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SPECIFIC AREAS OF DISAGREEMENT AND AGREEMENT IN THE PERCEPTIONS OF TEACHERS AND ADMINISTRATORS CONCERNING TEACHER IN-SERVICE EDUCATION

by
Mary Lou Elizabeth Durbin

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education)
in The University of Michigan
1977

Doctoral Committee:

Assistant Professor George E. Mills, Co-Chairman
Professor Leonard F. Sain, Co-Chairman
Professor Sydney Bernard
Professor Finley Carpenter
Professor Curtis Van Voorhees

Dedicated to Students and
Their Teachers

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CHAPTER I

THE PROBLEM

INTRODUCTION

Teacher in-service education has, since its inception in the mid-1800's, been recognized as a vehicle instrumental in conveying to school personnel new instructional techniques and approaches. Currently, however, this educational medium is severely criticized. In-service education, considered potentially valuable, is rejected because it seems operationally impractical.

Escalated effort to plan and implement more comprehensive programs of in-service education will not alone solve this critical problem. The goals and objectives of in-service education activities must be closely centered around the defined needs of the school personnel who seek to benefit from the participation. A problem results from the apparently undefined and unshared perceptions of teachers and administrators concerning teacher-perceived needs in in-service education. The lack of understanding between the two

groups hinders the occurrence of needed change in in-service education practices.

This study is an investigation to determine the amount of agreement between teachers and administrators concerning teacher-perceived needs in in-service education. The assumptions involved in this investigation are supported by a perceptual theory foundation related to research in social science.

The general development of human perception affects the perceptions of the teachers and administrators. Each person's perceptual growth is individualized, unique, and personal. According to Combs and Snygg,[1] perceptual development begins with the child's family. The family transmits the first cultural influences, establishing a pattern that determines how the person will continue to perceive for the rest of his life. Each individual perceives through his own concept of "reality."

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[1]Arthur W. Combs and Donald Snygg, Individual Behavior: A Perceptual Approach to Behavior (New York: Harper and Brothers, 1949), pp. 92-93.

Cantril[1] describes the personal characteristics of perception as the process utilized by man to make his purposive behavior more satisfying. This behavior, Cantril asserts, always stems from and is rooted in a personal behavior center.[2]

Many variables continue to influence the individual's perception through new experiences, keeping it in a state of continuous change, according to Combs and Snygg.[3] These authors explain that each new experience influences perception, and the perception then changes the perceptual field. This process continues throughout a person's life.

Teachers and administrators have individually acquired their unique perceptual determinant patterns through varied influences. They have been exposed to

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[1]Hadley Cantril, "Perception and Interpersonal Relations," in Concepts and Controversy in Organizational Behavior, (Ed.), Walter Nord (California: Goodyear, 1972), pp. 26-35.

[2]Ibid., p. 26.

[3]Combs and Snygg, Individual Behavior, p. 98.

certain generally similar variables, such as educational training and teaching experience and they have different experiential backgrounds. These factors that influence each perceptual field are associated with the similar and divergent perceptions of teachers and administrators.

Roles in which individuals function in organizations potentially influence their perceptions. Strong role identification may polarize the perceptions of the teachers and administrators. Each group may present a different concept of the "reality" of needs within the school.

A process for role-influenced perception through selectivity is presented by Dearborn and Simon.[1] This team described effects of selective perception upon the behavior of individuals in industrial organizations. They researched the organizational theory hypothesis that each executive will perceive those aspects of a situation relating specifically to the goals and activities of his department. They applied to

[1]DeWitt C. Dearborn and Herbert A. Simon, "Selective Perception: A Note on the Departmental Identification of Executives," in Concepts and Controversy in Organizational Behavior, (Ed.), Walter Nord (Cal: Goodyear, 1972), pp. 36-39.

organizational phenomena the generalization that through the selective process of perception, the individual perceives what he is "ready" to perceive. Dearborn and Simon, working with a group of industrial executives, supported the hypothesis by determining that there was a relationship between the "most important problem" mentioned and each individual's departmental affiliation.[1]

This generalization applies to the way teachers and administrators may perceive needs as influenced by their roles. Each group is ready to perceive within role boundaries of reality. The school principal who must relate directly to concerns of the total teaching staff, students, parents, other school personnel, central office administration, and the general school community, logically perceived differently from teachers who relate more directly to their individual classrooms, particular students, and parents. Differing roles and related responsibilities have determining effects upon the perceptions of the persons who work within these roles. These factors possibly cause differences relative to the perceived needs and priorities set by

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[1] Ibid., p. 38.

teachers and administrators.

Theoretically, however, the degree to which certain other factors, such as needs and similar backgrounds have been experienced or are shared by teachers and administrators, may help bridge the perceptual distance between the two groups. Dearborn and Simon[1] also describe how motivational mechanisms mingle with selective perception, supporting the concept that shared motivation, knowledge, experiences, and other variables are associated with the agreement in the perceptions of teachers and administrators.

The fact that teachers and administrators continue to share the need and responsibility for their school in-service education program planning and implementation provides a positive incentive for them to identify and solve their problems. Both groups recognize the value of continuing the potential source of innovative techniques and resources offered through in-service education.

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[1] Ibid., p. 36.

The initiation of in-service education occurred through effort to provide for basic educational needs. Tyler[1] describes how the commencement of in-service education occurred when teachers with limited education needed remedial review of basic academic facts and skills. He summarizes as follows:

> 1. Teachers still view in-service education as a means of increasing communication and reducing the sense of loneliness and isolation in teaching.
>
> In-service education is still a major way of achieving social mobility in the educational profession.
>
> In-service education continues to be an evenue by which an individual's personal needs and interests can be served.[2]

The existing need for in-service education has remained constant and relatively unchanged in purpose. Tyler reports:

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[1]Ralph W. Tyler, "In-Service Education of Teachers: A Look at the Past and Future," in Improving In-Service Education, (Ed.), Louis J. Rubin (Boston: Allyn and Bacon, Inc., 1971).

[2]Ibid., p. 14.

> Actually, the only new major purpose of in-service education since 1930 is to aid the schools in implementing new educational programs by helping teachers acquire understanding, skills, and attitudes essential to the roles they are to play in the new programs.[1]

A persistent problem still remains in that the teachers and administrators share their disenchantment with the current lack of visible change through in-service education, in spite of all of the effort to promote it. They raise the question, "Does this really make a difference and will it work in the classroom?"

THE PROBLEM IN PERCEPTUAL CONCEPT PERSPECTIVE

The importance of shared awareness between teachers and administrators concerning the effects of their roles upon their perceptions is emphasized in literature and research relating to formal organizational behavior. According to Nord,[2] interpersonal problems rooted in

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[1] Ibid.

[2] Walter Nord, Editor, Concepts and Controversy in Organizational Behavior (California: Goodyear, 1972), p. 23.

perception are a major concern to all managers and supervisors who must deal with possible distortions and perceptual defenses. This may be applied to the school organization. Lack of awareness of differences in the perceptions of teachers and administrators, causing incorrect assumptions, adversely affects the school as an organization.

The literature relating to perception in organizational behavior suggests implications for the school teacher and administrator to consider in attempting to understand their perceptual differences. Griffiths explains:

> The administrator works with groups or with individuals with a group referrent, not with individuals as such. An administrator interacts with others in the organization primarily in terms of the groups to which others belong. The school administrator's perception of X is of a member of a teaching group rather than Miss X as a unique individual. The same is true of his perception of other administrators in the organization.

> Subordinates rebel against this perception of the administrator and the rebellion has taken the form of strong unions in industry and the strengthening of teachers' organizations in education.[1]

The power of the administrator's role in relation to the teaching personnel may alienate the perceptions of the two educator groups. The Guba Model of Internal Administrative Relationships[2] presents power as the actualizing force affecting the role dimensions of those who function within the organization. According to Guba, the role and person dimensions are influenced by conflict, causing alienating forces that ultimately influence the behvaior and goal accomplishment effected through both dimensions. The model shows, however, that the disparity may be tempered through the integration of the goals and values involved in both the role and person dimensions of the organization.[3]

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[1]Daniel E. Griffiths, "Administration as Decision-Making," in Organizations and Human Behavior: Focus on Schools (Eds.), Fred D. Carver and Thomas J. Sergiovanni (New York: McGraw-Hill Book Company, 1969), p. 139.

[2]Egon G. Guba, "Research in Internal Administration: What Do We Know?" in Administrative Theory As a Guide to Action (Eds.), R. F. Campbell and J. M. Lipham (Chicago: Midwest Administration Center, University of Chicago, 1960), Chapter vii, Cited by Roald F. Campbell et al, The Organization and Control of American Schools, 2nd ed. (Columbus, Ohio: Charles E. Merrill Publishing Co., 1970), pp. 259-261.

[3]Ibid.

Campbell[1] and co-authors discuss serious implications of the Guba Model, suggesting that conflicts between the role expectations of an organization and the personal need dispositions of the personnel in the organization may have serious consequences. These authors warn:

> Indeed, if organizational demands and personal need dispositions become too disparate, the organization will cease to be productive or the members will leave the organization. To counter these alienating forces are integrating forces in the form of goals and values. If the administrator and members of his work group can agree on goals and if values they hold have much in common, organizational demands may be seen in a different context and organizational procedures may be more acceptable.[2]

Application of the Guba theory to the school as an organization suggests that the administrator's role and the need dispositions of the teachers are in conflict, with the alienating forces affecting the school organizational role dimension and the personal dimension of the teachers. The distance between the roles of

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[1]Roald F. Campbell et al., The Organization and Control of American Schools, 2nd ed. (Columbus, Ohio: Charles E. Merrill Publishing Company, 1970), pp. 259-60.

[2]Ibid.

teachers and administrators may be associated with the perceived needs for in-service education.

The sex roles of the teachers and administrators may affect the perceptions of in-service educational needs. Studies by Simpson and Simpson[1] reveal factors affecting women in occupations. One of these identified factors, "women's primary attachment to the family role,"[2] logically affects the perception of women educators concerning in-service education. A conflict between home and job, curtailing available time outside the school day, may influence a woman educator's perception of herself as a leader or participant in in-service educational activities. Her availability may be limited. More alternatives in in-service education are now offered during the school day, but practically speaking, such

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[1]Simpson and Simpson, "Women and Bureaucracy in the Semi-Professions," in The Semi-Professions and Their Organizations: Teachers, Nurses, and Social Workers (Ed.), Amitai Etzioni (New York: The Free Press, A Division of The Macmillan Company, 1969), pp. 196-265. Cited by Donald Myers, Teacher Power--Professionalization and Collective Bargaining (Massachusetts: Lexington Books, D. C. Heath and Company, 1973), p. 68.

[2]Ibid.

leadership requires much time and planning beyond the school day. Contact of resource persons and speakers, committee meetings, and other organizational effort may not easily be accomplished during the school day. After school time needed for this planning may conflict with the family role of women.

The established occupational role of men cited by Simpson and Simpson[1] reasonably promotes their perception of themselves as available for participation and leadership in in-service education. Research by the National Education Association,[2] shows that women teachers as a group are more experienced than men, a factor that may influence the perceptions of the males and females concerning in-service educational needs.

According to research by Clarke,[3] the elementary

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[1] Ibid.

[2] National Education Association, "The Status of the American Public School Teacher," Research Bulletin, XXXV, No. 1 (February, 1957), Cited by Roald F. Cunningham et al, The Organization and Control of American Schools, 2nd ed (Columbus, Ohio: Charles E. Merrill Publishing Company, 1970), p. 277.

[3] Eunice A. Clarke et al., Women in Administrative Positions in Public Education (Philadelphia: Recruitment Leadership and Training Institute, Temple University, 1974), p. 2, Cited by Louise Bach, "Of Women, School Administration, and Discipline," Phi Delta Kappan (March, 1976), pp. 463-466.

teaching grade levels predominantly involve women; whereas, the secondary teaching levels are more evenly balanced. This suggests the possibility of variable overlap between the sex roles and teaching grade levels as influencers of the perceptions of male and female educators concerning in-service education.

The teaching grade level responsibilities of elementary, junior high and senior high school personnel may influence the perception of these educators. Variables such as the educational characteristics and needs of their student clientele may affect teacher-perceived priorities for in-service education.

Other variables are also interrelated with and affected by perception. The Bruner-Goodman studies[1] validated the acceptance of the factors of need, attitude and social pressure as significant in perception. Griffiths[2] explains that perception and communication are interrelated. Limits are set through perception

[1]J. Bruner, "Social Psychology and Perception," in Readings in Social Psychology (Ed.), E. Maccoby, T. Newcomb, and E. Hartley, 3rd ed. (New York: Holt, Rinehart and Winston, 1958), pp. 85-94. Cited by Walter Nord (Ed.), Concepts and Controversy in Organizational Behavior (California: Goodyear Publishing Company, Inc., 1958), p. 25.

[2]Griffiths, Administration As Decision-Making, pp. 144-145.

for the occurrence of communication. The limits, broad or narrow, are dependent upon the possible effort to communicate. Awareness and sharing of needs between teachers and administrators may prevent perceptual differences from limiting the communication and hindering the effort to achieve mutual goals.

Research reveals possible perceptual differences within roles. An inference may be drawn that teachers and administrators may perceive differently concerning teacher needs in in-service education. Assumptions may be made that teachers and administrators will show varying degrees of perceptual agreement and disagreement. The formulation of each individual's perceptual field and his exposure to influencing variables continuously affects his perception. Understanding concerning their possibility of agreement and disagreement should be useful to school personnel. Through research, personnel may become better informed concerning their needs and more readily equipped to solve their problems.

ASSUMPTIONS

First Assumption - The occupational roles of school teachers and administrators are associated with their perceptions of teacher needs for in-service edcuation.

Second Assumption - The sex roles of teachers and administrators are associated with their perceptions of teacher needs for in-service education.

Third Assumption - School grade levels are associated with the perceptions of teachers and administrators concerning teacher needs for in-service education.

THE PROBLEM FOR RESEARCH

A survey was conducted to determine the nature and extent of perceptual agreement and disagreement between teachers and administrators concerning teacher-perceived needs for in-service education. The primary purpose was to compare and contrast occupational roles of teachers and administrators relative to 70 measures for in-service education.

Secondary purposes were to compare and contrast: (1) male and female sex roles of teachers, administrators, and special education personnel relative to 70 measures for in-service edcuation; (2) school teaching grade levels, K-3, 4-6, 7-9, 10-12, and combined roles of administrators and special education personnel relative to 70 measures for in-service education.

The problem for research is presented in the primary question and two secondary questions.

Primary Question - What is the relationship between occupational role within the school and the nature and extent of the agreement and disagreement in the perceptions of teachers and administrators concerning teacher perceived needs for in-service education?

Secondary Questions - (1) What is the relationship between sex role, occupational role and the nature and extent of the agreement and disagreement in the perceptions of male and female teachers, male and female administrators, and male and female special education personnel as determined by their responses to 70 measures for in-service education?

(2) What is the relationship between school grade levels K-3, 4-6, 7-9, 10-12, and roles of teachers and combined roles of administrators and special education personnel and the nature and extent of agreement and disagreement in the perceptions of these educators as determined by their responses to 70 measures for in-service education?

DEFINITION OF TERMS

1. The administrators include those principals, assistant principals, coordinators or supervisors who are the immediate administrative supervisors for general or special education personnel within a public school building.

2. The teachers are elementary, junior and senior high school teachers in academic and non-academic subject areas, special education, reading and other classroom teaching assignments.

3. The in-service education areas include all knowledge and resources to be gained through in-service education workshops, staff meetings, resource persons,

and participation by teachers and administrators in sharing and leadership. These areas include information and resources pertaining to student needs, learning characteristics, instructional techniques, media skills and materials, and instructional leadership involved in the perceived needs of teachers relative to in-service education.

THE SCHOOL POPULATION AND SAMPLE

The 21 selected schools in this study represented a total of 169 high schools, 132 junior high schools and 506 elementary schools. The 21 selected schools provided 517 teachers and special education personnel and 41 administrators.

The sample was identified by using Fox's[1] cluster technique in conjunction with Leedy's[2] proportional stratified sampling design. A 5% random selection was

[1]David J. Fox, The Research Process in Education (New York: Holt, Rinehart and Winston, Inc., 1959), pp. 341-342.

[2]Paul D. Leedy, Practical Research Planning and Design (New York: Macmillan Publishing Co., Inc., 1974), pp. 103-106.

drawn from each school level. The identified school clusters included three senior high, four junior high, and fourteen elementary schools.

The final identified sample, totaling 621, included 580 teachers and special education personnel and 41 administrators.

THE DATA COLLECTING INSTRUMENT

The instrument used in this study was a multi-variable Likert-type questionnaire self-devised by this researcher. Several years' experience was involved in the preparation, refinement and use of the questionnaire through leadership activities in in-service education. Items were tried, revised and added to the instrument as it was presented to participants in workshops conducted in Michigan Public Schools. This effort yielded information concerning topics of need and interest for in-service education.

The instrument was prepared in accordance with the guidelines for the construction of the Likert Method of Summated Ratings.[1]

An original pilot test involved teachers, administrators, university personnel, and special education teachers who responded to the questionnaire. The instrument was then revised. A class in research techniques at The University of Michigan responded to the revised questionnaire. Another revision followed this experimental use of the instrument. Finally, three pilot schools in Wayne County, Michigan, involving 31 teachers and eight administrators, tested the questionnaire before its use in this research. A data analysis of the pilot test was completed. The reader may refer to the instrument in Appendix B.

THE DATA COLLECTION PROCESS

The data collection process was effected during the 1975-76 school year. Information was obtained concerning each school's policy for granting permission

[1]John W. Best, Research in Education (New Jersey: Prentice-Hall, Inc., 1959).

for the extraction of data from the school for use in research.

A copy of the instrument and an explanatory letter presenting the design and purpose of the research were submitted to each principal for approval. Group "warm up" sessions were arranged with the school personnel before the presentation of the questionnaire.

The questionnaire was presented in each school. Teachers were asked to report the strength of their felt needs for the specific topics according to the Likert-type scale. Administrators were asked to rate the measures according to their own perceptions of the teachers' perceived need of each measure for in-service education. The numerical rating key ranged from 0-4, indicating No Need, Little Need, Moderate Need, Rather Strong Need, and Very Strong Need.

THE RESEARCH DESIGN

This was a cross-sectional descriptive survey study involving parallel samples,[1] representing teachers, administrators, and special education personnel in Wayne County, Michigan. Data were collected from the 21 identified schools to describe current perceptions of needs for teacher in-service education in Wayne County, Michigan.

The primary and secondary research questions were investigated by analyzing the three independent variables, occupational roles, sex roles, and school teaching grade levels, to ascertain their relationships with the degrees of perceptual agreement and disagreement. The 70 measures for in-service education were used.

THE DEPENDENT VARIABLE

The 70 measures of the dependent variable perception were grouped in eight categories on the survey questionnaire. The categories and internal measures are

[1]Earl R. Babbie, Survey Research Methods (California: Wadsworth Publishing Company, Inc., 1973), pp. 62-66.

presented with brief rationales, as follows:

CATEGORY 1
STUDENT BEHAVIORAL CHARACTERISTICS

1. Child with behavioral problems.
2. Child with learning disabilities.
3. Bright under-achieving student.
4. Slow learner.
5. Identification of specific learning disabilities.
6. Child who daydreams.
7. Tense, anxious child.
8. Hyperactive, easily distracted child.
9. Challenging the bright student.
10. Enrichment techniques for teaching the "average" student.

