable models and modes for the Integration of Faith, Learning, and Practice. Since the current Integration of Faith, Learning, and Practice as an identifiable priority emphasized in Adventist Schools is of comparatively recent vintage, it is not clear whether the need to know more about it is not also an indication of the state of the art in that area, namely that it has strangely penetrated the teacher corps in the Lake Union Conference area as an ideology but that it has not come to creative fruition in terms of finding suitable modes of implementation. This kind of problem is not new in the areas of implementing new ideas and findings.

It is also not clear whether the findings of the present study will hold true for other parts of the United States of America. It may be that the very proximity of Andrews University with its strong emphasis on Integration of Faith, Learning, and Practice to the territories of the Lake Union Conference, give the findings a local bias that may not be readily seen in groups of Seventh-day Adventist teachers in other geographical areas of the United States. Further study needs to be undertaken to determine the holding validity of the preeminent hierarchy of teacher inservice needs as found in the Lake Union Conference of Seventh-day Adventists and the implication that might result from such a study.

Very closely related to the apparent strength and hierarchy of need perception of the teachers in the Lake Union Conference of Seventh-day Adventists is the finding that teachers' needs vary

according to years of experience and the level where teaching takes place in the school system.

The majority of the total respondents indicated their greatest need was integrating religious concepts into the curriculum, making it applicable to everyday situations. In addition, data showed as an important perceived need of the K-12 teachers was pupil development. In other words, motivating the student, while at the same time instilling in the student the will to learn on his own initiative. The respondents indicated still another important perceived need was to individualize instruction, using a variety of methods such as computers, remedial materials and methods of implementing instruction.

Elementary teachers who taught grades K-2 perceived a greater need for evaluating, assessing and setting performance standards, whereas, the elementary teachers who taught grades 3-5 had a greater perceived need for pupil development, motivating students and facilitating the pupil's self worth, while the teachers who taught grades 6-8 had a greater perceived need in the areas of personal development and student development. Elementary teachers who had more years of experience (16-20 and 21+) perceived a greater need for personal development than did the elementary teachers with fewer years of experience.

Secondary teachers, on the other hand, with 0-5 years of experience had a greater perceived inservice need for personal development while the secondary teachers with 6-10 years of experience perceived a greater need for evaluation and assessment techniques. The secondary teacher with 11-15 years of experience

perceived a greater need for pupil development and individualizing instruction, than integration of religious concepts, whereas, the secondary teacher with 16-20 years of experience perceived a greater need for effective teaching techniques, dealing with poor attitudes of students, problem solving, and improving instruction, than integrating the religious concepts into the curriculum. Secondary teachers as a group had a greater perceived inservice need for discipline and personal development than elementary teachers, whereas, the elementary teachers had a greater perceived inservice need for individualizing instruction and developing better communication with parents and students.

For the teachers who had a combination of teaching assignments, the principal-teacher had a greater perceived need for assessment and evaluation techniques. Furthermore, they perceived the least need in the area of managing the classroom.

While secondary and elementary teachers showed differences of perceived inservice needs, the teachers who taught more than three grades and other teachers who taught in both elementary and secondary grades had exactly the same perceived inservice needs.

Principals who also taught in the secondary school did not conform to the general pattern of perceived needs other than placing Integration of Faith, Learning, and Practice first. The principals had a strong emphases on assessment and non-factor related items. The non-factor related items were given a higher priority than secondary teachers as a group evidenced.

The fact that teachers do have different priorities in perceived inservice needs do have some strong implications for planning

inservice programs. In order to plan adequately for effective inservice programs one has to try and assess the reasons for the different priority needs within a group of teachers. If one tried to develop a specific program to meet the specific needs of each teacher one would either have to have too many programs or would run the risk again of just catering to a few teachers. It would seem therefore that a workable approach to planning inservice programs based on a specific needs assessment might reasonably be to; first, determine the pattern of needs priorities among the teachers; second, to evaluate these into categories; third, to plan different inservice programs for different target teacher groups within the greater teacher corps; and finally, to develop a multi-faceted inservice program to cater for the various nuances of perceived needs.

In analyzing the apparent patterns of need priorities as evidenced by the various groups that emerged in this study, it would appear that while all K-12 teachers as a group evidenced a compatible image of perceived needs, the dissimilarities are highlighted when elementary and secondary teachers are treated as separate groups. In addition, principals or administrators as a group appear to find greater congruence with secondary teachers. The only time that elementary and secondary teachers as two separate groups appear to be very compatible as one group is when elementary teachers who teach more than three grades are placed with secondary teachers who also teach in the elementary school.

The question remains on how to handle the perceived inservice needs of teachers whose needs vary according to the number of years

of teaching experience. Should teachers who have 10-20 years of teaching experience be placed in a group because of their priority listing of their needs which appear to be somewhat different from the other groupings of teachers under study? Why is it that the teachers with 10-20 years of teaching experience as a group do not rate the Integration of Faith, Learning, and Practice category as of prime importance? Is this an evidence of teacher burn-out or second-generational institutionalism? Were these teachers trained in non-Adventist institutions where the Integration of Faith, Learning, and Practice did not receive high priority. Could it perhaps be that teachers in that category passed through Seventh-day Adventist schools at a time when the emphasis on Integration of Faith, Learning, and Practice was still comparatively dormant?

Even the apparent emphasis on student self-development instead of teacher self-development may not point to a selflessness but simply a perception on the part of the teachers that they are tired of inservice programs and are qualified enough. It could also evidence a perception on the part of the teachers that to help students in this self-development is indeed a part of Integration of Faith, Learning, and Practice at another Christian activity level. Another aspect of this problem is the teachers in the secondary school who feel a desire for self development when they become aware of the greater demands on knowledge and background when dealing with the more mature students or the elementary teachers with more than six years of experience who become aware of the need to be updated. This same phenomena is evidenced among the elementary teachers of grades 6-8.

None of the above questions were persued in this study but they are referred to here in an attempt to indicate that firm conclusions on the basis of the facts presented would be nothing but simplistic reasoning. To draw conclusions for other Seventh-day Adventist teachers groups in the United States of America on the basis of the findings of this study when definitive answers to the questions raised have not been obtained, would be concluding too much. It can be safely concluded from the research that currently these findings do constitute a reliable basis for planning inservice programs. However, these programs must be flexible and have provisions for meeting the multi-faceted perceived needs of the teachers of the Lake Union Conference. Because the findings of this study have given evidence that principal-teachers have different perceived needs, the study gives validity to the research from the literature that inservice programs should not be planned unilaterally by the administrators, but should be a joint and cooperative effort between teachers and administrators.

Because a large percentage of teachers perceive a need for inservice programs that will assist with the implementation of integration of faith, learning, and practice, the universities should examine their curriculum and be sure that the teacher education courses provide adequate experiences that can be used in classroom for the implementation of faith, learning, and practice.

This study did not attempt to discover to what extent the current inservice programs of the Lake Union Conference of Seventh-day Adventists actually met the perceived inservice needs of its teachers.

It appears that the instrument designed by Ingersoll contains items in the Non-factor Related category that could be placed in other categories. This may have masked the real category that a teacher might have selected as representing their particular need priority. While this may not change the findings of the study, it might become critical when teachers assist in pinpointing the areas needed for inservice. Perhaps, this highlights the importance of an objective instrument for assessing teachers' perceived needs.

Because a teacher's perceived needs assessment are but one aspect of the whole matter of inservice education, the findings of this study should not be used exclusively for planning inservice programs for the Lake Union Conference of Seventh-day Adventists.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. That the Lake Union Conference use the findings of this study as a basis for planning their future inservice educational programs on the following basis:

- (a) Use the findings of this study as one component in their total inservice program planning keeping in mind the need for determining the perceived needs of administration, the constituency, the parents, the students, and the educational fraternity among Adventists and elsewhere, particularly in the region of the Lake Union Conference.