The measures pertaining to the student learning disabilities, hyperactivity, behavioral problems, under-achievement, and enrichment in learning, are currently emphasized in educational research. These direct student related needs are major concerns in teaching. They are relevant to teacher use in instructional diagnosis, prescriptive teaching, and remediation.

CATEGORY 2
STUDENT LEARNING AND SOCIAL NEEDS

11. Values clarification.
12. Affective education.
13. Cognitive learning skills.
14. Psychomotor skills.
15. Educational needs of minority groups.
16. Bilingual student needs.
17. Differences in dialects or language patterns.

These skills are related to the planning of educational objectives for individual students. Current mandatory educational programs in special education relate to the cognitive, affective and psychomotor domains. Consideration of these needs is necessary in planning and programming for students. Teachers and administrators in general education are becoming more involved in instructional responsibilities for special education students through the "mainstream" effort to have every student participate in the regular school program in accordance with his potential.

Bilingual students, minority groups, and the cultural and educational needs of all are receiving more attention through research, legislation, and an intensified effort to provide the most beneficial educational plan for all. This category of measures is relevant to all educators and offers potentially needed areas of in-service education for the consideration of teachers and administrators.

CATEGORY 3
CLASSROOM TECHNIQUES

18. How to rate or assess student social skills.
19. How to determine the student's self-concept.
20. Practical techniques for use with underachievers.
21. Sources for obtaining instructional aïds and materials.
22. Knowing who may be helpful as resource persons.
23. Determining which student should be referred for special help.
24. How to make a student referral for special help.

This category was arranged to include instructional needs pertaining to all grade levels. The measures

relating to the referral of students for special help are relevant to all teachers and administrators who are responsible for the processing of such referrals.

CATEGORY 4
THE LAW AND EDUCATION

25. The law and due process rights of parents.
26. Student rights.
27. The Mandatory Special Education Law.
28. The law and teacher rights.

The legal responsibilities in education, once solely an obligation of the school administrator, are now also shared by the teacher. The greater accountability shared by teachers and administrators causes the legal aspects of education to be potential needs for in-service education.

CATEGORY 5
INSTRUCTIONAL WORKSHOP AREAS

29. Availability of specific skill tests for use in the classroom.

30. Meanings of such terms as "withdrawn," used to describe student characteristics.

31. How to administer such tests as the Slosson, Purdue Perceptual Motor Survey, Illinois Test of Psycholinguistic Abilities (ITPA), and others.

32. Evaluating instructional programs and materials.

33. Use of behavioral changing or modification techniques for pupil motivation.

34. Sources for high interest, low vocabulary reading materials.

35. Sources for free and inexpensive instructional materials.

36. How to use the results of visual and auditory perception tests to help students.

37. Teacher prepared instructional materials from scraps and inexpensive items.

38. How to recognize and what to do about possible implications of seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, and others.

39. Utilizing open space/open classroom techniques.

This category includes instructional techniques, tests for diagnosis and determination of student learning needs, behavioral modification techniques and motivational skills that relate directly to the classroom.

CATEGORY 6
SKILL MASTERY FOR MEDIA UTILIZATION

40. Use of closed circuit television in the classroom.

41. Use of the tape recorder.

42. Role playing and dramatization as aids to learning.

43. Microteaching skills.

44. The camera as a teaching aid.

45. Use of film and filmstrip projectors.

46. Making slides.

47. Use of the slide projector.

48. Use of the overhead projector and transparencies.

49. Video taping.

50. Use of reference materials.

51. Mounting materials (lifts, dry mounting, laminating).

Audio-visual aids in teaching have been heavily emphasized in teacher education since the 1940's. The nomenclature and operation of the projectors were earlier components of college courses. The trend toward media-centered libraries, instructional materials centers, and the arrival of media specialists and consultants now offer assistance to classroom teachers. Students also help as trained projectionists.

There has been, however, a strong current emphasis on technical and specialized skill development through the use of media equipment. This includes video taping, use of calculators, cassette tape recorders, and many more media materials requiring more complex skills and competencies in application to instructional purposes. Classroom use of audio-visual equipment and techniques involves basic instructional goals, as well as enrichment and reinforcement purposes. Skill development and practice by students are involved. There is a greater emphasis on "getting the media into the hands of the kids," according to consultant-trainers in a recent workshop sponsored by the Special Education Department of the Michigan Department of Education. The media skills

included in this category were provided to assess current perceptions of their needs in teacher in-service education.

CATEGORY 7
LEADERSHIP SKILLS

52. Evaluation of program innovations.

53. Group consensus decision-making skills.

54. Dealing with the "hidden agenda."

55. How to conduct an Educational Planning and Placement Committee Meeting (EPPC).

56. Brainstorming, fishbowling, and other discussion and sharing skills.

57. Transactional analysis skills.

58. Working with the supervising teacher aides.

59. Involvement of paraprofessionals.

60. Leading parent education programs.

61. Administrative leadership style and skill development.

These skills were included to investigate perceived needs for leadership techniques involved in teaching and the involvement of instructional aides, paraprofessionals, and parents in educational activities. These measures

are especially relevant to leadership in special education. Teachers in general education also participate in the planning conferences concerning special education students who attend regular school classes. These skills are relevant for the consideration of all teachers and administrators.

CATEGORY 8
SELF-ROLE PERCEPTION FOR IN-SERVICE EDUCATION

62. Change agent leadership skills.
63. Initiator leadership skills.
64. Participatory leadership skills.
65. Consultant skills in leadership.
66. Conducting in-service education workshops.
67. Leadership in sharing instructional materials and techniques.
68. In-service leadership concerning student learning needs.
69. Building individual and group potential.
70. Finding people/materials to conduct in-service activities.

The self-role topics were included in consideration of the current emphasis on more autonomy, choice and involvement of teachers in the leadership of their own professional activities. These measures were selected to assess the perceptions of teachers and administrators concerning the needs of teachers for skills in leadership and participation in the planning and initiation of their own in-service educational activities.

RESEARCH PROCEDURES

The Hotelling's T-Square (T^2) Statistic was used in the investigation of the primary research question to test the significance of the eight categories of measures for in-service education. The T-Square identified the statistically significant and non-statistically significant categories, revealing those that showed perceptual disagreement and agreement between the teachers and administrators. The Student's t-test was then used to identify the internal measures that were found statistically significant or non-statistically significant, showing perceptual disagreement and agreement within each of the eight categories. The t-tests

were used to estimate the probability of mean differences in order to decide whether or not any given pair of means could be said to come from the same or different populations. Significant differences were interpreted to mean that obtained differences were probably not a mere matter of chance.

The Chi-Square Test of Independence was used in the investigations of the two secondary research questions. The Chi-Square Test was used to test the independence of the responses of the participants to the 70 measures for in-service education as affected the the two independent variables, sex roles and occupational roles and school grade levels. The underlying assumption of the Chi-Square Test of Independence, as applied to this investigation, is that there is no relationship between the roles of the participants and the responses to the topics for in-service education. The perceptions of the participants are assumed independent of the roles. Statistical significance suggests that response patterns are related to the sorting variables--independent variables. Non-statistically significant measures present varying

degrees of perceptual agreement between the groups.

According to Harris,[1] Hotelling's T-Square provides a generalization of the univariate t-test. Harris states:

> Any background variable (age, sex, socio-economic status), which we employ as a basis for sorting subjects into two different groups or for distinguishing two sub-categories of some population almost inevitably has associated with it many different other variables, so that the two groups (sub-populations) so defined, differ on a wide variety of dimensions.[2]

Harris explains that only very rarely are the effects of an experimental manipulation confined to a single behavioral manifestation.[3] This supports testing the categories of measures for in-service education and isolating the internal measures for the investigation of the primary research question.

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[1]Richard J. Harris, A Primer of Multivariate Statistics (New York: Academic Press, 1975).

[2]Ibid., p. 13

[3]Ibid.

According to Harris, the Hotelling's T-Square provides a means of testing the overall null hypothesis that the two populations from which the two groups were sampled do not differ in their means on any of the p (outcome) variables.[1] Statistical significance of certain categories shows that particular measures within the categories show differences between the means.

DATA ANALYSIS PROCESS

The following procedural steps were followed to test the statistically significant relationships of the 70 measures for in-service education and the perceptions of the teachers and administrators for the primary research question.

1. Two-way cross tabulation of Ns (numbers of teachers and administrators responding to each topic).

2. Column percentages of responses of teachers and administrators according to the five levels of need for each topic: (1) No Need, (2) Little Need, (3) Moderate Need, (4) Rather Strong Need, and (5) Very Strong Need.

3. Application of the Hotelling's T-Square Statistic to obtain a multivariate analysis of each category of measures for in-service education.

4. Application of the Student's t-test Statistic to determine the statistical significance status of each measure within each category.

5. Presentation of the research findings.

Procedural steps number one, two, and five, were followed for the two secondary research questions to investigate the independent variables, sex roles, occupational roles, and school teaching grade levels and the topics for in-service education.

The Chi-Square Test of Independence was used for the two secondary research questions, since these questions involved several populations and subgroups.

DATA HANDLING PROCEDURES

The results for the primary and secondary research questions are presented in Chapter III according to the following procedure:

1. Restatements of each research question.

2. Findings are reported in separate tables for each of the three sets of independent variables with emphasis upon the measures showing agreement and disagreement within the eight categories.

Agreement and disagreement were determined through the following processes:

1. For the primary research question, in which the Student's t-test Statistic was used, differences between the means for the teachers and administrators were computed for each of the 70 measures.

2. The difference scores were listed in rank-order.

3. The significance level of .05 was selected.

4. The levels of statistical significance for each of the 70 measures were listed in rank-order. They were established as indicating the statistical significance or non-statistical significance of the respective measures for in-service education.

The statistically significant measures were within the upper range of the rank-order of mean difference scores and the levels of significance. These measures showed the higher possible relationship between occupational role and the perceptions of need for in-service education. These measures showed strong disagreement between the teachers and administrators.

The non-statistically significant measures were within the middle and lower range of scores in rank-order. These measures showed the lower possible relationship between occupational role and the perceptions of need for in-service education. These measures were defined as showing moderate disagreement, moderate

agreement and strong agreement, in accordance with their levels of significance. The procedure for these definitions is explained in Chapter III, as the three data tables are presented.

5. For the secondary research questions, in which the Chi-Square Test of Independence was used, the contingency coefficients were listed in rank order. The same process as was used for the primary research question was then used to establish the agreement and disagreement between the groups investigated for the two secondary research questions.

The strength of the need for in-service education was measured as weak or strong, according to the trend of the responses on the Likert scale, as follows;

1. Weak need for in-service education was defined as any instance in which a higher percentage of respondents chose at the numerical level 0-1 (No Need and Little Need) than chose at the 3-4 level.

2. Strong need for in-service education was defined as any instance in which a higher percentage of respondents chose at the numerical level 3-4 (Rather Strong Need and Very Strong Need) than chose at the 1-2 level.

DELIMITATIONS OF THE STUDY

1. This study did not involve a comparison of the responses of departmental or central office administrators or other personnel in these departments.

2. Special Services disciplines, such as speech teachers, psychologists, social workers, or itinerant consultants, were not involved as representative groups in this study.

ETHICS

Strict anonymity was safeguarded and maintained during this study. Approval of the use of human subjects in the study was obtained through the office of Dr. Rudolph B. Schmerl, Assistant Dean for Research and

Chairman of the School of Education Research Committee at The University of Michigan. Dr. Schmerl's committee reviewed the proposal and the instrument. The research investigation was approved as meeting policy requirements, and the decision was made that human subjects would not be at a risk.

The results of this study did not identify individuals or schools. The findings are reported concerning the participants in relation to the variables investigated. The promises of the researcher will be fulfilled in follow-up of the completed study. This involves sharing the research findings with the participating schools.

CHAPTER II

REVIEW OF RELATED LITERATURE

FORMAL ORGANIZATIONS AND THEORIES

This study of the agreement and difference in the perceptions of persons assuming various roles in the school as an organization requires an initial consideration of formal organizations generally and their related theories.

The literature presents influences and effects of roles upon the perceptions of individuals in the educational system as well as in the formal organizations. The educational establishment may not be as comprehensive and formal in structure as the industrial organizations, but it does contain departments and operates with a hierarchical control pattern.[1] Its formal structure involves various roles that may affect the perceptions

[1]Max G. Abbott, "Hierarchical Impediments to Innovations in Educational Organizations," in Organizations and Human Behavior: Focus on Schools (Eds.), Fred Carver and Thomas Sergiovanni (New York: McGraw-Hill Book Company, 1969), p. 45.

of individuals within the school organization.

Certain characteristics of the organization and control pattern of the educational establishment have been cited as adversely affecting personnel morale, communication and innovative effort. Abbott cites the deleterious effects of hierarchical prerogatives of administrative officials upon the introduction of innovations and change.[1] Abbott cites these two examples:

1. The hierarchical definition of roles, even in an educational bureaucracy, tends to emphasize obligations when referring to subordinate roles and rights when referring to subordinate roles.

2. Specific superordinate rights may inhibit innovation, specifically the right to veto or affirm, control communication, and require deference from subordinates.[2]

Departmentalization is an example of potential organizational inhibiting forces impinging upon the perceptions of school personnel. This causes separation,

[1] Ibid., p. 46.

[2] Ibid.

isolation, difficulties in communication, and inhibiting effects upon the sharing of perceptions.

School teaching grade levels cause isolation. Teachers frequently express a need to communicate with others who share their teaching grade levels or subject assignments within their own school buildings as well as other schools within the district. In-service education preferences of teachers, expressed through interviews conducted in 1976 by a Citizens' Advisory Committee within a Wayne County School, presented many needs and concerns relating to communication. Teachers wanted inter-school cooperation within the district with opportunities to observe classroom activities in other schools. An advisory committee for teacher in-service education was recommended with sufficient personnel representation to consider these needs.

ORGANIZATIONAL THEORIES

SCIENTIFIC MANAGEMENT

Scientific management theory resulted from industrial America's search for greater efficiency and effectiveness in organizations and more profit. Frederick Taylor[1] swept the country into the efficiency movement in 1910. According to Callahan,[2] an American tragedy occurred in the educational system when the schools became involved in this movement between 1910 and 1928. Callahan criticizes the wholesale application of business principles to education. Callahan points out that balance should have been maintained by careful use and application of business methods.[3]

Etzioni explains the emphasis of the Scientific Management theory:

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[1]Frederick Taylor, The Principles of Scientific Management (New York, 1911), p. 8. Cited by Raymond E. Callahan, Education and the Cult of Efficiency (Chicago: The University of Chicago Press, 1962), pp. 42.43.

[2]Raymond E. Callahan, Education and the Cult of Efficiency (Chicago: The University of Chicago Press, 1962), p. 244.

[3]Ibid.

> Workers were seen as motivated by economic rewards, and the organization was characterized by a clearly defined division of labor with a highly specialized personnel and by a distinct hierarchy of authority.[1]

HUMAN RELATIONS THEORY

The Human Relations theory, according to Etzioni, is in contrast to the Scientific Management theory. Etzioni explains its principles:

> Human relations emphasized the emotional, unplanned, non-rational elements in organizational behavior. It discovered the significance of friendship and social groupings of workers for the organization. It also pointed out the importance of leadership in the organization and of emotional communication and participation.[2]

STRUCTURALIST THEORY

The Structuralists, Etzioni indicates,[3] perceive some inevitable and not always undesirable conflicts

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[1] Amitai Etzioni, Modern Organizations (New Jersey: Prentice-Hall, Inc., 1946), p. 20.

[2] Ibid.

[3] Ibid., p. 21.

between the worker and the organization. According to Etzioni, this approach relates the formal and informal organization concepts.

LEADERSHIP STYLES

Conclusions formed from research involving leadership styles have also affected the school organization. The Lippitt and White[1] study, "Leadership and Group Life," was a major one of a series initiated in the 1930's under the leadership of Kurt Lewin. Three types of leaders - authoritarian, democratic, and laissez-faire - were assigned to direct children in arts and crafts work in four different youth clubs. Major differences were found as follows:

1. The group that worked under the democratic leadership produced less than those who were authoritarian directed, but the quality of their work was higher.

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[1]R. Lippitt and R. W. White, "An Experimental Study of Leadership and Group Life," in Readings in Social Psychology (Eds.), G. E. Swanson, T. M. Newcomb, and E. L. Hartley (New York: Holt, 1952), pp. 340-355. Cited by Amitzi Etzioni, Modern Organizations (New Jersey: Prentice-Hall, Inc., 1964), p. 37.

Relations were warm and friendly and the members worked well in groups. Independent work continued when the leader left the room.

2. The group working under the laissez-faire leadership did not do well on either achievement or group cooperation. There was much frustration among the members.

3. Those working under the authoritarian leadership showed both aggressive and apathetic reactions. There was scapegoating of other children among the group.

The results of the Lippitt and White study have frequently been cited and used in teacher training courses as significant to classroom management and structure.

Research by Coch and French[1] showed that democratic leadership has a positive effect on workers' attitudes toward their jobs. Currently, the rigid school leadership structures that are considered as a threat to the

[1]L. Coch and J.R.P. French, Jr., "Overcoming Resistance to Change," in Readings in Social Psychology (Eds.), G. E. Swanson, T. M. Newcomb, and E. L. Hartley (New York: Holt, 1952), pp. 474-490. Cited by Amitai Etzioni, Modern Organizations (New Jersey: Prentice-Hall, Inc.), p. 37.

autonomy of school personnel are being criticized.

Taggart[1] advocates openness that affords teachers time, freedom, and assistance to discover what works for pupils. Administrative leadership styles that provide for the needs of the school personnel and community are now more seriously considered.

Influences from social science research have had a positive effect on school leadership thinkers and innovators. Maslow's holistic-dynamic point of view, cited as a "Third Force" in American psychology, has motivated thinking in regard to school leadership.[2] Maslow presents the belief that man has an essential nature of his own, with a psychological structure as well as a physical structure.[3] Man has needs, capacities and

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[1]Robert J. Taggert, The Elementary School Journal, LXXIV (March, 1974), pp. 336-343.

[2]Calvin Hall and Gardner Lindzey, Theories of Personality, end ed. (New York: John Wiley and Sons, 1957, 1970), p. 325.

[3]Ibid., p. 326.

tendencies that are genetically based, some of which are characteristic of the whole human species and some of which are unique to the individual.[1]

In presenting Maslow's theory of human motivation, Hall and Lindzey cite his considered basic human needs (hunger, affection, security, self-esteem, and other deficiency needs) and metaneeds (justice, goodness, beauty, order, unity and other growth needs).[2] Maslow[3] lists human needs in an hierarchical order: security, social, esteem, autonomy, and self-actualization. According to him, as a need at the lower level is met, the individual is motivated to seek growth at a higher level, with self-actualization the highest order need.[4]

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[1] Ibid.

[2] Ibid, p. 327.