- (b) Make their own determination and evaluation of the patterns of need priorities as evidenced among the teachers

of the Lake Union Conference.

(c) Establish practical inservice educational programs for specific and identified target teacher groups that have been jointly planned by administrators and recognized expert classroom teachers.

(d) Build into the inservice education programs a flexibility that will allow for a broad, multi-faceted program to address the various nuances of the perceived inservice needs of the teachers in the Lake Union Conference.

(e) Construct, upon recommendation of the joint committee, inservice education programs having the elements of the Integration of Faith, Learning, and Practice which would place greater emphasis on awareness, understanding, self-renewal, and personal commitment while stressing practical methods of implementation of the integration of faith and learning programs.

2. That similar studies should be conducted in each of the other Union Conferences of North America to discover the specific perceived inservice needs of each Union Conference's teachers and to determine if a general pattern exists among the teachers employed by the Seventh-day Adventist Church of North America.

3. That specific studies should be conducted and instruments developed to discover the exact reason for the Lake Union Conference teachers' perceived need in the area of Integration of Faith, Learning, and Practice.

4. That specific studies should be undertaken and instruments developed to determine why teachers with 11-20 years of

teaching experience do not put such a high priority on Integration of Faith, Learning, and Practice.

5. That a specific study be undertaken to determine the nature of the inservice program of the Lake Union Conference over the past five years and to what extent they had been successful in catering to the present perceive inservice needs of teachers in the Lake Union Conference.

6. That Andrews University give study to the matter of Integration of Faith, Learning, and Practice to determine to what extent prospective teachers are exposed to its concepts as well as the modes for successfully implementing an integration of faith and learning programs. Furthermore, that the university try to determine the extent to which it has had success in orienting a prospective teacher to the task that lies ahead in the area of Integration of Faith, Learning, and Practice.

7. That studies be initiated that will assist in further refining Ingersoll's instrument for assessing the perceived inservice needs for teachers in the Seventh-day Adventist schools.

8. That the findings of this study be treated statistically to discover more accurately its verdicts and reliability.

9. That further inservice assessments be conducted which would include the non-teaching principals, assistant superintendents, and administration in an effort to also ascertain the types of inservice programs that may compliment the perceived needs of the teachers.

A P P E N D I C E S

APPENDIX A

LAKE UNION CONFERENCE INSERVICE
ASSESSMENT INSTRUMENT

Lake Union Conference Inservice Assessment

This is an inservice assessment that is being used in the planning of some of next year's inservice activities. The assessment consists of a number of generally recognized areas in which teachers could be helped through inservice education.

To aid in the decision making, the following information is needed, none of which will violate your anonymity.

1. In rows 1 and 2 of the box marked Code 1, please darken in the two columns that would indicate your years of teaching experience. Please use a two digit number. If your number of years is less than ten (10), place a 0 in row 1 (e.g., 05 years).

CODE 1	
1	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
2	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
3	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
4	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

2. In row 5 of Code 2, please indicate the grade level at which you teach - choose the appropriate number.

0 Principal	5 Grades K-5
1 Grades K-2	6 Grades 6-12
2 Grades 3-5	7 Grades K-12
3 Grades 6-8	8 Grades K-8
4 Grades 9-12	9 some other combination

CODE 2	
5	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
6	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
7	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
8	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

3. In rows 9 and 10 of Code 3, please indicate your subject matter or content area. If you teach in more than one area mark your second area in rows 11 and 12:

00 Elementary, General	11 Physical Education
01 Art	12 Principal
02 Bible	13 Reading
03 Business Education	14 Science
04 Counselor	15 Foreign Language
05 English	16 Social Services
06 Home Economics	17 Social Studies
07 Industrial Arts	18 Speech and Hearing
08 Librarian	19 Vocational Education
09 Mathematics	20 Other, please specify below Code 3
10 Music	

CODE 3	
9	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
10	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
11	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
12	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

4. In row 13 of Code 4, please indicate your conference:

1 Indiana
2 Illinois
3 Lake Region
4 Michigan
5 Wisconsin

CODE 4	
13	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
14	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
15	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9
16	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

DIRECTIONS:

Please read each item and decide whether or not it constitutes an area of need for yourself. Each statement defines an area of need. Mark with pencil the degree to which you agree or disagree with each as an area in which you feel you could use some training. If you strongly disagree (SD) that you have a need for skill training in that area mark SD (or column C); if you disagree with the statement as an area of need, mark (D); if you are uncertain mark (U); if you agree that the item reflects an area in which you need training, mark (A); and if you strongly agree mark (SA).

THERE IS A NEED FOR SKILL TRAINING IN

1. Diagnosing basic learning difficulties
2. Constructing and using tests for evaluating academic progress
3. Identifying student disabilities that need referral or special remedial work
4. Identifying student attitudes in order to better relate to problems
5. Establishing appropriate performance standards
6. Involving students in self-evaluation
7. Teacher-pupil verbal interaction
8. Deciding what teaching technique is best for a particular intended outcome
9. Developing the use of the computer in the classroom
10. Planning teaching activities with other teachers or administrators
11. Creating useful remedial materials
12. Evaluating instruction/instructional design
13. Motivating students to learn on their own
14. Keeping abreast of developments in your own subject matter area
15. Selecting and developing materials activities appropriate for individualized instruction
16. Implementing and supervising individualized instruction
17. Using questioning procedures that promote discussion
18. Utilization of audio-visual equipment and other mechanical aids
19. Gearing instruction to problem solving
20. General presentation of information and directions
21. Providing for reinforcement
22. Deciding on appropriate pupil grouping procedures for instruction

	STRONGLY DISAGREE					DISAGREE					UNDECIDED					AGREE					STRONGLY AGREE				
	SD	D	U	A	SA	SD	D	U	A	SA	SD	D	U	A	SA	SD	D	U	A	SA	SD	D	U	A	SA
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... Developed at the National Center for the Development of Training Materials in Teacher Education
Permission for modification granted by test designer
INDIANA UNIVERSITY BUREAU OF EDUCATIONAL STUDIES AND TESTING

APPENDIX B

PERMISSION LETTER FROM LAKE UNION CONFERENCE
EDUCATION DEPARTMENT

Lake Union
Conference of
Seventh-day
Adventists

September 7, 1982

Mrs. Hazel Wright
129 South Maplewood
Berrien Springs, MI 49103

Dear Mrs. Wright:

This is to put in writing the action of the Lake Union educational administrators concerning your research request.

In their meeting on August 16 the available principals and superintendents voted to approve your request. Enclosed is a copy of the signed approval form.

We wish you much success and satisfaction in your research and also in your doctoral dissertation.

Most sincerely,

W. E. Minder
Director
OFFICE OF EDUCATION

aa
Encl.

APPENDIX C

INTRODUCTORY LETTER FOR ALL ELEMENTARY TEACHERS

129 S. Maplewood Drive
Berrien Springs, Michigan 49103
August 18, 1982

Dear Fellow Teachers,

On August 16, 1982, the Lake Union Conference educational administrators approved my request to conduct research in the Lake Union for my dissertation. The research will be addressing the teachers's perceived inservice needs. Research shows that inservice becomes more effective when the participants and administrators plan the activities together. Thus the enclosed assessment has evolved.

Please take a few minutes to fill out the enclosed instrument as accurately as possible.

May the Lord bless you as you continue to serve Him.

Sincerely,

Mrs. Hazel Wright

APPENDIX D

INTRODUCTORY LETTER TO LAKE REGION
CONFERENCE TEACHERS

129 S. Maplewood Drive
Berrien Springs, Michigan 49103
November 8, 1982

Dear Fellow Teachers,

On August 16, 1982, the Lake Union Conference educational administrators approved my request to conduct research in the Lake Union for my dissertation. The request is assessing the teacher's perceived inservice needs. Research shows that inservice becomes more effective when the participants and administrators plan the activities together. Thus the enclosed assessment has evolved.