[3] Abraham H. Maslow, Toward a Psychology of Being (New York: Van Nostrand Reinhold Company, 1968). Cited by Calvin Hall and Gardner Lindzey, Theories of Personality, 2nd ed. (New York: John Wiley and Sons, 1957, 1970), pp. 325-329.

[4] Ibid.

This theory has been applied to organizational management and leadership as it relates to human needs.

McGregor[1] offers his "Theory Y" in opposition to the direction of control and management by a hierarchical order from the top down, described as "Theory X." He asserts that people are not by nature passive or resistant to the organization's needs. Experience in organizations, however, has caused them to become so.[2] "Theory Y" management, states McGregor, places the responsibility upon management to arrange the conditions in the organization so that people can achieve their goals by directing their own efforts toward organizational objectives.[3]

Carl Rogers[4] has applied his version of McGregor's "Theory Y" to responsibilities in administrative leadership.

[1]Douglas McGregor, "The Human Side of Enterprise," in Organizations and Human Behavior: Focus on Schools (Eds.), Fred D. Carver and Thomas J. Sergiovanni (New York: McGraw-Hill Book Company, 1969), pp. 150-156.

[2]Ibid., p. 154.

[3]Ibid.

[4]Carl Rogers, Freedom to Learn (Ohio: Charles E. Merrill Publishing Company, 1969), p. 208.

This is presented in the section of this chapter relating to research in in-service education.

THE PROBLEM FOR IN-SERVICE EDUCATION

The literature contains varied and severe criticisms of present practices in teacher in-service education. Emphasis is focused upon the need for practical resources to help teachers confront classroom problems. In an interview conducted by the elementary education periodical, Teacher, Paul Olson of The University of Nebraska was asked this question: "Most school systems encourage or demand further in-service training for teachers on the job. Is this kind of education more helpful?" Olson responded:

> More and more groups that are talking about or doing research on in-service education are saying that it is just no good --too gimmicky and anti-intellectual on the one side, too ignorant of the real circumstances of school and the surrounding streets, shops,

> industries, culture, even intellectual millieu, on the other.[1]

Other criticisms, such as Louis Rubin's, are directed at traditional in-service education and the present repetition of the past ineffectiveness. Rubin states:

> What we now call in-service education is but a shoddy approximation of what it ought to be.[2]

A strong challenge for the confrontation of problems in in-service education is presented in the literature. Recommendations and procedures for planning in-service education strategies are considered crucial. Rubin summarized points of interest that are pertinent to all planning for in-service education:

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[1]Paul Olson, "What's Wrong with Teacher Education?" Teacher 92 (May-June, 1975), pp. 20-24.

[2]Louis J. Rubin, "Authentic Teacher Growth," Educational Leadership 28 (April, 1971), p. 701.

1. A teacher is the best educator of other teachers.
2. Much professional growth can occur while the teacher is at work.
3. Skills are best acquired through practice.
4. The Teacher's workday may be arranged so that skills can be enhanced during the art of teaching.
5. In-service education involves unlearning as well as learning.
6. The aim is not for isolated skills, attitudes or knowledge, but for a complete teacher.[1]

Awareness on the part of both teachers and administrators concerning their shared responsibilities for effective in-service education is stressed in the literature. Carl Rogers[2] applies his version of McGregor's "Theory Y" as it applies to the administrator's responsibilities for facilitating relevant teacher in-service education. Rogers states:

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[1] Ibid., p. 703.

[2] Rogers, Freedom to Learn.

> The administrator has the task of using himself in just as fulfilling a way as he makes possible for his staff and students. He does not submerge himself, but uses his leadership qualities, his vision, his wider information, all the characteristics which have led to his being placed in a position of responsibility as positive input in a living and changing organization.[1]

Rogers sees the most serious problem to be solved through in-service education as "How can we generate or develop more facilitative leaders?"[2]

Lippitt and Fox[3] stress the need for the supervisor to be a specialist in helping teachers diagnose their professional growth needs. This involves designing and arranging for the activities to take place and continuing in support of the teacher in an effort to initiate change.

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[1] Ibid., p. 208.

[2] Ibid.

[3] Ronald Lippitt and Robert Fox, "Development and Maintenance of Effective Classroom Learning," in Improving In-Service Education (Ed.) Louis J. Rubin (Boston: Allyn and Bacon, Inc., 1971),

Perhaps research studies will help in bringing the teachers and administrators closer together to seek information and resources necessary in solving their problems in in-service education. Their defined and shared perceptions, similar or divergent, are valuable.

CRITIQUE OF IN-SERVICE RELATED LITERATURE

Certain exemplary in-service education programs have been developed, but they are individual in most cases. They apparently apply primarily to the peculiar locations in which they were initiated. The need, therefore, continues for the personnel in each school to identify their own in-service education needs and to provide appropriate follow-up procedures.

A most recent study of in-service education is a doctoral dissertation completed by Patsy Kaye Edwards[1] at The University of Michigan in 1975. Edwards'

[1]Patsy Kaye Edwards, "Teachers' Perceptions of Present Practices, Process-Needs, Alternative Delivery Systems, and Priority of In-Service Education," unpublished doctoral dissertation, Ann Arbor: The University of Michigan, 1975.

purpose was to explore teachers' perceptions of: present in-service education practices; identification of in-service education processes and content needs; desired alternative delivery systems of in-service education; and the priority of in-service education in relation to other identified needs. The instrument used was a questionnaire designed to test each teacher's perception of desired and present in-service education practices.

The two major implications from the Edward's study are:

1. Emerging in-service education opportunities should be planned, directed and implemented through administrator-teacher cooperation at the local school district level.

2. An open in-service environment should be established that encourages participation through questioning, commenting and exchanging ideas.

Five major need areas were found as follows:

1. Teacher input into decision-making.

2. Relevant in-service for classroom application.

3. Open atmosphere for learning.

4. Cooperative planning and programming for teachers and administrators.

5. Introduction and opportunity to use new methods.[1]

Edwards presents guidelines that are greatly needed for in-service education. The need exists, however, for additional more specifically identified and defined classroom procedures, resources and perceived delivery systems cited by teachers and administrators.

Another study, conducted by Edmonds,[2] investigated on-the-job in-service education for school administrators in four rural, culturally deprived and economically

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[1] Ibid., p. 214.

[2] Fred Edmonds, et al, Developing Procedures for the In-Service Education of School Administrators (Bethesda, Md.: Lexington College of Education, University of Kentucky, ERIC Document, Ed 010 168, 1966).

depressed school districts. The investigation was conducted by a team of specialists in school administration, curriculum, supervision, and in-service education, working with teams of school administrators in local school districts. Results showed that the administrators reformulated their job concepts, redefined their roles, and modified their concepts of the ultimate purposes of their schools.[1] Such studies are valuable in helping school personnel to achieve their shared goals through better understanding and communication within the school.

Criticisms of teacher in-service education were presented through Roy Edelfelt's[2] exploration of the literature, in which a total of 256 ERIC 1973 and 1974 citations dealing with teacher in-service education were reviewed. Edelfelt's main criticism was that, although many subjects received attention, there is too

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[1] Ibid.

[2] Roy A. Edelfelt, In-Service Education--Sources in the RRIC System (Arlington, Va.: ERIC Document, ED 099 308, January, 1957).

little attempt to formulate a comprehensive program. He states:

> Too often, objectives were narrow, and were unrelated to a larger purpose, and most of the programs focused on the teacher as an individual rather than as a member of a group. None of the reported programs was comprehensive, dealing broadly with the professionalization of teachers in a full sense.[1]

Interaction between teachers and administrators was considered in the work by Dorothy Westby-Gobson.[2] Various practices and services were discussed, such as: (1) systems analysis, (2) interaction analysis, (3) microteaching, (4) sensitivity training, (5) various electronic media, from movies to computers, and (6) diversification of staff and its duties.

The problem of decision-making and leadership in in-service programming was also confronted. Sound

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[1] Ibid., p. 17.

[2] Dorothy Westby-Gibson, In-Service Education: Perspectives for Educators (Berkeley, California: Far West Laboratory for Educational Research and Development, Bethesda Maryland: ERIC Document, Ed 015 161, 1967).

preparation and rigorous evaluation were emphasized.

SUMMARY

The literature clearly presents needs and problems in in-service education, showing the disillusionment of school personnel with present practices. There is, however, little evidence that teachers and administrators feel that in-service education should be discontinued. The criticisms contain numerous suggestions for possible improvement.

Much effort is being made to provide appropriate models for in-service education programming within specific localities. Program evaluation pertains to the individual in-service education models, programs or workshops. Research is needed, however, to determine the perceptions of the personnel using the models or services. Currently, there is a strong trend toward teacher involvement in the planning and improvement of their own in-service education practices. Research is necessary to determine the extent of involvement and leadership the teachers wish to share. Their input into the decision-making for this effort is needed,

since their benefit is the primary factor.

Studies have involved opinions of teachers and administrators separately concerning their own needs and roles. This review of literature documents many worthwhile studies related to in-service educational needs and programs. Few are related, however, to the need for shared perceptions between the personnel within the school. There remains a need for studies in which personnel groups are given the opportunity to consider their own perceptions and to become aware of the perceptions of other personnel within their school. Shared perceptual awareness between the personnel within the school is needed to help solve the problems in teacher in-service education.

CHAPTER III

PRESENTATION AND ANALYSIS OF DATA

INTRODUCTION

This chapter contains the data, the statistical analyses and the findings for this investigation of perceptual agreement and disagreement between teachers and administrators concerning teacher-perceived needs for in-service education.

A restatement of each research question is followed by a table presenting the statistical analysis for the independent variable. Data findings for the 70 measures for in-service education were summarized in clusters showing the statistically significant disagreement, non-statistically significant agreement, and moderate agreement and disagreement.

The statistical analysis of the eight categories is presented in a table.

A summary table contains the combined findings for the 70 measures within the eight categories, as revealed by the investigations of the three sets of independent variables.

DATA ANALYSES

Two-way cross tabulations of data were prepared showing column totals and percentages of responses to the 70 measures for the three sets of independent variables. Table A-1, appearing in Appendix A, presents the tabulations for the primary research question. It should be noted that the rating scale of 0-4 used on the instrument was converted to 1-5 for computer use and appears so in Table A-1.

Full data, showing the cross tabulations were not reported for the two secondary research questions.

ANALYSIS FOR THE PRIMARY RESEARCH QUESTION

Restatement of the Primary Question - What is the relationship between occupational role within the

school and the nature and extent of the agreement and disagreement in the perceptions of teachers and administrators concerning teacher-perceived needs for in-service education?

Statistical Analysis - Table 1, showing the analysis according to occupational role, presents the t-tests, the rank-order of the differences between the means for the teachers and administrators, agreement and disagreement, and the strength of the perceived need for each of the 70 measures.

The listing of the measures in Table 1 (and other tables) involved shortened versions of the longer statements of measures. The complete measures as they appeared on the instrument were used in the report of the findings.

The levels of statistical significance used for the identification of disagreement, agreement and moderate (see Table 1) agreement and disagreement were as follows: 0.000 - .05 Disagreement (statistically significant), Disagree 0.06 - 0.66 Moderate (nonstatistically significant), Moderate 0.67 - 1.00 Agreement (nonstatistically significant) Agree.

TABLE 1

STUDENT'S t-test ANALYSIS, RANK-ORDER OF MEAN DIFFERENCES, AND AGREEMENT AND DISAGREEMENT BETWEEN 466 TEACHERS AND 41 ADMINISTRATORS CONCERNING PERCEIVED NEED FOR 70 MEASURES FOR TEACHER IN-SERVICE EDUCATION

MEASURES	t-test	df	MEANS		DIF.	S. D.		SIGNIF.	LEVEL OF AGREEMENT	
			TEACHERS	ADMINS.		TEACHERS	ADMINIS.		TEACHERS	ADMINIS.
									DISAGREEMENT	
Administrative leadership style	-5.2276	505	2.5300	3.6098	1.0798	1.2919	.9455	p .01 S	WEAK	STRONG
Conducting in-service education workshops	-4.0519	505	2.8326	3.73.7	0.8991	1.3904	.9753	p .01 S	STRONG	STRONGER
Evaluation of program innovations	-4.2258	505	2.9721	3.8049	0.8328	1.2310	.9279	p .01 S	STRONG	STRONGER
Video Taping	-3.7940	505	2.6567	3.4878	0.8311	1.3655	1.0752	p .01 S	WEAK	STRONG
Evaluating instructional programs and materials	-4.3886	505	3.0773	3.9024	0.8251	1.1780	.8308	p .01 S	STRONG	STRONGER
In-service leadership concerning student learning needs	-3.7722	505	2.9871	3.8049	0.8178	1.3567	.9803	p .01 S	STRONG	STRONGER
Dealing with the "hidden agenda"	-4.1492	505	2.4635	3.2683	0.8048	1.2002	1.0729	p .01 S	WEAK	STRONG
Participatory leadership skills	-3.7447	505	2.5472	3.3171	0.7699	1.2814	1.0109	p .01 S	WEAK	STRONG
Initiator leadership skills	-3.7220	505	2.5322	3.2927	0.7605	1.2751	.9809	p .01 S	STRONG	STRONGER
Behavioral modification techniques	-3.8492	505	3.3155	4.0732	0.7577	1.2278	.9589	p .01 S	STRONG	STRONGER
Consultant skills in leadership	-3.5942	505	2.5258	3.2683	0.7425	1.2870	1.0253	p .01 S	WEAK	STRONG

TABLE 1 (CONTINUED)

MEASURES	t-test	df	MEANS TEACHERS	MEANS ADMINS.	DIF.	S. D. TEACHERS	S. D. ADMINIS.	SIGNIF.	LEVEL OF AGREEMENT TEACHERS	LEVEL OF AGREEMENT ADMINIS.
Change agent leadership	-3.6348	505	2.4356	3.1707	0.7351	1.2586	1.0223	p .01 S	WEAK	STRONG
How to challenge the bright student	-3.7748	505	3.3627	4.0976	0.7349	1.2232	.8002	p .01 S	STRONG	STRONGER
Group consensus decision making	-3.7032	505	2.7833	3.5122	0.7289	1.2156	1.1208	p .01 S	WEAK	STRONG
Affective education	-3.3710	505	3.1481	3.7805	0.6324	1.1684	.9358	p .01 S	STRONG	STRONGER
Values clarification	-3.1730	505	3.0515	3.6829	0.6314	1.2363	1.0354	p .01 S	STRONG	STRONGER
Sharing instructional materials and techniques	-2.9752	505	2.9099	3.5366	0.6267	1.3184	.9513	p .01 S	STRONG	STRONGER
Making slides	-2.8750	505	2.5730	3.1951	0.6221	1.3536	1.1229	p 01 S	WEAK	STRONG
Building individual and group potential	-3.0083	505	2.9421	3.5610	0.6189	1.2914	.8674	p .01 S	STRONG	STRONGER
Student rights	-2.7184	505	2.8433	3.3659	0.5226	1.1892	1.0667	p .05 S	WEAK	STRONG
Finding people/ materials	-2.3078	505	2.9979	3.5122	0.5143	1.3966	.9778	p .05 S	STRONG	STRONGER
The camera as a teaching aid	-2.4783	505	2.5408	3.0488	0.5080	1.2732	1.0712	p .01 S	WEAK	STRONG
Role playing	-2.4493	505	2.6223	3.1220	0.4997	1.2662	1.0769	p .05 S	WEAK	STRONG
Practical techniques for use with underachievers	-2.7596	505	3.6502	4.1463	0.4961	1.1302	.7267	p .05 S	STRONG	STRONGER
Determining which student should be referred for special help	-2.4329	505	3.0193	3.5122	0.4929	1.2639	.9778	p .05 S	STRONG	STRONGER

TABLE 1 (CONTINUED)

MEASURES	t-test	df	MEANS TEACHERS	MEANS ADMINS.	DIF.	S. D. TEACHERS	S. D. ADMINIS.	SIGNIF.	LEVEL OF AGREEMENT TEACHERS	LEVEL OF AGREEMENT ADMINIS.
Mounting materials	-2.2915	505	2.6781	3.1707	0.4926	1.8324	1.1159	p .05 S	WEAKER	WEAK
Microteaching skills	-2.3972	505	2.4592	2.9512	0.4920	1.5393	1.0477	p .05 S	WEAKER	WEAK
Cognitive learning skills	-2.6994	505	3.1330	3.6098	0.4768	1.0933	.9716	p .05 S	STRONG	STRONGER
How to rate or assess student social skills	-2.4826	505	2.6760	3.1463	0.4703	1.1787	.9634	p .05 S	WEAK	STRONG
The bright under-chieving student	-2.7066	505	3.4893	3.9512	0.4619	1.0677	.8047	p .05 S	STRONG	STRONGER
Leading parent education programs	-2.1479	505	2.7339	3.1951	0.4612	1.3271	1.2087	p .05 S	WEAK	STRONG
Identification of specific learning disabilities	-2.4059	505	3.6223	4.0732	0.4509	1.1764	.7871	p .05 S	STRONG	STRONG
The mandatory Special Education Law	-2.2621	505	2.9185	3.3659	0.4474	1.2293	1.0187	p .05 S	WEAK	STRONG
How to determine the student's self-concept	-2.2661	505	3.1631	3.6098	0.4467	1.2318	.9186	p .05 S	STRONG	STRONGER
The law and due process rights of parents	-2.2292	505	2.8798	3.3171	0.4373	1.2057	1.1925	p .05 S	WEAK	STRONG
Use of closed circuit TV	-1.9961	505	2.5215	2.9512	0.4297	1.4440	1.2440	p .05 S	WEAK	STRONG
Skill tests for classroom use	-2.2041	505	3.1803	3.6098	0.4295	1.2171	.9186	p .05 S	STRONG	STRONGER

TABLE 1 (CONTINUED)

MEASURES	t-test	df	MEANS TEACHERS	MEANS ADMINS.	DIF.	S. D. TEACHERS	S. D. ADMINIS.	SIGNIF.	LEVEL OF AGREEMENT TEACHERS	LEVEL OF AGREEMENT ADMINIS.
										MODERATE
Use of reference materials	-1.8881	505	2.5665	2.9756	0.4091	1.3508	1.0604	p .06 NS	WEAK	STRONG
Use of visual and auditory perception tests	-1.9865	505	3.2339	3.6098	0.3759	1.1691	1.0695	p .05 S	STRONG	STRONGER
Transactional analysis	-1.6506	505	2.6996	3.0488	0.3492	1.3132	1.1170	p .10 NS	WEAK	STRONG
Brainstorming and other discussion skills	-1.6276	505	2.8026	3.1463	0.3437	1.3197	.9890	p .10 NS	WEAK	STRONG
Enrichment techniques for the "average" student	-1.6588	505	3.3326	3.6585	0.3259	1.2247	.9646	p .10 NS	STRONG	STRONGER
The tense, anxious child	-1.7335	505	2.9421	3.2439	0.3018	1.0791	.9429	p .08 NS	STRONG	STRONGER
Subtle classroom behaviors, such as withdrawal	-1.5364	505	3.326	3.6341	0.3015	1.2212	.9939	p .13 NS	STRONG	STRONGER
The slow learner	-1.5685	505	3.4828	3.7805	0.2977	1.1845	.9086	p .12 NS	STRONG	STRONGER
Psychomotor skills	-1.6388	505	2.8305	3.1220	0.2915	1.1068	.8999	p .10 NS	WEAK	STRONG
Use of overhead projector; transparencies	-1.3443	505	2.3734	2.6585	0.2851	1.3092	1.2168	p .18 NS	WEAKER	WEAK
High interest, low vocabulary reading materials	-1.3403	505	3.3755	3.6585	0.2830	1.3192	1.0012	p .18 NS	STRONG	STRONG
The child with learing disabilities	-1.4522	505	3.7511	4.0244	0.2733	1.1619	1.0604	p .15 NS	STRONG	STRONG