Please take a few minutes to fill out the enclosed instrument and return it in the self-addressed stamped envelope.

May the Lord bless you as you continue to serve Him.

Sincerely,

A handwritten signature in cursive script, appearing to read "Hazel Wright".

Mrs. Hazel Wright

APPENDIX E

LETTER TO EDUCATIONAL SUPERINTENDENT OF
THE LAKE REGION CONFERENCE

129 South Maplewood Drive
Berrien Springs, Michigan 49103
November 28, 1982

Elder Reginald D. Barnes
Lake Region Conference of Seventh-day Adventist
8517 South State Street
Chicago, Illinois 60619

Dear Elder Barnes:

In accordance with our phone conversation, enclosed please find a copy of the Inservice Assessment instrument, the acceptance of the research request by the Lake Union Educational Committee and the appropriate signed Research Approval form from Andrews University.

To enhance the research being conducted, each educational superintendent has had an active part in distributing and collecting the instrument at their teacher's convention. Since it was not possible for you to distribute the instrument to your teachers at the Lake Region Teacher's Convention, Elder Minder suggested that it would be nice for you to write a letter of support and a letter of encouragement to the teachers to return the completed instrument as soon as possible.

Wishing you God's blessing, I remain

A handwritten signature in cursive script that reads "Hazel Wright". The signature is written in dark ink and is positioned above the printed name.

Mrs. Hazel Wright

APPENDIX F

REMINDER LETTER TO LAKE REGION
CONFERENCE TEACHERS

129 S. Maplewood Drive
Berrien Springs, Michigan 49103
December 5, 1982

Dear Fellow Teachers,

On November 8, 1982, I sent you a research instrument which would assess your perceived inservice needs. Research shows that inservice programs become more effective when the participants and administrators plan the activities together.

Todate, very few of the marked instruments have been returned. Some of you were very prompt, and this is greatly appreciated. If you have not answered the questionnaire, please take a few minutes and put down your responses, and using the self-addressed stamped envelope, send it back to me.

I appreciate your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Hazel Wright". The signature is written in dark ink and is positioned above the printed name.

Hazel Wright

APPENDIX G

RAW DATA RESPONSES FROM K-12 TEACHERS

RAW DATA RESPONSES FROM K-12 TEACHERS

	SD	D	U	A	SA	Rank Order	Weighted Score
1. Diagnosing basic learning difficulties	8	27	30	151	73	9	1121
2. Constructing and using tests for evaluating academic progress	14	74	39	129	32	37	956
3. Identifying student disabilities that need referral or special remedial work	7	44	41	130	67	13	1073
4. Identifying student attitudes in order to better relate to problems	12	55	46	130	46	28	1010
5. Establishing appropriate performance standards	10	67	65	120	27	38	954
6. Involving students in self-evaluation	12	49	51	144	33	29	1004
7. Teacher-pupil verbal interaction	24	77	52	111	25	44	903
8. Deciding what teaching technique is best for a particular intended outcome	11	58	58	135	27	35	976
9. Developing the use of the computer in the classroom	11	23	58	88	109	8	1128
10. Planning teaching activities with other teachers or administrators	11	63	52	117	46	31	991
11. Creating useful remedial materials	9	48	42	125	65	17	1056
12. Evaluating instruction/instructional design	6	55	77	124	27	34	978
13. Motivating students to learn on their own	6	25	21	131	106	5	1173
14. Keeping abreast of developments in your own subject matter area	6	44	33	118	88	10	1105
15. Selecting and developing materials activities appropriate for individualized instruction	8	38	45	142	56	14	1067