TABLE 1 (CONTINUED)

MEASURES	t-test	df	MEANS TEACHERS	MEANS ADMINS.	DIF.	S. D. TEACHERS	S. D. ADMINIS.	SIGNIF.	LEVEL OF AGREEMENT TEACHERS	LEVEL OF AGREEMENT ADMINIS.
Use of tape recorder	-1.2951	505	2.3884	2.6585	0.2701	1.2907	1.1535	p .20 NS	WEAK	WEAK
Use of the slide projector	-1.2769	505	2.2318	2.4878	0.2560	1.2196	1.1429	p .20 NS	WEAK	WEAK
Bilingual student needs	-1.1864	505	2.4335	2.6829	0.2494	1.3038	1.1278	p .24 NS	WEAK	WEAK
Supervising teacher aides	-1.1732	505	2.7275	2.9756	0.2481	1.3120	1.1189	p .24 NS	WEAK	WEAK
The child who daydreams	-1.3967	505	2.6137	2.8537	0.2400	1.0641	.9370	p .6 NS	WEAK	WEAK
Maintaining of such terms as "withdrawn"	-1.2434	505	2.3348	2.5610	0.2262	1.1281	.9759	p .21 NS	WEAKER	WEAK
Hyperactive, easily distracted child	-1.1578	505	3.3519	3.5610	0.2091	1.1267	.8674	p .25 NS	STRONG	STRONG
Use of film and filmstrip projectors	- .95820	505	2.3562	2.5610	0.2048	1.3254	1.1413	p .34 NS	WEAKER	WEAK
How to administer tests	- .90849	505	2.6545	2.8537	0.1992	1.3579	1.1950	p .36 NS	WEAK	WEAK
Differences in dialects	- .84446	505	2.3863	2.5610	0.1747	1.2805	1.1412	p .40 NS	WEAKER	WEAK

TABLE 1 (CONTINUED)

MEASURES	t-test	df	MEANS TEACHERS	MEANS ADMINS.	DIF.	S. D. TEACHERS	S. D. ADMINIS.	SIGNIF.	LEVEL OF AGREEMENT TEACHERS	LEVEL OF AGREEMENT ADMINIS.
Child with behavioral problems	- .83709	505	3.5944	3.7561	0.1617	1.2007	.9945	p .40 NS	STRONG	STRONG
Knowing resource persons	- .79903	505	3.2124	3.3659	0.1535	1.1967	.9422	p .43 NS	STRONG	STRONG
Involvement of paraprofessionals	- .69469	505	2.8755	3.0244	0.1489	1.3205	1.2548	p .40 NS	WEAK	STRONG
The law and teacher rights	.68734	505	3.5043	3.3659	-0.1384	1.2326	1.2798	p .49 NS	STRONG	STRONG
Educational needs of minority	- .61023	505	2.6330	2.7561	0.1231	1.2428	1.1786	p .54 NS	WEAK	WEAK
									AGREE	
Sources for free instructional aids	.42756	505	3.5279	3.4390	-0.0889	1.2969	1.0012	p .67 NS	STRONG	STRONG
Open space/open classroom	- .40808	505	2.7918	2.8780	0.0862	1.3140	1.0769	p .68 NS	WEAK	WEAK
How to conduct an EPPC	.28441	505	2.5258	2.5854	0.0596	1.3134	.9213	p .78 NS	WEAK	WEAK
How to make a student referral	- .29365	505	2.4292	2.4878	0.0586	1.2271	1.2667	p .77 NS	WEAK	WEAK
Sources for instructional materials	- .16579	505	3.2833	3.3171	0.0338	1.2603	1.1498	p .87 NS	STRONG	STRONG
Teacher-prepared aids	.62534	505	3.2940	3.2927	-0.0013	1.3189	.8730	p .00 NS	STRONG	STRONG

FINDINGS

The major findings regarding occupational role relative to the 70 measures of the dependent variable, perception, were identified according to the measures showing statistically significant disagreement and non-statistically significant agreement and moderate agreement and disagreement between the teachers and administrators.

The levels of statistical significance (0.06-0.66) were used again to classify moderate disagreement and moderate agreement, as follows: 0.06-0.50 Moderate Disagreement, 0.51-0.66 Moderate Agreement.

The complete major findings are presented, showing statistically significant strong disagreement and non-statistically significant moderate disagreement, moderate agreement, and strong agreement.

Strong disagreement (statistically significant):

1. Administrative leadership style and skill development

2. Conducting in-service education workshops

3. Evaluation of program innovations

4. Video taping

5. Evaluating instructional programs and materials

6. In-service leadership concerning student learning needs

7. Dealing with the "hidden agenda"

8. Participatory leadership skills

9. Initiator leadership skills

10. Use of behavioral changing or modification techniques for pupil motivation

11. Consultant skills in leadership

12. Change agent leadership skills

13. How to challenge the bright student

14. Group consensus decision-making skills

15. Making slides

16. Affective education

17. Values clarification

18. Leadership in sharing instructional materials and techniques

19. Building individual and group potential

20. Student rights

21. Finding people/materials to conduct in-service activities

22. The camera as a teaching aid

23. Role playing and dramatization as aids

24. Practical teaching techniques for use with underachievers

25. Determining which student should be referred for special help

26. Mounting materials

27. Microteaching skills

28. Cognitive learning skills

29. How to rate or assess student social skills

30. The bright underachieving student

31. Leading parent education programs

32. Identification of specific learning disabilities

33. The Mandatory Special Education Law

34. How to determine the student's self-concept

35. The law and due process rights of parents

36. Use of closed circuit television in the classroom

37. Availability of specific skill tests for classroom use

38. How to use the results of visual and auditory perception tests to help children

Moderate disagreement (nonstatistically significant):

1. Use of reference materials

2. Transactional analysis

3. Brainstorming, fishbowling, and other discussion and sharing skills

4. Enrichment techniques for teaching the "average" student

5. The tense, anxious child

6. How to recognize and what to do about possible implications of seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, etc.

7. The slow learner

8. Psychomotor skills

9. Use of overhead projector; transparencies

10. Sources for high interest, low vocabulary reading materials

11. The child with learning disabilities

12. Use of the tape recorder

13. Use of the slide projector

14. Bilingual student needs

15. Working with and supervising teacher aides

16. The child who daydreams

17. Meanings of such terms as "withdrawn," or "aggressive," as they are used to describe student characteristics

18. Hyperactive, easily distracted child

19. Use of film and filmstrip projectors

20. How to administer tests such as the Slosson, Purdue Perceptual Motor Survey, Illinois Test of Psycho-linguistic Abilities (ITPA), etc.

21. Differences in dialects or language patterns

22. Child with behavioral problems

23. Knowing who may be helpful as resource persons

24. Involvement of paraprofessionals

25. The law and teacher rights

Moderate agreement (nonstatistically significant):

1. Educational needs of minority groups

Strong agreement (nonstatistically significant):

1. Sources for free and inexpensive instructional materials

2. Utilizing open space/open classroom techniques

3. How to conduct an Educational Planning and Placement Committee Meeting (EPPC)

4. How to make a student referral for special help

5. Sources for obtaining instructional aids and materials

6. Teacher-prepared instructional materials from scraps and inexpensive items

This t-test analysis shows the administrators' perceptions in statistically significant strong disagreement with the teachers' perceptions of need relative to 38 of the 70 measures for in-service education. Table 1

shows that the difference between the means for the two groups was greatest concerning the measure, administrative leadership style and skill development, showing strong disagreement. The least difference between the means, showing strong agreement, was evident concerning the measure, teacher-prepared instructional aids from scraps and inexpensive items.

ANALYSES FOR THE SECONDARY RESEARCH QUESTION

Restatement of Secondary Question One - What is the relationship between sex role, occupational role, and the nature and extent of the agreement and disagreement in the perceptions of male and female teachers, male and female administrators, and male and female special education personnel as determined by their responses to 70 measures for in-service education?

Statistical Analysis - Table 2, showing the analysis according to sex and occupational role, presents the Chi Square Tests of Independence, the rank-order of the contingency coefficients, agreement and disagreement

TABLE 2

CHI SQUARE TESTS OF INDEPENDENCE, RANK-ORDER OF CONTINGENCY COEFFICIENTS, AGREEMENT AND DISAGREEMENT BETWEEN 152 MALE AND 314 FEMALE TEACHERS, 33 MALE AND 8 FEMALE ADMINISTRATORS, AND 19 MALE AND 32 FEMALE SPECIAL EDUCATION PERSONNEL CONCERNING PERCEIVED NEED FOR 70 MEASURES FOR TEACHER IN-SERVICE EDUCATION

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
			DISAGREE					
Change agent leadership	56.146	20	.3024	.01 S	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	WEAK	WEAK
Participatory leadership skills	55.402	20	.3005	.01 S	MALE	WEAK	STRONGER	STRONG
					FEMALE	WEAK	STRONG	STRONG
Consultant skills in leadership	55.163	20	.2999	.01 S	MALE	WEAK	STRONGER	STRONG
					FEMALE	WEAK	STRONG	STRONG
Group consensus decision-making	53.737	20	.2964	.01 S	MALE	STRONG	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
How to challenge the bright student	50.585	20	.2883	.01 S	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONGER	STRONG
Evaluating instructional programs and materials	49.427	20	.2853	.01 S	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONGER	STRONGER
Initiator leadership skills	48.410	20	.2825	.01 S	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
Video taping	46.792	20	.2782	.01 S	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
Teacher-prepared instructional materials	44.874	20	.2728	.01 S	MALE	STRONG	STRONG	WEAK
					FEMALE	STRONG	STRONG	STRONG
Use of visual and auditory perception tests	44.766	20	.2725	.01 S	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONGER
Administrative leadership style and skill development	44.726	20	.2724	.01 S	MALE	WEAK	STRONG	WEAK
					FEMALE	WEAK	STRONG	WEAK

TABLE 2 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Values clarification	43.545	20	.2691	.01 S	MALE	STRONG	STRONG	WEAK
					FEMALE	WEAK	STRONG	WEAK
Conducting in-service education workshops	42.631	20	.2664	.01 S	MALE	STRONG	STRONG	STRONG
					FEMALE	WEAK	STRONGER	STRONG
Dealing with the "hidden agenda"	42.153	20	.2650	.01 S	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
Leading parent education programs	41.738	20	.2638	.01 S	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	STRONG
Use of film and filmstrip projectors	41.531	20	.2632	.01 S	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAKER	WEAKER	WEAKER
Determining which student should be referred for special help	40.362	20	.2597	.01 S	MALE	STRONG	STRONG	WEAK
					FEMALE	STRONG	STRONG	STRONG
Evaluation of program innovations	40.065	20	.2588	.01 S	MALE	STRONG	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
Use of closed circuit television	39.929	20	.2584	.01 S	MALE	WEAK	WEAK	STRONG
					FEMALE	WEAK	STRONG	STRONG
Mounting materials	39.883	20	.2583	.01 S	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	WEAK
Use of the slide projector	38.720	20	.2547	.01 S	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	WEAK
Behavioral modification techniques	38.607	20	.2544	.01 S	MALE	STRONG	STRONGER	STRONG
					FEMALE	STRONG	STRONG	STRONGER

TABLE 2 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Building individual and group potential	37.987	20	.2525	.01 S	MALE	STRONG	STRONGER	STRONG
					FEMALE	WEAK	STRONG	STRONG
Making slides	37.982	20	.2524	.01 S	MALE	WEAK	STRONG	WEAK
					FEMALE	WEAK	STRONG	WEAK
The Mandatory Special Education Law	37.981	20	.2524	.01 S	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
In-service leadership concerning learning needs	37.159	20	.2499	.02 S	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONGER	STRONGER
Affective education	36.816	20	.2488	.02 S	MALE	STRONG	STRONGER	STRONG
					FEMALE	STRONG	STRONG	STRONG
Overhead projector; transparencies	35.920	20	.2459	.02 S	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	WEAK
How to rate or assess student social skills	35.866	20	.2458	.02 S	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONGER
The bright underachieving student	35.845	20	.2457	.02 S	MALE	WEAK	STRONG	STRONG
					FEMALE	STRONG	STRONG	WEAK
Cognitive learning skills	35.690	20	.2452	.02 S	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
The tense, anxious child	34.218	20	.2404	.02 S	MALE	STRONG	WEAK	STRONG
					FEMALE	STRONG	STRONG	STRONG
The law and due process rights of parents	33.529	20	.2381	.02 S	MALE	STRONG	STRONG	WEAK
					FEMALE	STRONG	STRONG	STRONG

TABLE 2 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
The hyperactive, easily disturbed child	32.586	20	.2349	.05 S	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONGER	STRONG
Sources for free instructional materials	32.563	20	.2348	.05 S	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONGER
Enrichment techniques for the "average" student	32.516	20	.2347	.05 S	MALE	STRONG	STRONG	WEAK
					FEMALE	STRONG	STRONGER	STRONG
Psychomotor skills	31.983	20	.2328	.05 S	MALE	WEAK	STRONG	STRONGER
			MODERATE		FEMALE	WEAK	WEAK	STRONG
Leadership in sharing instructional materials	30.704	20	.2284	.06 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
How to conduct an EPPC	30.421	20	.2274	.06 NS	MALE	WEAK	WEAK	STRONG
					FEMALE	WEAK	WEAK	STRONG
The camera as a teaching aid	30.170	20	.2265	.07 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	WEAK
Role playing	29.585	20	.2244	.08 NS	MALE	WEAK	STRONG	WEAK
					FEMALE	WEAK	STRONG	STRONG
Use of reference materials	28.713	20	.2212	.09 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	WEAK
How to determine the student's self-concept	28.109	20	.2190	.11 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
Student rights	27.987	20	.2185	.11 NS	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG

TABLE 2 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Educational needs of minority	27.369	20	.2162	.13 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	WEAK	WEAK
The child who daydreams	27.081	20	.2151	.13 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	WEAK	WEAK
Use of the tape recorder	26.877	20	.2144	.14 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	WEAK	WEAK
Bilingual student needs	26.656	20	.2135	.15 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	STRONG
Skill tests for classroom use	26.585	20	.2133	.15 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
Identification of specific learning disabilities	26.477	20	.2128	.15 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
Finding people/ materials	26.301	20	.2122	.16 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
Difference in dialects	25.353	20	.2085	.19 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	STRONG	WEAK
Brainstorming and other discussion skills	24.832	20	.2064	.21 NS	MALE	WEAK	STRONG	STRONG
					FEMALE	WEAK	STRONG	STRONG
Subtle classroom behaviors	24.553	20	.2053	.22 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
Knowing resource persons	24.534	20	.2052	.22 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG

TABLE 2 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
The child with learning disabilities	23.376	20	.2005	.27 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
How to administer tests	23.362	20	.2005	.27 NS	MALE	WEAK	WEAK	STRONG
					FEMALE	WEAK	WEAK	STRONG
Transactional analysis	23.083	20	.1993	.29 NS	MALE	WEAK	STRONG	WEAK
					FEMALE	WEAK	STRONG	STRONG
Open space/open classroom	23.078	20	.1993	.29 NS	MALE	WEAK	WEAK	STRONG
					FEMALE	WEAK	WEAK	STRONG
Microteaching skills	22.307	20	.1961	.32 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	WEAK	WEAK
Meanings of terms	21.908	20	.1944	.35 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	WEAK	WEAK
Techniques for underachievers	20.899	20	.1900	.40 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
The child with behavioral problems	20.678	20	.1890	.42 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
The slow learner	19.677	20	.1846	.48 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG

TABLE 2 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
How to make a student referral for help	18.624	20	.1797	.55 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	WEAK	WEAK
High interest, low vocabulary reading materials	17.914	20	.1764	.59 NS	MALE	STRONG	STRONG	STRONG
			AGREE		FEMALE	STRONG	STRONG	STRONG
The law and teacher rights	16.200	20	.1680	.70 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
Supervising teacher aides	15.280	20	.1633	.76 NS	MALE	WEAK	WEAK	WEAK
					FEMALE	WEAK	WEAK	WEAK
Sources for instructional aids	14.963	20	.1616	.78 NS	MALE	STRONG	STRONG	STRONG
					FEMALE	STRONG	STRONG	STRONG
Involvement of paraprofessionals	10.894	20	.1384	.95 NS	MALE	WEAK	WEAK	STRONG
					FEMALE	WEAK	STRONG	STRONG

between the male and female teachers, male and female administrators, and male and female special education personnel, and the strength of the perceived need for each of the 70 measures for in-service education.

The levels of statistical significance introduced for Table 1 are also used in the analysis presented in Table 2, showing the statistically significant disagreement, and nonstatistically significant moderate disagreement and agreement, and strong agreement. Repeated, they are as follows: 0.000 - .05 Disagreement (statistically significant) Disagree, 0.06 - 0.66 Moderate (nonstatistically significant) Moderate, 0.67 - 1.00 Agreement (nonstatistically significant) Agree.

FINDINGS

The major findings regarding sex and occupational role relative to the 70 measures of the dependent variable, perception, were identified according to the measures showing statistically significant disagreement, nonstatistically significant agreement, and moderate agreement and disagreement between the males and females of the separate groups.

The levels of statistical significance (0.06-0.66) were used to classify moderate disagreement and moderate agreement as follows: 0.06 - 0.50 Moderate Disagreement, 0.51 - 0.66 Moderate Agreement.

The total major findings were presented in the following clusters showing statistically significant strong disagreement and nonstatistically significant moderate disagreement, moderate agreement, and strong agreement.

Strong disagreement (statistically significant):

1. Change agent leadership

2. Participatory leadership

3. Consultant skills in leadership

4. Group consensus decision-making

5. How to challenge the bright student

6. Evaluation of instructional programs and materials

7. Initiator leadership skills

8. Video taping

9. Teacher-prepared instructional materials from scraps and inexpensive items

10. How to use the results of visual and auditory perception tests to help students

11. Administrative leadership style and skill development

12. Values clarification

13. Conducting in-service education workshops

14. Dealing with the "hidden agenda"

15. Leading parent education programs

16. Use of film and filmstrip projectors

17. Determining which student should be referred for special help

18. Evaluation of program innovations

19. Use of closed circuit television in the classroom

20. Mounting materials

21. Use of the slide projector

22. Use of behavioral changing or modification techniques for pupil motivation

23. Building individual and group potential

24. Making slides

25. The Mandatory Special Education Law

26. In-service leadership concerning student learning needs

27. Affective education

28. Overhead projector; transparencies

29. How to rate or assess student social skills

30. The bright, underachieving student

31. Cognitive learning skills

32. The tense, anxious child

33. The law and due process rights of parents

34. The hyperactive, easily distracted child

35. Sources for free and inexpensive instructional materials

36. Enrichment techniques for teaching the "average" student

37. Psychomotor skills

Moderate disagreement (nonstatistically significant):

1. Leadership in sharing instructional materials and techniques

2. How to conduct an Educational Planning and Placement Committee Meeting (EPPC)

3. The camera as a teaching aid

4. Role plahing and dramatization as aids to teaching

5. Use of reference materials

6. How to determine the student's self-concept

7. Student rights

8. Educational needs of minority groups

9. The child who daydreams

10. The use of the tape recorder

11. Bilingual student needs

12. Availability of specific skill tests for classroom use

13. Identification of specific learning disabilities

14. Finding people/materials to conduct in-service activities

15. Differences in dialects or language patterns

16. Brainstorming, fishbowling, and other discussion and sharing skills

17. How to recognize and what to do about possible implications of seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, etc.

18. Knowing who may be helpful as resource persons

19. The child with learning disabilities

20. How to administer tests such as the Slosson, Purdue Perceptual Motor Survey, Illinois Test of Psycholinguistic Abilities (ITPA), etc.

21. Transactional analysis

22. Utilizing open space/open classroom techniques

23. Microteaching skills

24. Meanings of such terms as "withdrawn," "aggressive," etc., as they are used to describe student characteristics

25. Practical techniques for use with underachievers

26. The child with behavioral problems

27. The slow learner

Moderate agreement (nonstatistically significant):

1. How to make a student referral for special help

2. Sources for high interest, low vocabulary reading materials

Strong agreement (nonstatistically significant):

1. The law and teacher rights

2. Working with and supervising teacher aides

3. Sources for obtaining instructional aids and materials

4. Involvement of paraprofessionals

This Chi Square analysis shows statistically significant strong disagreement between the male and female personnel concerning 37 of the 70 measures for in-service education. The rank-order of the contingency coefficients in Table 2 shows the strongest disagreement concerning the measure, change agent leadership. Strongest agreement was shown for the measure, involvement of paraprofessionals.

Restatement of Secondary Question Two - What is the relationship between school grade levels K-3, 4-6, 7-9, 10-12, and the roles of teachers and the combined roles of administrators and special education personnel and the nature and extent of agreement and disagreement in the perceptions of these school personnel as determined by their responses to 70 measures for in-service education?

Statistical Analysis - Table 3, showing the analysis according to school grade levels, presents the Chi Square Test of Independence, the rank-order of the contingency coefficients, agreement and disagreement among the K-3, 4-6, 7-9, 10-12 grade level teachers and the combined administrators and special education personnel, and the

TABLE 3

CHI SQUARE TEST OF INDEPENDENCE, RANK-ORDER OF CONTINGENCY COEFFICIENTS, AGREEMENT AND DISAGREEMENT AMONG TEACHERS OF GRADES K-3, 4-6, 7-9, and 10-12 AND COMBINED ADMINISTRATORS AND SPECIAL EDUCATION PERSONNEL CONCERNING PERCEIVED NEED FOR 70 MEASURES FOR TEACHER IN-SERVICE EDUCATION

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL	LEVEL OF AGREEMENT TEACHERS		ADMINIS.	SP. ED.
			DISAGREE					
Video taping	59.631	16	.3107	.01 S	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	STRONG		
Overhead projector; transparencies	52.650	16	.2936	.01 S	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	STRONG		
How to make a student referral for help	39.197	16	.2562	.01 S	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	STRONG		
Dealing with the "hidden agenda"	37.022	16	.2494	.01 S	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	STRONG		
Use of visual and auditory perception tests	34.611	16	.2417	.01 S	K-3	STRONG		
					4-6	STRONG	STRONGER	STRONGER
					7-9	STRONG		
					10-12	STRONG		
Use of the slide projector	34.558	16	.2415	.01 S	K-3	WEAKER		
					4-6	WEAKER	WEAK	WEAK
					7-9	WEAKER		
					10-12	WEAK		

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL	LEVEL OF AGREEMENT		
					TEACHERS	ADMINIS.	SP. ED.
Group consensus decision-making skills	33.674	16	.2386	.01 S	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 STRONG	STRONG	STRONG
Making slides	33.332	16	.2374	.01 S	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 STRONG	STRONG	STRONG
Closed circuit television	32.840	16	.2358	.01 S	K-3 WEAKER 4-6 WEAKER 7-9 WEAK 10-12 WEAK	WEAK	WEAK
Sources for instructional materials	32.301	16	.2339	.01 S	K-3 WEAK 4-6 STRONG 7-9 STRONG 10-12 STRONG	STRONG	STRONG
The slow learner	32.241	16	.2337	.01 S	K-3 STRONG 4-6 STRONG 7-9 STRONG 10-12 STRONGER	STRONGER	STRONGER
Knowing resource persons	29.959	16	.2257	.05 S	K-3 WEAK 4-6 WEAK 7-9 STRONG 10-12 STRONG	STRONG	STRONG

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL	LEVEL OF AGREEMENT		
					TEACHERS	ADMINIS.	SP. ED.
How to determine the student's self-concept	29.991	16	.2256	.05 S	K-3 WEAK 4-6 STRONG 7-9 STRONG 10-12 STRONG	STRONG	STRONG
Evaluating instructional programs and materials	29.588	16	.2244	.05 S	K-3 STRONG 4-6 STRONG 7-9 STRONG 10-12 STRONG	STRONGER	STRONGER
Conducting in-service education workshops	23.318	16	.2198	.05 S	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 STRONG	STRONG	STRONG
Use of reference materials	28.093	16	.2189	.05 S	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 STRONG	WEAK	WEAK
How to conduct an EPPC	27.782	16	.2178	.05 S	K-3 WEAKER 4-6 WEAKER 7-9 WEAKER 10-12 WEAK	WEAK	WEAK
The camera as a teching aid	27.329	16	.2161	.05 S	K-3 WEAKER 4-6 WEAKER 7-9 WEAK 10-12 WEAK	WEAK	WEAK

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Meanings of terms	27.268	16	.2158	.05 S	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	STRONG		
Evaluation of program innovations	27.090	16	.2152	.05 S	K-3	WEAK		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		
Psychomotor skills	26.787	16	.2140	.05 S	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	WEAK		
Building individual and group potential	26.715	16	.2138	.05 S	K-3	STRONG		
					4-6	STRONG	STRONGER	STRONGER
					7-9	STRONG		
		MODERATE			10-12	STRONGER		
Initiator leadership skills	25.818	16	.2103	.06 NS	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	STRONG		
					K-3			
					4-6			
					7-9			
					10-12			

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL	LEVEL OF AGREEMENT	TEACHERS	ADMINIS.	SP. ED.
Use of the tape recorder	25.208	16	.2079	.07 NS	K-3	WEAKER	WEAK	WEAK
					4-6	WEAKER		
					7-9	WEAKER		
					10-12	WEAK		
Use of film and filmstrip projectors	25.040	16	.2072	.07 NS	K-3	WEAKER	WEAK	WEAK
					4-6	WEAKER		
					7-9	WEAKER		
					10-12	WEAK		
Open space/ open classroom	24.712	16	.2059	.08 NS	K-3	WEAK	STRONG	STRONG
					4-6	STRONG		
					7-9	WEAK		
					10-12	WEAK		
Administrative leadership style	22.455	16	.1967	.13 NS	K-3	WEAK	STRONG	STRONG
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		
Sources for free instructional materials	22.035	16	.1949	.14 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
How to administer tests	21.994	16	.1947	.14 NS	K-3	STRONG	WEAK	WEAK
					4-6	STRONG		
					7-9	STRONG		
					10-12	WEAK		

TABLE 3 (CONTINUED)

MEASURES	x^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Teacher rights	21.620	16	.1931	.16 NS	K-3	STRONG		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		
Finding people/ materials	21.344	16	.1919	.17 NS	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	WEAK		
Determining which student should be referred for special help	20.457	16	.1881	.20 NS	K-3	WEAK		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG	STRONG	STRONG
					10-12	STRONG		
Consultant skills	20.460	16	.1881	.20 NS	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	STRONG		
Leading parent education programs	20.177	16	.1868	.21 NS	K-3	WEAK		
					4-6	WEAK	STRONG	STRONG
					7-9	WEAK		
					10-12	WEAK		
Values clarification	20.027	16	.1861	.22 NS	K-3	STRONG		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Skill tests for classroom use	19.342	16	.1830	.25 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
Mounting materials	19.055	16	.1817	.27 NS	K-3	WEAK	WEAK	WEAK
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		
In-service leadership concerning student learning needs	18.613	16	.1797	.29 NS	K-3	WEAK	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
Participatory leadership skills	18.397	16	.1787	.31 NS	K-3	WEAK	STRONG	STRONG
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		
Role playing	18.249	16	.1780	.31 NS	K-3	WEAK	STRONG	STRONG
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		
Behavioral modification	17.676	16	.1752	.34 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL	LEVEL OF AGREEMENT			
						TEACHERS	ADMINIS.	SP. ED.
Differences in dialects	17.559	16	.1747	.35 NS	K-3	WEAK	WEAK	WEAK
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		
Change agent leadership	16.444	16	.1692	.42 NS	K-3	WEAK	STRONG	STRONG
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		
Hyperactive, easily distracted child	16.297	16	.1685	.43 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
Child with learning disabilities	16.093	16	.1674	.45 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
High interest, low vocabulary reading materials	16.023	16	.1671	.45 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
Cognitive learning skills	15.943	16	.1667	.46 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Teacher prepared instructional aids	15.958	16	.1667	.46 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
The Mandatory Special Education Law	15.111	16	.1665	.46 NS	K-3	WEAK	STRONG	STRONG
					4-6	WEAK		
					7-9	WEAK		
					10-12	STRONG		
Leadership in sharing instructional materials	15.476	16	.1643	.49 NS	K-3	STRONG	STRONGER	STRONGER
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONGER		
Techniques for the "average" student	15.079	16	.1622	.52 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		
Subtle classroom behaviors	14.361	16	.1584	.57 NS	K-3	STRONG	STRONG	STRONG
					4-6	STRONG		
					7-9	STRONG		
					10-12	STRONG		

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
The tense, anxious child	14.226	16	.1577	.58 NS	K-3	STRONG		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		
Techniques for use with underachievers	14.082	16	.1569	.59 NS	K-3	STRONG		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		
How to challenge the bright student	13.085	16	.1514	.67 NS	K-3	STRONG		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		
The child with behavioral problems	13.084	16	.1514	.67 NS	K-3	STRONG		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		
The bright, underachieving student	12.930	16	.1505	.68 NS	K-3	STRONG		
					4-6	STRONG	STRONG	STRONG
					7-9	STRONG		
					10-12	STRONG		

AGREE

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL	LEVEL OF AGREEMENT		
					TEACHERS	ADMINIS.	SP. ED.
Identification of specific learning disabilities	12.460	16	.1478	.71 NS	K-3 STRONG 4-6 STRONG 7-9 STRONG 10-12 STRONG	STRONG	STRONG
Involvement of paraprofessionals	12.135	16	.1459	.74 NS	K-3 STRONG 4-6 WEAK 7-9 WEAK 10-12 WEAK	STRONG	STRONG
Supervising teacher aides	11.794	16	.1439	.76 NS	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 WEAK	WEAK	WEAK
How to rate or assess student social skills	11.528	16	.1423	.78 NS	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 WEAK	WEAK	WEAK
Educational needs of minority	11.260	16	.1406	.79 NS	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 WEAK	WEAK	WEAK
Microteaching skills	11.124	16	.1398	.80 NS	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 WEAK	WEAK	WEAK

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL	LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
Brainstorming and discussion skills	10.921	16	.1385	.81 NS	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 WEAK	STRONG	STRONG
Bilingual student needs	10.880	16	.1383	.82 NS	K-3 WEAK 4-6 WEAK 7-9 WEAK 10-12 WEAK	WEAK	WEAK
Affective education	10.117	16	.1334	.86 NS	K-3 STRONG 4-6 STRONG 7-9 STRONG 10-12 STRONG	STRONG	STRONG
Student rights	9.9997	16	.1327	.87 NS	K-3 STRONG 4-6 STRONG 7-9 STRONG 10-12 STRONG	STRONG	STRONG
Due process rights of parents	9.8082	16	.1314	.88 NS	K-3 STRONG 4-6 STRONG 7-9 STRONG 10-12 STRONG	STRONG	STRONG

TABLE 3 (CONTINUED)

MEASURES	X^2	DF	CONTINGENCY COEFFICIENT	SIGNIFICANCE LEVEL		LEVEL OF AGREEMENT TEACHERS	ADMINIS.	SP. ED.
The child who daydreams	7.8899	16	.1181	.95 NS	K-3	WEAK	WEAK	WEAK
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		
Transactional analysis skills	7.5316	16	.1154	.96 NS	K-3	WEAK	WEAK	WEAK
					4-6	WEAK		
					7-9	WEAK		
					10-12	WEAK		

strength of the perceived need for each of the 70 measures for teacher in-service education.

The levels of statistical significance used for Tables 1 and 2 were also used in the analysis presented in Table 3, showing the statistically significant disagreement, and the nonstatistically significant moderate disagreement and agreement, and strong agreement.

MAJOR FINDINGS

The major findings regarding the school grade level roles for teachers and administrators relative to the 70 measures of the independent variable, perception, were identified according to the measures showing statistically significant disagreement and nonstatistically significant agreement and moderate agreement and disagreement among the teachers of the grade levels and the combined group of administrators and special education personnel.

The levels of statistical significance (0.06 - 0.66) were used to classify moderate disagreement and agreement, as was shown in the findings reports for Tables 1 and 2.

Repeated, the levels 0.06-0.50 were used to establish moderate disagreement, and 0.51-0.66 established moderate agreement.

The total major findings were presented in the following clusters showing statistically significant strong and nonstatistically significant moderate disagreement, moderate agreement, and strong agreement.

Strong disagreement (statistically significant):

1. Vedeo taping

2. Overhead projector; transparencies

3. How to make a student referral for special help

4. Dealing with the "hidden agenda"

5. How to use the results of visual and auditory perception tests to help students

6. Use of the slide projector

7. Group consensus decision-making skills

8. Making slides

9. Use of closed circuit television in the classroom

10. Sources for obtaining instructional aids and materials

11. The slow learner

12. Knowing who may be halpful as resource persons

13. How to determine the student's self-concept

14. Evaluating instructional programs and materials

15. Conducting in-service education workshops

16. Use of reference materials

17. How to conduct an Educational Planning and Placement Committee Meeting (EPPC)

18. The camera as a teaching aid

19. Meanings of such terms as "withdrawn," "aggressive," etc., as they are used to describe student characteristics

20. Evaluation of program innovations

21. Psychomotor skills

22. Building individual and group potential

Moderate disagreement (nonstatistically significant):

1. Initiator leadership skills

2. Use of the tape recorder

3. Use of film and filmstrip projectors

4. Utilizing open space/open classroom techniques

5. Administrative leadership style and skill development

6. Sources for free and inexpensive instructional materials

7. How to administer tests such as the Slosson, Purdue Perceptual Motor Survey, Illinois Test of Psycholinquistic Abilities (ITPA), etc.

8. Teacher rights

9. Finding people/materials to conduct in-service activities

10. Determining which student should be referred for special help

11. Consultant skills in leadership

12. Leading parent education programs

13. Values clarification

14. Availability of specific skill tests for use in the classroom

15. Mounting materials

16. In-service leadership concerning student learning needs

17. Participatory leadership

18. Role playing and dramatization as aids to teaching

19. Use of behavioral changing or modification techniques for pupil motivation

20. Differences in dialects or language patterns

21. Change agent leadership

22. The hyperactive, easily distracted child

23. The child with learning disabilities

24. Sources for high interest, low vocabulary reading materials

25. Cognitive learning skills

26. Teacher-prepared instructional materials from scraps and inexpensive items

27. The Mandatory Special Education Law

28. Leadership in sharing instructional materials and techniques

Moderate agreement (nonstatistically significant):

1. Enrichment techniques for teaching the "average" student

2. How to recognize and what to do about possible implications of seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, etc.

3. The tense, anxious child

4. Practical techniques for use with underachievers

Strong agreement (nonstatistically significant):

1. How to challenge the bright student

2. The child with behavioral problems

3. The bright under-achieving student

4. Identification of specific learning disabilities

5. Involvement of paraprofessionals

6. Working with and supervising teacher aides

7. How to rate or assess student social skills

8. Educational needs of minority groups

9. Microteaching skills

10. Brainstorming, fishbowling and other discussion and sharing skills

11. Bilingual student needs

12. Affective education

13. Student rights

14. The law and due process rights of parents

15. The child who daydreams

16. Transactional analysis skills

This Chi Square analysis showed statistically significant strong disagreement concerning 22 of the 70 measures for in-service education. The rank-order of the contingency coefficients in Table 3 showed strongest disagreement concerning the measure, video taping. Strongest agreement was shown concerning the measure, transactional analysis.

Table 4 presents a summary of the total measures that showed statistically significant strong disagreement, nonstatistically significant moderate disagreement, moderate agreement, and strong agreement for the analyses of the three independent variables.

Table 4 shows that the personnel were much closer together in perceptual agreement in the analysis according to school grade levels. They showed stronger disagreement in the analyses according to occupational roles and sex roles and occupational roles.

ANALYSIS OF THE EIGHT CATEGORIES

The 70 measures for in-service education were grouped into eight categories for analysis. Table 5 shows the Hotelling's T-Square statistical analysis of the agreement and disagreement of the eight categories of the 70 measures for in-service education.

TABLE 4

SUMMARY OF THE STATISTICAL ANALYSES OF THREE INDEPENDENT VARIABLES: OCCUPATIONAL ROLES WITHIN THE SCHOOL, SEX ROLES AND OCCUPATIONAL ROLES, AND SCHOOL GRADE LEVELS, SHOWING THE TOTALS OF STATISTICALLY SIGNIFICANT MEASURES OF IN-SERVICE EDUCATION AND THE LEVELS OF AGREEMENT AND DISAGREEMENT OF THE PERSONNEL

INDEPENDENT VARIABLES			
OCCUPATIONAL ROLES	SEX & OCCUPATIONAL ROLES	SCHOOL GRADE LEVELS	LEVELS OF AGREEMENT AND DISAGREEMENT
38	37	22	Strong disagreement (statistically significant)
25	27	28	Moderate disagreement (nonstatistically significant)
1	2	4	Moderate agreement (nonstatistically significant)
6	4	16	Strong agreement (nonstatistically significant)

TABLE 5

HOTELLING'S T-SQUARE ANALYSIS OF AGREEMENT AND DISAGREEMENT OF EIGHT CATEGORIES OF 70 MEASURES FOR TEACHER IN-SERVICE EDUCATION ACCORDING TO PERCEIVED NEED OF 466 TEACHERS AND 41 ADMINISTRATORS

CATEGORY	T-SQUARE	df	SIGNIFICANCE LEVEL
1. Student Behavioral Characteristics	18.605	10.496	.0535 NS
2. Student Learning and Social Needs	16.092	7.499	.0277 S
3. Classroom Techniques	16.926	7.499	.0207 S
4. The Law and Education	19.640	4.502	.0007 S
5. Instructional Workshop Areas	37.462	11.495	.0002 S
6. Skill Mastery for Media Utilization	21.203	12.494	.0578 NS
7. Leadership Skills	58.522	10.496	.0000 S
8. Self-Role Perception	23.464	9.497	.0068 S

FINDINGS

The Hotelling's T-Square Statistic established the statistical significance of six categories, showing disagreement between the teachers and administrators. Two categories were found nonstatistically significant, showing agreement between the groups. The categories and their status of significance are presented as follows:

STATISTICALLY SIGNIFICANT (DISAGREEMENT)

CATEGORY 2 - Student Learning and Social Needs

CATEGORY 3 - Classroom Techniques

CATEGORY 4 - The Law and Education

CATEGORY 5 - Instructional Workshop Areas

CATEGORY 7 - Leadership Skills

CATEGORY 8 - Self-Role Perception

NONSTATISTICALLY SIGNIFICANT (AGREEMENT)

CATEGORY 1 - Student Behavioral Characteristics

CATEGORY 6 - Skill Mastery for Media Utilization

The teachers and administrators showed statistically significant disagreement concerning the six categories involving student learning and social needs, classroom techniques, the law and education, instructional workshop areas, leadership skills and self-role perception.