	SD	D	U	A	SA	Rank Order	Weighted Score
16. Implementing and supervising individualized instruction	10	39	49	141	50	19	1049
17. Using questioning procedures that promote discussion	14	57	38	127	53	26	1015
18. Utilization of audio-visual equipment and other mechanical aids	22	71	45	113	38	42	941
19. Gearing instruction to problem solving	6	45	45	156	37	20	1040
20. General presentation of information and directions	34	106	59	76	14	46	797
21. Providing for reinforcement	14	69	61	112	33	40	948
22. Deciding on appropriate pupil grouping procedures for instruction	19	85	62	96	27	45	894
23. Constructively using evaluation in helping student progress	6	39	54	147	43	18	1049
24. Managing classroom affairs in order to get maximum benefit from supervising, aids, tutors, etc.	11	63	50	119	46	30	993
25. Knowing where to refer student problems beyond what can be handled by the teacher	18	61	45	111	54	32	989
26. Useful methods of classroom discipline and when to use them	15	50	26	122	76	16	1061
27. Maintaining classroom control without appearing as an ogre to the students	17	61	31	106	74	21	1019

	SD	D	U	A	SA	Rank Order	Weighted Score
28. Communicating and interacting with parents	16	63	29	118	63	25	1016
29. Counselling and conferring with students	13	63	29	130	54	24	1016
30. Involving others in the school program	10	40	63	143	33	23	1016
31. Developing a personal self-evaluation method	9	51	56	125	48	22	1019
32. Developing a broad acceptance of self	19	50	63	98	50	36	968
33. Selecting and specifying performance goals and objectives	16	61	65	119	28	39	949
34. Developing a capacity of accepting others' feelings	19	73	50	109	38	41	941
35. Facilitating pupil self-concept and worth	9	39	22	150	69	11	1098
36. Facilitating pupil social interaction	10	60	59	127	33	33	980
37. Facilitating development of pupil responsibility	11	38	37	133	70	12	1080
38. Stimulating growth of pupil attitudes and values	8	29	23	146	83	6	1134
39. Instilling in the student the will to learn on his own initiative	8	22	20	124	115	2	1183
40. Developing or modifying instructional procedures to suit your own strengths	8	53	56	130	42	27	1012
41. Identifying the gifted and talented students	18	68	62	112	29	43	933
42. Developing a better understanding of the theory of integrating faith, learning, and practice and what makes it work	6	30	39	120	94	7	1133

	SD	D	U	A	SA	Rank Order	Weighted Score
43. Knowing how to achieve faith, learning and practice from the curriculum through written objectives and evaluating results	13	38	44	127	67	15	1064
44. Constructing and implementing a Christian witness program for students and teachers together	6	19	30	125	109	3	1179
45. Transforming faith into action--by vicarious experience--developing Christian values and attitudes	6	16	30	137	100	4	1176
46. Making Bible instruction more applicable to everyday life	6	22	15	110	136	1	1215

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VITA

NAME: Hazel R. Garner Wright

DATE AND PLACE OF BIRTH: July 7, 1939, Hinckley, Minnesota

UNDERGRADUATE AND GRADUATE SCHOOLS ATTENDED:

Emmanuel Missionary College, Berrien Springs, Michigan
Andrews University, Berrien Springs, Michigan
Lake Michigan College, Benton Harbor, Michigan
Western Michigan University, Kalamazoo, Michigan
Michigan State University, East Lansing, Michigan

DEGREES AWARDED:

1971 Bachelor of Science
Andrews University

1974 Master of Arts
Andrews University

1983 Doctor of Education
Andrews University

EXPERIENCE:

1959-1962 Secretary, Laboratory Equipment Corporation
St. Joseph, Michigan

1965-1968 Secretary, Laboratory Equipment Corporation
St. Joseph, Michigan

1971-1973 Physical Education Teacher, Sylvester Elementary
School, Berrien Springs, Michigan

1973-1975 Sixth Grade Teacher, Sylvester Elementary School
Berrien Springs, Michigan

1975-1983 Reading Specialist, Berrien Springs Middle School
Berrien Springs, Michigan

1978-1982 Adjunct Instructor, Andrews University
Berrien Springs, Michigan

1983 Director, Berrien Springs Middle School Summer
School, Berrien Springs, Michigan