They showed nonstatistically significant agreement concerning the two categories, student behavioral characteristics, and skill mastery for media utilization.

SUMMARY OF THE FINDINGS

Table 6 presents a summary of the statistical findings for the analyses of the three sets of independent variables: occupational roles within the school, sex roles and occupational roles, and school grade levels relative to the perceived need of the personnel groups concerning the 70 measures of the in-service education within the eight categories.

The 70 measures were presented in Table 6 as they appeared on the instrument within their respective categories.

TABLE 6

SUMMARY OF STATISTICAL FINDINGS FOR THE ANALYSES OF THE INDEPENDENT VARIABLES, OCCUPATIONAL ROLES WITHIN THE SCHOOL, SEX ROLES AND OCCUPATIONAL ROLES, AND SCHOOL GRADE LEVELS RELATIVE TO THE PERCEIVED NEED OF TEACHERS, ADMINISTRATORS AND SPECIAL EDUCATION PERSONNEL FOR 70 MEASURES OF TEACHER IN-SERVICE EDUCATION WITHIN EIGHT CATEGORIES

		INDEPENDENT VARIABLES					
		OCCUPATIONAL ROLES		SEX & OCCUPATIONAL ROLES		SCHOOL GRADE LEVELS	
MEASURES	CATE-GORY	t-test SIGNIF.		x^2 SIGNIF.		x^2 SIGNIF.	
Child with behavioral problems	1	.43	NS	.42	NS	.67	NS
Child with learning disabilities	1	.15	NS	.27	NS	.45	NS
The bright under-achieving student	1	p .05	S	.02	S	.68	NS
The slow learner	1	.12	NS	.48	NS	.01	S
Identification of specific learning disabilities	1	p .05	S	.15	NS	.71	NS
The child who daydreams	1	..16	NS	.13	NS	.58	NS
The tense, anxious child	1	.08	NS	.05	S	.58	NS
Hyperactive, easily distracted child	1	.25	NS	.05	S	.43	NS
How to challenge the bright student	1	p .01	S	.01	S	.67	NS
Enrichment techniques for the "average" student	1	.10	NS	.05	S	.52	NS
Values clarification		p .01	S	.01	S	.22	NS
Affective education		p .01	S	.02	S	.86	NS
Cognitive learning skills		p .05	S	.02	S	.46	NS

TABLE 6 (CONTINUED)

MEASURES	CATE-GORY	INDEPENDENT VARIABLES: OCCUPATIONAL ROLES t-test SIGNIF.		SEX & OCCUPATIONAL ROLES x^2 SIGNIF.	SCHOOL GRADE LEVELS x^2 SIGNIF.
Psychomotor skills	2	.10	NS	.05 S	.05 S
Educational needs of minority groups	2	.54	NS	.13 NS	.79 NS
Bilingual student needs	2	.24	NS	.15 NS	.82 NS
Difference in dialects	2	.40	NS	.19 NS	.35 NS
How to rate or assess student social skills	3	p .05	S	.02 S	.78 NS
How to determine the student's self-concept	3	p .05	S	.11 NS	.05 S
Teaching techniques for use with underachievers	3	p .05	S	.40 NS	.59 NS
Sources for instructional aids	3	.87	NS	.78 NS	.01 S
Knowing who may be helpful as resource persons	3	.43	NS	.22 NS	.05 S
Determining which student should be referred for special help	3	p .05	S	.01 S	.20 NS
How to make a student referral for special help	3	.77	NS	.55 NS	.01 S
The law and due process rights of parents	4	p .05	S	.05 S	.88 NS
Student rights	4	p .05	S	.11 NS	.87 NS

TABLE 6 (CONTINUED)

MEASURES	CATE-GORY	INDEPENDENT VARIABLES: OCCUPATIONAL ROLES t-test SIGNIF.	SEX & OCCUPATIONAL ROLES x^2 SIGNIF.	SCHOOL GRADE LEVELS x^2 SIGNIF.
The Mandatory Special Education Law	4	p .05 S	.01 S	.46 NS
The law and teacher rights	4	.49 NS	.70 NS	.16 NS
Specific skill tests for use in the classroom	5	p .05 S	.15 NS	.25 NS
Meanings of terms to describe student characteristics	5	.21 NS	.35 NS	.05 S
How to administer tests such as the Slosson, Purdue and ITPA	5	.36 NS	.27 NS	.14 NS
Evaluating instructional programs and materials	5	p .01 S	.01 S	.05 S
Use of Behavioral modification	5	p .01 S	.01 S	.34 NS
Sources for high interest, low vocabulary reading materials	5	.18 NS	.59 NS	.45 NS
Sources for free instructional materials	5	.67 NS	.05 S	.14 NS
How to use the results of visual and audiroty perception tests	5	p .05 S	.01 S	.01 S
Teacher-prepared instructional materials	5	1.00 NS	.01 S	.46 NS

TABLE 6 (CONTINUED)

MEASURES	CATE-GORY	INDEPENDENT VARIABLES: OCCUPATIONAL ROLES t-test SIGNIF.	SEX & OCCUPATIONAL ROLES x^2 SIGNIF.	SCHOOL GRADE LEVELS x^2 SIGNIF.
Subtle classroom behaviors, such as student withdrawal, attention-seeking	5	.13 NS	.22 NS	.57 NS
Open space/open classroom techniques	5	.68 NS	.29 NS	.05 S
Use of closed circuit television in the classroom	6	p .05 S	.01 S	.01 S
Use of the tape recorder	6	.20 NS	.14 NS	.07 NS
Role playing and dramatization	6	p .05 S	.08 NS	.31 NS
Microteaching skills	6	p .05 S	.32 NS	.80 NS
The camera as a teaching aid	6	p .01 S	.07 NS	.05 S
Use of film and filmstrip projectors	6	.34 NS	.01 S	.07 NS
Making slides	6	p .01 S	.01 S	.01 S
Use of the slide projector	6	.20 NS	.01 S	.01 S
Overhead projector; transparencies	6	.18 NS	.02 S	.01 S
Video taping	6	p .01 S	.01 S	.01 S
Use of reference materials	6	.06 NS	.09 NS	.05 S
Mounting materials	6	p .05 S	.01 S	.27 NS

TABLE 6 (CONTINUED)

MEASURES	CATE-GORY	INDEPENDENT VARIABLES: OCCUPATIONAL ROLES t-test SIGNIF.		SEX & OCCUPATIONAL ROLES x^2 SIGNIF.		SCHOOL GRADE LEVELS x^2 SIGNIF.	
Evaluation of program innovations	7	p .01	S	.01	S	.05	S
Group consensus decision making skills	7	p .01	S	.01	S	.01	S
Dealing with the "hidden agenda"	7	p .01	S	.01	S	.01	S
How to conduct an Educational Planning and Placement Committee Meeting (EPPC)	7	.78	NS	.06	NS	.05	S
Brainstorming, fishbowling and other discussion skills	7	.10	NS	.21	NS	.81	NS
Transactional analysis skills	7	.10	NS	.29	NS	.96	NS
Working with and supervising teacher aides	7	.24	NS	.76	NS	.76	NS
Involvement of professionals	7	.49	NS	.95	NS	.74	
Leading parent education rograms	7	p .05	S	.01	S	.21	NS
Administrative leadership style and skill development	7	p .01	S	.01	S	.13	NS
Change agent leadership skills	8	p .01	S	.01	S	.42	NS

TABLE 6 (CONTINUED)

MEASURES	CATE-GORY	INDEPENDENT VARIABLES: OCCUPATIONAL ROLES t-test SIGNIF.		SEX & OCCUPATIONAL ROLES x^2 SIGNIF.		SCHOOL GRADE LEVELS x^2 SIGNIF.	
Initiator leadership skills	8	p .01	S	.01	S	.06	NS
Participatory leadership skills	8	p .01	S	.01	S	.31	NS
Consultant skills in leadership	8	p .01	S	.01	S	.20	NS
Conducting in-service education workshops	8	p .01	S	.01	S	.05	S
Leadership in sharing instructional materials and techniques	8	p .01	S	.06	NS	.49	NS
In-service leadership concerning student learning needs	8	p .01	S	.02	S	.29	NS
Building individual and group potential	8	p .01	S	.01	S	.05	S
Finding people/materials to conduct in-service activities	8	p .05	S	.16	NS	.17	NS

Table 6 shows that the following measures were found statistically significant, showing strong disagreement in the analyses of all three independent variables.

1. Evaluating instructional programs and materials

2. How to use the results of visual and auditory perception tests to help students

3. Use of closed circuit television in the classroom

4. Making slides

5. Video taping

6. Evaluation of Program innovations

7. Group consensus decision-making skills

8. Dealing with the "hidden agenda"

9. Conducting in-service education workshops

10. Building individual ang group potential

The following measures shown in Table 6, were found nonstatistically significant, showing moderate disagreement or moderate agreement in the analyses of all three independent variables.

1. The child with behavioral problems

2. The child with learning disabilities

3. The child who daydreams

4. Educational needs of minority groups

5. Bilingual student needs

6. Differences in dialects or language patterns

7. The law and teacher rights

8. How to administer tests such as the Slosson, Purdue and Illinois Test of Psycholinguistic Abilities (ITPA)

9. Sources for high interest, low vocabulary reading materials

10. How to recognize and what to do about seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, etc.

11. Use of the tape recorder

12. Brainstorming, fishbowling and other discussion and sharing skills

13. Transactional analysis skills

14. Working with and supervising teacher aides

15. Involvement of paraprofessionals

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY OF THE RESEARCH

This study was done to investigate the nature and extent of perceptual agreement and disagreement between teachers and administrators concerning teacher-perceived needs for teacher in-service education.

The current severe criticisms of teacher in-service education motivated this investigation of a problem, apparently resulting from undefined and unshared perceptions of teachers and administrators concerning teacher needs for in-service education.

Research related to perceptual theory and the influence of occupational roles within the school organization was used in forming the theoretical basis for this study. A perceptual frame of reference in accordance with research in social science was used to form assumptions that occupational roles, sex roles, and needs represented by

the teaching grade levels are associated with the perceptions of teachers and administrators concerning teacher in-service education.

A survey investigation was conducted in Wayne County, Michigan, within public elementary, junior and senior high schools. Teachers and administrators were invited to rate their perceptions of teacher needs for 70 defined measures of need for in-service education, grouped in eight categories. A Likert-type rating scale was used.

The primary research question investigated was the relationship between occupational role within the school and the nature and extent of agreement and disagreement in the perceptions of teachers and administrators concerning teacher-perceived needs for in-service education. Secondary questions involved the relationship between sex roles, occupational roles, and school grade levels and the agreement and disagreement between the perceptions of the school personnel concerning needs for in-service education.

Research procedures involved use of the Hotelling's T-Square Statistic to analyze the eight categories in the investigation of the primary research question. The Student's t-test Statistic was used for the primary research question to analyze the 70 measures of the dependent variable, perception. The Chi Square Test of Independence was used for the analyses of the 70 measures for the two secondary research questions.

The analysis of the primary research question established the statistical significance of 38 measures for in-service education, showing strong disagreement between the teachers and administrators. The 32 measures established as nonstatistically significant revealed moderate disagreement and moderate and strong agreement (see Table 1). All except three of the 70 measures were perceived by the administrators as stronger needs for teacher in-service education. The teachers perceived three measures as stronger needs.

Six of the eight categories of the 70 measures were found statistically significant, showing disagreement.

Agreement was shown by the two categories established as nonstatistically significant. The teachers and administrators showed stronger disagreement concerning the topics in Categories Seven and Eight, involving leadership skills and self-role perception for leadership in in-service edcuation. Stronger agreement between the teachers and administrators involved student learning problems and related needs, instructional resources and materials, and educational processes shared by both groups.

According to the majority of the responses for both groups, the teachers and administrators perceived the following measures as strong needs for teacher in-service education.

1. Conducting in-service education workshops

2. Evaluation of program innovations

3. Evaluating instructional programs and materials

4. In-service leadership concerning student learning needs

5. Use of behavioral changing or modification techniques for pupil motivation

6. How to challenge the bright student

7. Affective education

8. Values clarification

9. Leadership in sharing instructional materials and techniques

10. Building individual and group potential

11. Finding people/materials to conduct in-service activities

12. Practical teaching techniques for use with underachievers

13. Determining which student should be referred for special help

14. Cognitive learning skills

15. The bright under-achieving student

16. How to evaluate the student's self-concept

17. Availability of specific skill tests for classroom use

18. How to use the results of visual and auditory perception tests to help students

19. Enrichment techniques for teaching the "average" student

20. The tense, anxious child

21. How to recognize and what to do about possible implications of seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, etc.

22. The slow learner

23. Sources for high interest, low vocabulary reading materials

24. The child with learning disabilities

25. The hyperactive, easily distracted child

26. The child with behavioral problems

27. Knowing who may be helpful as resource persons

28. The law and teacher rights

29. Sources for obtaining instructional aids and materials

30. Teacher-prepared instructional materials from scraps and inexpensive items

The analysis of the secondary research question concerning sex roles and occupational roles and the 70 measures for in-service education revealed the statistical significance of 37 measures, showing strong disagreement. The 33 nonstatistically significant measures showed moderate disagreement and moderate and strong agreement (see Table 2).

Disagreement was shown between male and female teachers concerning seven measures. The other 63 measures showed weaker disagreement and moderate and strong agreement.

Male teachers perceived the following as stronger needs, whereas the females perceived them as weaker needs.

1. Group consensus decision-making skills

2. Evaluation of program innovations

3. Use of behavioral changing or modification techniques

4. Building individual and group potential

5. In-service leadership concerning student learning needs

6. Evaluation of instructional programs and materials

Female teachers perceived the following measure as stronger need; males reported weaker need.

1. The bright under-achieving student

Disagreement was shown between male and female administrators concerning 23 measures. The other 47 measures showed moderate disagreement and moderate and

1. Group consensus decision-making skills

2. Evaluation of program innovations

3. Use of behavioral changing or modification techniques

4. Building individual and group potential

5. In-service leadership concerning student learning needs

6. Evaluation of instructional programs and materials

Female teachers perceived the following measure as stronger need; males reported weaker need.

1. The bright under-achieving student

Disagreement was shown between male and female administrators concerning 23 measures. The other 47 measures showed moderate disagreement and moderate and

strong agreement.

Male administrators perceived the following measures as stronger needs, whereas the females perceived them as weaker needs.

1. Change agent leadership

2. Participatory leadership

3. Consultant skills in leadership

4. Use of film and filmstrip projectors

5. Psychomotor skills

6. Building individual and group potential

7. Affective education

8. Cognitive skills

Female administrators perceived the following as stronger needs, whereas the males reported them as weaker needs.

1. How to challenge the bright student

2. Evaluating instructional programs and materials

3. Conducting in-service education workshops

4. Leading parent education programs

5. Use of closed circuit television in the classroom

6. Mounting materials

7. Use of the slide projector

8. The tense, anxious child

9. The hyperactive, easily distracted child

10. Enrichment techniques for teaching the "average" student

11. The camera as a teaching aid

12. Differences in dialects and language patterns

13. In-service leadership concerning student learning needs

14. Overhead projector; transparencies

15. Involvement of paraprofessionals

Disagreement was shown between male and female special education personnel concerning 16 measures. The other 54 measures showed moderate disagreement and moderate and strong agreement.

Male special education personnel perceived the following as stronger needs, whereas the females reported them as weaker needs.

1. Change agent leadership

2. Use of filmstrip projector

3. The bright, under-achieving student

4. Psychomotor skills

Female special education personnel perceived the following measures as stronger needs, whereas the males reported them as weaker needs.

1. Evaluating instructional programs and materials

2. Teacher-prepared instructional materials from scraps and inexpensive items

3. Use of visual and auditory perception tests to help students

4. Values clarification

5. Leading parent education programs

6. Determining which student should be referred for special help

7. In-service leadership concerning student learning needs

8. How to rate or assess student social skills

9. The law and due process rights of parents

10. Enrichment techniques for teaching the "average" student

11. Role playing and dramatization as aids to teaching

12. Transactional analysis skills

The analysis for the secondary research question concerning the school grade levels established the statistical significance of 22 measures, showing strong disagreement. The 48 measures established as non-statistically significant showed moderate disagreement and moderate and strong agreement (see Table 3).

The senior high school teachers perceived the following measures as stronger needs, whereas the teachers of the other grade levels perceived them as weaker needs.

1. Video taping

2. Overhead projector; transparencies

3. How to make a student referral for special help

4. Dealing with the "hidden agenda"

5. Group consensus decision-making skills

6. Making slides

7. Sources for obtaining instructional aids and materials

8. The slow learner

9. Knowing who may be helpful as resource persons

10. How to determine the student's self-concept

11. Evaluating instructional programs and materials

12. Conducting in-service education workshops

13. Use of reference materials

14. Meanings of such terms as "withdrawn," "aggressive," etc., as they are used to describe student characteristics

15. Initiator leadership skills

16. Administrative leadership style and skill development

17. Finding people/materials to conduct in-service education activities

18. Determining which student should be referred for special help

19. Consultant skills in leadership

20. In-service leadership concerning student learning needs

21. The Mandatory Special Education Law

22. Leadership in sharing instructional materials and techniques

DISCUSSION OF FINDINGS

Certain patterns evident in each analysis showed stronger disagreement between personnel concerning leadership related in-service measures and stronger agreement concerning those measures that involved needs and responsibilities shared by all personnel within the school. This pattern was most evident in the analysis of the primary research question, involving teachers and administrators.

The pattern continued in the analysis according to sex roles and occupational roles. This analysis involved the separate grouping of the males and females within roles: teachers, administrators, and special education personnel. The Chi Square Test of Independence was used to analyze the several groups of males and females. The statistical significance may have been associated with both or either of the sex roles and the occupational roles of the several groups of personnel. Data showing the responses, however, identified agreement or disagreement between the males and females in the specific occupational roles. The stronger disagreement between

males and females involved leadership-related measures. Stronger agreement pertained to measures involving needs, processes, and responsibilities that are shared by all of the school personnel investigated.

The analysis according to school grade levels included the classification of the teachers according to primary, elementary, junior and senior high school teaching levels, with the administrators and special education personnel as a combined group. This analysis showed the groups much closer together in their perceptions of general needs for teacher in-service education. This finer differentiation also identified specific needs according to the school grade levels.

The statistically significant measures showing strong disagreement predominantly involved leadership-related measures, but with a strong preference for specialized media skills, student referral processes, and instructional needs. The role as teacher shared by four of the groups in this investigation may have helped to account for the predominance of nonstatistically significant measures, showing stronger agreement than was shown in the other two investigations.

The special education personnel, whose student clientele possess many special needs as well as many similar to the other students, were not grouped with the other teachers in this investigation. They were, however, included with the administrators as a combined group. Their involvement may also have helped to diminish the divergence between the administrators and the teachers of the grade levels. It should be noted, however, that the inclusion of special education personnel as a male and female group in the analysis of sex roles and occupational roles apparently did not increase the nonstatistical significance for that independent variable. The data showed that the administrators showed the most disagreement between the males and females of their group, and that the teachers were in agreement. The presence of the several groups of teachers may, therefore, be considered as a strong influencing factor in the stronger agreement found in the analysis according to school levels.

There was evidence of closer perceptual agreement between the primary and elementary school teachers, with the junior high school teachers closer in agreement with

them. The junior high school teachers, however, also showed agreement with the senior high school teachers concerning certain measures.

The senior high school teachers were perceptually divergent from the teachers of the other grade levels and closer in agreement with the administrators and special education personnel concerning nearly one-third of the measures investigated. The senior high school teachers and the administrators and special education personnel, showing strong disagreement with the teachers of the elementary and junior high school levels, may account for much of the statistical significance of certain measures for in-service education shown in this investigation. The elementary and junior high school teachers, much closer in agreement, may account for the stronger agreement found in this investigation and the higher level of nonstatistical significance.

The analyses of all three independent variables, as shown in Table 6 and the summary following this table, revealed ten measures that were found statistically significant in all investigations. Six of

these ten measures were leadership-related. The others involved specialized media and instructional skills.

Table 6 and the summary also show that the personnel investigated in all three analyses showed agreement concerning 15 measures involving student learning needs, legal aspects of education, instructional techniques and sources, and certain educational responsibilities and processes shared by all school personnel.

Roles, experience in education, needs, shared goals, and the unique characteristics of student clientele, were all possible factors that may have influenced the responses of the school personnel in the analyses of the three sets of independent variables.

STRONGER AGREEMENT AND DISAGREEMENT

Agreement - The analysis of the primary research question showed strong agreement between the teachers and administrators concerning measures relating to student learning characteristics, sources for instructional

materials, student referral processes shared by the school personnel, and teacher-prepared instructional materials and learning aids.

The teachers and administrators, who share certain responsibilities for the improvement of instruction and for pupil growth and achievement, considered these measures as strong needs for teacher in-service education. Teachers and administrators share the responsibilities for giving attention to pupil needs. They share the need for information and the acquisition of required skills for use in planning instructional objectives for helping students achieve in school. They agreed concerning the measures that are related to these shared needs and responsibilities.

Certain media skills involving the use of the projectors and the tape recorder were considered as weaker needs by the teachers and administrators. These skills have been emphasized through the years in in-service education and in media skills courses in university programs relating to teacher education.

Certain measures relating to instructional workshop needs showed perceptual agreement between the teachers and administrators. This may exemplify the influence of a relatively shared or similar experiential background and similar goals upon the perception of needs. The administrators and teachers have all experienced teacher training and classroom teaching. They are all cognizant of many general needs in education. This knowledge logically influenced their perceptions concerning certain measures that they considered as weak or strong needs for teacher in-service education.

The males and females in personnel groups showed the same general pattern of agreement concerning shared needs, student-related needs and learning characteristics, and shared responsibilities for instruction, need for resources, and instructional techniques.

The finer decomposition of the teaching grade levels, revealing closer perceptual agreement, suggests that the sharing of the teaching role was a bond that possibly brought the personnel groups closer together.

Certain educational needs seemed to supersede all roles investigated, and were considered as strong needs by all personnel groups investigated. These measures are included in the conclusions section of this chapter.

Disagreement - The administrators' responses were consistently stronger concerning their perceived needs for teacher in-service education. The disagreement between the two groups was extreme, ranging from very strong to moderate.

A pattern persisted concerning the measures relating to leadership skills and responsibilities. The administrators and teachers showed significantly strong disagreement concerning leadership skills, responsibilities for the evaluation of instructional programs, certain media and instructional skills, and specific legal responsibilities in education.

Variability was shown in the levels of disagreement. Certain measures reported as strong needs by both groups were found statistically significant, since the administrators' perceptions were so much stronger. These

measures, shown in Table 1, indicate that teachers reported strong need; administrators reported stronger need.

Variability was evident for individual schools. The analysis of individual schools was not a purpose of this research investigation. Graphs were, however, prepared to show the variability of perceived needs between teachers and administrators, according to the modes of the teacher responses and the responses of the administrator in the individual schools. Two graphs, Figure 1 and Figure 2, show the measures for which there were greatest variability and are presented at the end of this chapter. Figure 1 shows the comparison of the teacher modes and the administrator's responses in a junior high school for six measures (see Figure 1). Junior High School #6 shows agreement for one measure and disagreement concerning the others. High School #1 (Figure 2), shows variability ranging from agreement to disagreement between the principal and teachers for the measures presented in the graph.

Many leadership-related measures were consistently perceived as weak needs by the teachers and strong according to the administrators. A possible influencing factor is the respondent's own role identification. The administrators may have been influenced by their own roles as they considered these needs as high priority for teacher in-service education, whereas, the teachers may have considered these measures as being associated with the administrator's role, and not their own.

The analysis according to sex roles and occupational roles showed that where disagreement was shown concerning the leadership-related measures, the males considered the measures as stronger needs. This may be in accordance with the established occupational role of males and the family role of women, cited in the research by Simpson.[1] Females may not have perceived themselves as needing in-service education relating to a strong leadership role in their own in-service education activities.

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[1]Simpson and Simpson, "Women and Bureaucracy."

The analysis according to school grade levels showed that the senior high school teachers, administrators and special education personnel disagreed with the teachers of other grades concerning several leadership measures. They reported stronger need for these measures than was indicated by the elementary and junior high school teachers. The high school teachers may feel that they have more autonomy and freedom in their educational role, and may be more leadership-oriented. There may also be overlap. The established family role of women may have been a factor in the weaker reported need by the elementary school teachers, the majority being women.

The media skills, not generally considered as strong needs for teacher in-service education by the teachers and administrators in this study, showed disagreement concerning the more current and specialized techniques and equipment. Examples are video taping, use of closed circuit television in the classroom, and making slides. Administrators considered the media skills as stronger needs. Differences were shown between males and females concerning specific media skills.

The females, where disagreement occurred, generally considered certain media skills as stronger needs; whereas, the males preferred certain others. Males and females within certain roles agreed or disagreed concerning certain measures, but there was no strong pattern showing agreement or disagreement involving males or females generally.

High school teachers showed a definite pattern of disagreement with the other teachers concerning certain media skills and the leadership-related measures. The unique needs of student clientele may be an influencing factor. The high school teachers may also be more leadership-oriented.

Special education personnel, high school teachers, and the administrators agreed concerning certain more currently available media skills, but showed disagreement with other teachers concerning these measures. These school personnel may have been exposed more readily to the information and demonstration of these devices and materials in in-service education conferences and workshops. Their more flexible schedules logically permit

more available time and access to new media techniques. This may influence their considered value of certain media skills and equipment as needs for in-service education.

The preferences of the school personnel were apparently influenced by the needs of student clientele. Instructional goals requiring certain specialized materials, resources, and information were possible influencing factors affecting the selection of certain measures for in-service education.

The preferences of the school personnel were apparently influenced by the needs of student clientele. Instructional goals requiring certain specialized materials, resources, and information were possible influencing factors affecting the selection of certain measures for in-service education.

Similar or different roles, educational background and training, needs of students, and shared or individual responsibilities of school personnel seemed related to their selections of measures for teacher in-service edcuation.

THEORETICAL INTERPRETATIONS

The nonexperimental techniques used in this survey investigation do not support a claim of a causal relationship between the participants' responses of needs for in-service education and their occupational roles within the school, sex roles, or the school grade levels of their student clientele. Certain similarities and differences observed in the investigations of the three sets of independent variables did, however, suggest that a perceptual theory frame of reference may be useful in the interpretation of the findings.

The approach to the personal perceptions of the participants involved in the study in which the participants were directed to indicate their own perceptions of needs for teacher in-service education, logically is more directly related to inner perceptions than to external factors. The teachers reported their own perceived needs. The administrators reported their own perceptions of their staff needs. It is likely that the perceptual field of each respondent was influenced by his occupational role,

experiences, and felt needs, and that this awareness was a determining factor in his responses.

Patterns already described in this research suggest that occupational role showed a stronger influence upon the perceptions of the teachers and administrators as they responded to specific items on the survey. Role-related measures possessing such descriptors as "administrative," "leadership," and "evaluation," were perceived as stronger needs by the administrators. Although the administrators reported all but three of the 70 measures as stronger needs than the teachers indicated, those measures more definitely related to administrative skills and educational leadership ranked highest, as shown in Table 1, presenting the stronger disagreement between the teachers and administrators.

The investigation of the occupational roles showed the strongest possibility of a relationship concerning the measures pertaining to educational leadership, but the sex roles and school grade levels of student clientele also showed a higher possible relationship concerning these measures. The senior high school teachers and the

male teachers, where disagreement was shown, reported a stronger felt need for these measures for in-service education. These factors are in congruence with research related to the influence of roles upon the perception of teachers concerning their own leadership related responsibilities and the differing needs of their student clientele.

Research shows also that needs, goals, and values are related to perception. These factors may possibly have been involved in the instances of higher agreement between the teachers and administrators, as well as the personnel in the teaching roles represented in the secondary questions. Higher perceptual agreement was shown by the personnel in all teaching grade levels concerning the in-service educational measures relating to student learning and behavioral characteristics and certain educational needs and processes shared by the personnel.

The summary that follows indicates certain factors that may have influenced the perceptions of the personnel investigated in this research. Observed factors are as follows:

1. Shared Roles As Teachers - All teachers generally showed closer agreement, as shown by the investigation according to school grade levels.

2. Similar Experiential Background and Teaching Experience - General classroom teachers were closer together in agreement. The special education personnel showed greater divergence from that group and were closer in agreement with the administrators. The senior high school teachers also showed more divergence from the other teachers. Higher perceptual agreement was shown by the elementary and junior high school teachers. Higher perceptual agreement was shown between the elementary and junior high school teachers.

3. Different Experiential Background and Teaching Experience - The divergence of the senior high school teachers from the others may have been related to these factors.

4. Similar Needs of Student Clientele - The unique needs of senior high school students may have been a factor here, overlapping with those factors already

cited concerning the divergence of the senior high school teachers. Student needs possibly influenced the preferences of the teachers of the other grade levels, since similar and different perceived needs for in-service education were reported for those groups also.

5. Shared or Different Responsibilities for Educational Processes - The administrators, who are responsible for interpreting student referral processes within their schools, reported these topics as stronger needs. The teachers, who follow an established procedure and may seek the assistance of their principal whenever necessary, did not report their need as strong as the administrators indicated.

6. In-Service Education Perhaps Already Experienced - The responses concerning the media skills showed that previous emphasis through in-service education and the exposure of personnel to this related information possibly influenced the selection of certain items as weak or strong needs.

Roles, experience in education, needs, shared goals, similar or different responsibilities, and the unique needs and characteristics of student clientele, were possible factors that may have influenced certain responses of the personnel in the analyses of the independent variables. The perceptual frame of reference may be useful in the explanation of the perceived needs expressed in this research.

CONCLUSIONS

The following conclusions are presented concerning perceived needs of school personnel for teacher in-service education, based upon the findings in this research investigation of the suburban schools of Wayne County, Michigan.

1. The perceived need of the administrators for teacher in-service education was significantly stronger than the perceived need of the teachers.

2. The teachers and administrators showed stronger disagreement concerning measures for in-service education relating to educational leadership and

responsibilities. The administrators perceived these needs as significantly stronger.

3. The perceived needs of the teachers and administrators concerning teacher in-service education are broad and variable, presenting high and low levels of agreement and disagreement concerning specific needs.

4. The teachers as a group did not indicate a strong need for in-service education relating to their own leadership or self-role involvement in responsibilities for initiating in-service educational activities.

5. The occupational roles as teacher or administrator showed a strong influence upon the perceived needs of school personnel concerning teacher in-service education.

6. The unique needs of student clientele showed a strong relationship to the perceived needs of the school personnel concerning teacher in-service education.

7. The investigation according to the sex roles and occupational roles of school personnel did not show any particular pattern of strong association with the perceived needs of any group concerning teacher in-service education.

8. The measures for in-service education considered as strong needs by all personnel investigated are generally related to student learning needs, problems, and characteristics.

9. The personnel in the Wayne County Public Schools generally consider instructional aids and materials, resources for use in the classroom, and teacher-prepared instructional materials as strong needs for teacher in-service education.

10. The teachers of all grade levels in the Wayne County Public Schools perceive needs for in-service education in accordance with their particular instructional goals or student needs.

11. The senior high school teachers indicated a stronger need than was indicated by the teachers of other grade levels for teacher in-service education.

12. The senior high school teachers indicated a strong interest in in-service education relating to their own leadership skills and self-role involvement in the initiation of in-service educational activities.

13. The senior high school teachers indicated a strong need for specialized media skills and equipment in in-service education.

14. The teachers of the elementary and junior high schools were closer in agreement concerning their perceived needs for in-service education.

15. Categories of needs for in-service education were established as showing agreement or disagreement between the teachers and administrators.

16. The following measures are considered strong need for teacher in-service education by teachers, administrators, and special education personnel in the public schools of wayne County, Michigan.

CATEGORY 1

STUDENT BEHAVIORAL CHARACTERISTICS

1. The child with learning disabilities

2. The child with behavioral problems

3. The bright underachieving student

4. The slow learner

5. The child who daydreams

6. The hyperactive, easily distracted child

7. Enrichment techniques for teaching the "average" student

8. The tense, anxious child

9. How to challenge the bright student

10. Identification of specific learning disabilities

CATEGORY 2
STUDENT LEARNING AND SOCIAL NEEDS

1. Values clarification

2. Affective education

3. Cognitive learning skills

4. Psychomotor skills

CATEGORY 3
CLASSROOM TECHNIQUES

1. How to determine the student's self-concept

2. Practical teaching techniques for use with underachievers

3. Sources for obtaining instructional aids and materials

4. Knowing who may be helpful as resource persons

CATEGORY 4

THE LAW AND EDUCATION

1. The law and teacher rights

2. Student rights

3. The law and due process rights of parents

CATEGORY 5

1. Availability of specific skill tests for use in the classroom

2. Use of behavioral changing or modification techniques for pupil motivation

3. Sources for high interest, low vocabulary reading materials

4. Sources for free and inexpensive instructional materials

5. Teacher-prepared instructional materials from scraps and inexpensive items

6. How to recognize and what to do about possible implications of seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, etc.

CATEGORY 8
SELF-ROLE PERCEPTION

1. Leadership in sharing instructional materials and techniques

2. Building individual and group potential

IMPLICATIONS

The findings in this research pose a most pertinent implication for the school administrator's need to be aware of his own perceptions in relationship to the perceptions of the teachers concerning educational needs within the school. The administrators in this investigation perceived most needs for in-service education significantly stronger than were perceived by the teachers. Measures for in-service education considered as strong needs by the administrators were considered significantly weaker by the teachers.

School administrators should not assume that they know their teachers' perceived needs for in-service education unless they have communicated with the teachers to identify these needs. Inaccurate assumptions on the part of the administrator or the "oversell" of an in-service program that the teachers may not value may be prevented through communication and the effort to more fully understand the perceived needs of the school personnel.

Disagreement between the teachers and administrators concerning needs in in-service education has implications for other issues within the educational arena. Implications are that teachers and administrators may disagree concerning other major staff or school needs and interests. Administrators may assume that teachers are more interested in a leadership role than they really are. A few examples are cited as follows:

1. Educational Leadership - The teachers in this study did not generally present a strong felt need for leadership in in-service education.

This raises questions concerning teacher perceptions of their own need or interest in their own involvement in the initiation of program innovations, curriculum planning, and the initiation of change within their school.

2. Staff Development and Evaluation - Teachers and administrators share the need to recognize the potential influence of their roles upon their perceptions and the potential of their similarly shared goals and needs

for intervention and bringing them closer in perceptual agreement. Communication may help them to solve their mutual problems and achieve their shared goals.

Role-influenced relationships are vulnerable to misconceptions and misunderstandings arising from undefined perceptual divergence between individuals or groups. This pertains especially to teacher-administrator or other combinations involving the hierarchy of a subordinate-superordinate leadership structure. The Getzels-Guba[1] model shows the influence of power as the actualizing force affecting both the role and person dimensions within an organization. Teachers and administrators should realize that both dimensions exist within their school. Their shared effort to identify the needs and goals associated with their roles may be helpful in keeping communication channels functioning for problem-solving.

The administrator may help through his awareness of the expectations that teachers have for his assistance

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[1]Egan G. Guba, "Research in Internal Administration: What Do We Know?"

because of his leadership role and his willingness to work with his staff. Teachers expect leadership from their principal, who, through his status role, is in a position to help them achieve their goals. They want understanding and consideration shown through his willingness to work with them as a member of the group whenever possible. The use of procedural and initiative as well as group-shared leadership are both possible without the encroachment of one type upon the other. Knowledge concerning the teacher's perceptions of his leadership is a starting point for the principal.

The principal may help by doing all possible to provide for the identified needs in in-service education within the school such as:

1. Working with teachers to define and provide for the varied in-service educational needs and interests.

2. Providing opportunities, time, and resources necessary for teachers to benefit from in-service education.

3. Providing opportunities for teachers to give input into the planning and evaluation of in-service educational activities.

4. Providing time for teachers to participate in in-service educational activities.

5. Supporting and helping teachers with the implementation of their new ideas or innovations gained through in-service educational activities.

6. Consideration of the individual needs of teachers, grade levels or groups. The senior high school teachers did show a strong interest in the leadership of their own in-service education, and they also indicated other particular needs and interests. Departmental or grade level needs require attention. Teachers may help by bringing their needs and concerns to the principal's attention.

Identification of their divergent perceptions helps teachers and administrators focus upon identified needs. The understanding of their shared goals, needs and interests is beneficial. Sergiovanni and Starratt[1] defined these shared needs and responsibilities as mediating

[1]Thomas J. Sergiovanni and Robert J. Starratt, Emerging Patterns of Supervision: Human Perspectives (New York: McGraw-Hill Book Company, 1971), p. 16.

variables. Effective use of the mediating variables may help teachers and administrators pursue problems and solve them.

The categories and measures for needs in in-service education that showed close perceptual agreement between the teachers and administrators in this study show examples of mutual goals and needs. Certain measures related to responsibilities for instruction, interest in student progress, accountability for legal requirements and processes in education, and many other needs.

The realization of teachers and administrators that their shared needs and goals bring them closer together in agreement has a certain positive effect. Their perceptual divergence shows the need for problem-solving, but their areas of agreement show much that they share. The school personnel in this investigation showed agreement concerning many needs in teacher in-service education. The shared responsibilities and understanding of student needs were evident concerning the responses of the teachers and administrators.

Implications of the potential effects of roles, responsibilities, needs and goals upon perception extend to other educational issues. Implications are involved for the current teacher request for autonomy and more freedom in their own leadership. Misunderstandings and false assumptions may arise if care is not exercised to determine the teachers' perceptions and expectations for their own role in this leadership.

Implications extend to needs in higher education that relate to student-instructor perceptions of course needs, planning and evaluation. These implications also pertain to the involvement of university personnel in meeting the needs in in-service education within the public schools. Pre-service is no longer sufficient. The universities may help by initiating more effort to determine needs in in-service education, with extended provision of resources to the school districts. New innovations once more abundantly available through the general flow of new personnel into a school system are now curtailed. The necessary changes now occurring within the schools and affecting the needs of personnel require the consideration of university leaders and innovators.

In-service education will have a strong continued role in effecting change within the schools, but it must become more directly related to specific needs of particular teachers, who are seeking strategies for identifying and providing for particular student-related needs.

RECOMMENDATIONS

1. It is recommended that school administrators survey the perceived needs of the personnel within their schools concerning teacher in-service education. The 70 measures used in this research, or selected ones, may be considered for use in surveying these needs.

2. The 29 high priority needs identified in this research should be considered for use by school personnel in determining and planning for their own in-service educational needs.

3. It is recommended that teachers and administrators consider the possible strong influence of their occupational roles upon their perceptions of needs within their schools. Effort to communicate and to share their

perceptions should be strengthened through this awareness.

4. The school administrators should realize that their teachers expect them to assume responsibility for the initiation of in-service education leadership within their schools. Input from the teachers into the program planning and leadership is necessary. The teachers expect their administrator to serve as key facilitator in helping them to define and seek solutions to their in-service education problems. Initiative and supportive types of leadership are recommended to aid the school personnel in determining their own needs and seeking solutions through problem-solving. The school principal may help by ensuring his availability to the staff for planning.

5. Numerous and divergent needs should be considered. Program planning should be done in accordance with input and/or representation of all potential participants. Comprehensive choice selections with options should be offered to provide practical and relevant in-service education.

6. Provision is necessary for small groups or for individual participants. The general practice of considering only the majority needs does not help the individual or minority who may return from an in-service education workshop or program feeling that it was not beneficial. Continued failure to provide worthwhile in-service education for all participants results in general disillusionment with the vehicle of in-service education. It is very serious if even one teacher spends an afternoon, a day, or longer, in an unprofitable in-service education conference.

7. In-service education should provide an emphasis on learning characteristics, problems, and needs of students. Teachers and administrators agree that these are high priority needs for teacher in-service education.

8. In-service education should provide information and resources for meeting teacher and administrator responsibilities concerning the law and education. Current legislative responsibilities in education include such specific examples as: How to assist with drug-related and other severe problems of students, procedures for suspected child abuse, the mandatory responsibilities for

meeting the handicapped student's needs, student and teacher rights, attendance problems, and parent rights and due process procedures.

9. Sources for general instructional materials, and those relating to high interest, low vocabulary reading materials are strong needs. They should be provided through school workshops and other continuous means of teacher education. Teachers desire in-service education that is relevant to their classroom instructional needs.

10. School budgets must provide for basic needs in teacher in-service education. Financial resources and time are essential, even though severe shortages and hardships exist in many school districts.

11. Effective delivery systems are required for the dissemination of information, sources, instructional techniques, and available equipment for in-service education that will reach student needs in the classroom.

12. Unique and individual needs of students should be considered through in-service education. Differing needs of student groups and grade levels may be obtained through surveys and teacher recommendations.

13. The categorical significance of this study suggests that assumptions cannot be made concerning the need in any area without investigation. Specific in-service education needs within area categories should be determined.

14. The divergence of needs within the school grade levels has implications for the current school grade level reorganization, changes, and combination of grades. Participation of school and community personnel in planning will help to provide for the needs of new grade levels occurring through changes in school structure. Surveys of needs, planning of objectives, implementation, evaluation, and follow-up may help to provide for these changes.

15. The responsibility for bringing together the necessary teaching resources and materials for use within the school is shared by all administrators. The current austere budgetary conditions within many schools cause a need for skilled liaison services emanating from within a school district and extending to the resources available through the Intermediate School District and other systems of available resources to all schools.

16. Special Services administrators share a leadership role in informing the school principals and establishing strategies for obtaining available materials and the services of consultants and resource persons.

17. School media specialists share the responsibility for leadership in in-service education within the school district.

18. The need should be recognized for the continuance of in-service education as a vehicle for change. The felt need by school personnel for the available techniques, innovations, and resources provided through teacher in-service education will not diminish. In-service education will have a strong continued role in effecting change within the schools.

LIMITATIONS OF THE RESEARCH

The following limitations should be considered concerning the findings involved in this research.

1. The 70 in-service education content topics investigated in this research as affected by three sets of independent variables, occupational roles, sex, and school grade level taught, were not investigated to determine the effects of other independent variables, such as educational experience, age, educational degrees, or academic and non-academic teaching assignments. These were considered in the recommendations for further research.

2. The researcher attempted to consider potential intervening variables by holding specific roles constant as others were investigated. There is, however, a possibility that unidentified intervening variables may have influenced the responses of the participants. High interest areas or the considered value of specific in-service education variables may have influenced certain responses.

3. The voluntary participation, 90%, of the sample, failed to obtain the representation of the needs of those who chose not to participate, 10%, in the survey. This was weighed by the researcher, and the considered greater advantages of the voluntary participation seemed sufficient. The in-service education needs of the school personnel who chose not to participate may be identified through other means within their schools.

ADDITIONAL RESEARCH NEEDS

Recommended arenas for further research include the academic teaching areas versus non-academic assignments as they relate to teacher perceptions of needs for in-service education. Carefully matched samples should be selected. The overarching purpose of this investigation was to study the school population as it is, and to consider general in-service education needs. Matched samples were not applicable to this investigation. They are, therefore, recommended for further research.

Other recommended studies may focus on additional independent variables such as teaching experience and/or administrative experience, and educational degrees and

training. Studies should be planned with sample groups carefully selected and balanced numerically.

Research relating to perception of other educationally involved groups is recommended. Examples are perceptual agreement and disagreement, between teacher and student, building administrators and central office personnel, teachers and principals concerning other areas, such as shared evaluation of teaching and programs, and other educator and community groups. Data-handling should include the use of statistical tools to focus on significant differences and to determine agreement and differences between groups. The need to investigate perception of other education-related personnel is relevant to many educational concerns.

STRENGTHS OF THE STUDY

Strengths of this study include the sample size, which provided these following advantages of large sample statistics: smaller risk of sampling errors, possible greater reliability, and increased power of the statistical tests applied to the data.

There was consideration of individual differences shown in the reporting of the results. The conclusions involved majority responses, but not only the majority. Input from all participants was considered.

The survey instrument included a wide range of degrees of need, providing the opportunity for the respondents to report their perceptions, ranging from no need to very strong need, as shown by the five levels of the Likert-type scale. This choice increased the flexibility and autonomy of the participants in reporting their perceptions of their own needs. The many items of the instrument enhance its validity in reporting perceived needs. The items were carefully selected in accordance with current literature relating to teacher in-service education. Each item represents a potential area of need. The instrument may be used by school administrators and teaching personnel in surveying their own school or district in-service educational needs.

The high percentage, 90%, of the sample response is a strong aspect of this study.

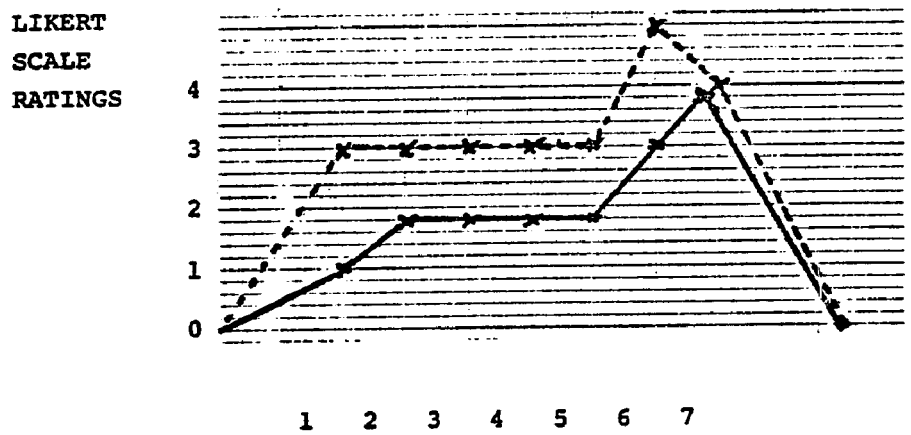
The voluntary participation of the teachers and administrators helped to minimize anxiety and pressure.

The stringent statistical analyses were valuable in establishment of the findings.

This research investigation provided pertinent information concerning teacher in-service educational needs. The educational significance of this study is strong.

FIGURE I

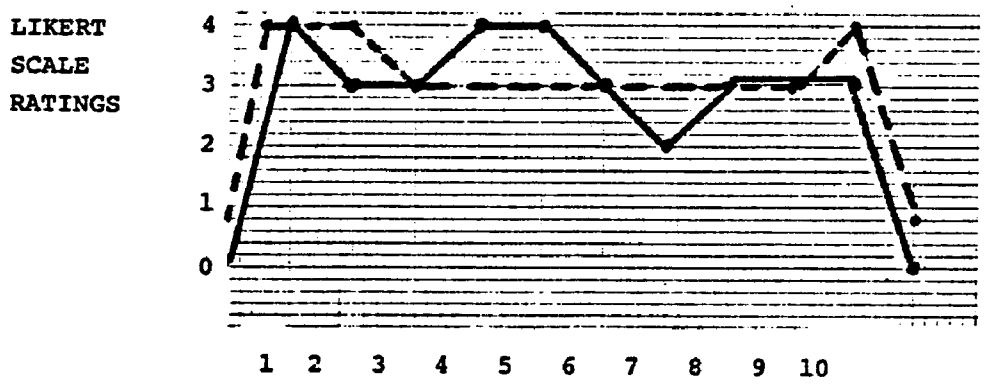
COMPARISON OF TEACHER RESPONSE MODES AND SCHOOL ADMINISTRATOR RESPONSE FOR JUNIOR HIGH SCHOOL #6



	MEASURES	TEACHER MODES AND ADMINISTRATOR RATINGS - (LIKERT SCALE) T	A
1.	DIFFERENCE IN DIALECT OR LANGUAGE PATTERNS	NO NEED	MODERATE
2.	HOW TO MAKE A REFERRAL OF A STUDENT FOR SPECIAL HELP	LITTLE NEED	MODERATE
3.	THE MANDATORY SPECIAL EDUCATION ACT	LITTLE NEED	MODERATE
4.	LEADING PARENT EDUCATION PROGRAMS	LITTLE NEED	MODERATE
5.	CONDUCTING IN-SERVICE EDUCATION WORKSHOPS	LITTLE NEED	MODERATE
6.	HOW TO CHALLENGE THE BRIGHT STUDENT	MODERATE	VERY STRONG
7.	HOW TO RECOGNIZE SUBTLE CLASSROOM BEHAVIORS	RATHER STRONG	RATHER STRONG

FIGURE 2

COMPARISON OF TEACHER RESPONSE MODES AND SCHOOL ADMINISTRATOR RESPONSES FOR HIGH SCHOOL #1



	MEASURES	TEACHER MODES AND ADMINISTRATOR RATINGS - (LIKERT SCALE_	
		T	A
1.	HOW TO CHALLENGE THE BRIGHT STUDENT	RATHER STRONG	RATHER STRONG
2.	THE MANDATORY SPECIAL EDUCATION ACT	MODERATE	RATHER STRONG
3.	OPEN CLASSROOM	MODERATE	MODERATE
4.	EVALUATION OF PROGRAM INNOVATIONS	RATHER STRONG	MODERATE
5.	HOW TO CONDUCT AN EPPC	RATHER STRONG	MODERATE
6.	WORKING WITH TEACHER AIDES	MODERATE	MODERATE
7.	ADMINISTRATIVE LEADERSHIP SKILL	LITTLE NEED	MODERATE
8.	CHANGE AGENT LEADERSHIP	MODERATE	MODERATE
9.	INITIATOR LEADERSHIP	MODERATE	MODERATE
10.	PARTICIPATORY LEADERSHIP	MODERATE	RATHER STRONG

APPENDIX A

TABLE A-1

FREQUENCIES AND PERCENTAGES OF THE RESPONSES OF 446 TEACHERS AND 41 ADMINISTRATORS TO 70 MEASURES FOR IN-SERVICE EDUCATION ACCORDING TO A LIKERT SCALE

TABLE A-1

FREQUENCIES AND PERCENTAGES OF THE RESPONSES OF 446 TEACHERS AND 41 ADMINISTRATORS TO 70 MEASURES FOR IN-SERVICE EDUCATION ACCORDING TO A LIKERT SCALE

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	TEACHERS %	ADMINISTRATORS NO.	ADMINISTRATORS %
1. The child with beha- behavioral problems.	1	32	6.9	1	2.4
	2	51	10.9	3	7.3
	3	123	26.4	11	26.8
	4	128	27.5	16	39.0
	5	132	28.3	10	24.4
	TOTAL	466		41	
2. The child with learn- ing dis- abilities.	1	31	6.7	1	2.4
	2	32	6.9	3	7.3
	3	105	22.5	7	17.1
	4	152	32.6	13	31.7
	5	146	31.3	17	41.5
	TOTAL	466		41	
3. The bright under- achieving student.	1	27	5.8	0	
	2	41	8.8	0	
	3	159	34.1	14	34.1
	4	155	33.3	15	36.6
	5	84	18.0	12	29.3
	TOTAL	466		41	
4. The slow learner.	1	42	9.0	1	2.4
	2	39	8.4	1	2.4
	3	140	30.0	13	31.7
	4	142	30.5	17	41.5
	5	103	22.1	9	22.0
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
5. Identification of specific learning disabilities	1	33	7.1	0	
	2	43	9.2	0	
	3	116	24.9	11	26.8
	4	149	32.0	16	39.0
	5	125	26.8	14	34.1
	TOTAL	466		41	
6. The child who day-dreams.	1	83	17.8	3	7.3
	2	119	25.5	11	28.8
	3	179	38.4	17	41.5
	4	65	13.9	9	22.0
	5	20	4.3	1	2.4
	TOTAL	466		41	
7. The tense, anxious, child.	1	51	10.9	1	2.4
	2	96	20.6	8	19.5
	3	184	39.5	15	36.6
	4	99	21.2	14	34.1
	5	36	7.7	3	7.3
	TOTAL	466		41	
8. The hyper-active, easily distractible child.	1	36	7.7	1	2.4
	2	59	12.7	1	2.4
	3	151	32.4	19	46.3
	4	145	31.1	14	34.1
	5	75	16.1	6	14.6
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	TEACHERS %	ADMINISTRATORS NO.	ADMINISTRATORS %
9. How to challenge the bright student.	1	46	9.9	0	
	2	57	12.2	1	2.4
	3	144	30.9	8	19.5
	4	120	25.8	18	43.9
	5	99	21.2	14	34.1
	TOTAL	466		41	
10. Enrichment techniques for teaching the "average" student.	1	52	11.2	1	2.4
	2	50	10.7	2	4.9
	3	146	31.3	16	39.0
	4	127	27.3	13	31.7
	5	91	19.5	9	22.0
	TOTAL	466		41	
11. Values clarification.	1	66	14.2	3	7.3
	2	83	17.8	1	2.4
	3	141	30.3	9	22.0
	4	113	24.2	21	51.2
	5	63	13.5	7	17.1
	TOTAL	466		41	
12. Affective education.	1	54	11.6	1	2.4
	2	68	14.6	2	4.9
	3	157	33.7	11	16.8
	4	129	27.7	18	43.9
	5	58	12.4	9	22.0
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
13. Cognitive learning skills.	1	46	9.9	0	
	2	68	14.6	5	12.2
	3	175	37.6	15	36.6
	4	132	28.3	12	29.3
	5	45	9.7	9	22.0
	TOTAL	466		41	
14. Psychomotor skills.	1	68	14.6	1	2.4
	2	92	19.7	9	22.0
	3	192	41.2	17	41.5
	4	79	17.0	12	29.3
	5	35	7.5	2	4.9
	TOTAL	466		41	
15. Educational need of minority groups.	1	107	23.0	6	14.6
	2	113	24.2	13	31.7
	3	132	28.3	10	24.4
	4	72	15.5	9	22.0
	5	42	9.0	3	7.3
	TOTAL	466		41	
16. Bilingual student need.	1	156	33.5	6	14.6
	2	96	20.6	13	31.7
	3	108	23.2	13	31.7
	4	68	14.6	6	14.6
	5	38	8.2	3	7.3
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	TEACHERS %	ADMINISTRATORS NO.	ADMINISTRATORS %
17. Differences in dialect or language patterns.	1	165	35.4	9	22.0
	2	86	18.5	10	24.4
	3	116	24.9	14	34.1
	4	68	14.6	6	14.6
	5	31	6.7	2	4.9
	TOTAL	466		41	
18. How to rate or assess student social skills.	1	97	20.8	2	4.9
	2	100	21.5	7	17.1
	3	158	33.9	18	43.9
	4	79	17.0	11	26.8
	5	32	6.9	3	7.3
	TOTAL	466		41	
19. How to determine the student's self-concept.	1	57	12.2	1	2.4
	2	76	16.3	3	7.3
	3	141	30.3	13	31.7
	4	118	25.3	18	43.9
	5	74	15.9	6	14.6
	TOTAL	466		41	
20. Practical techniques for use with under-achievers.	1	32	6.9	0	
	2	33	7.1	1	2.4
	3	116	24.9	5	12.2
	4	170	36.5	22	53.7
	5	115	24.7	13	31.7
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
21. Sources for obtaining instructional aids and materials	1	54	11.6	2	4.9
	2	66	14.2	9	22.0
	3	134	28.8	11	26.8
	4	118	25.3	12	29.3
	5	94	20.2	7	17.1
	TOTAL	466		41	
22. Knowing who may be helpful as resource persons.	1	49	10.8	0	
	2	73	15.7	8	19.5
	3	148	31.8	15	36.6
	4	122	26.2	13	31.7
	5	74	15.9	5	12.2
	TOTAL	466		41	
23. Determining which student should be referred for special help.	1	80	17.2	1	2.4
	2	67	14.4	3	7.3
	3	143	30.7	19	46.3
	4	116	24.9	10	24.4
	5	60	12.9	8	19.5
	TOTAL	466		41	
24. How to make a student referral for special help.	1	138	29.6	10	24.4
	2	114	24.5	12	29.3
	3	121	26.0	11	26.8
	4	62	13.3	5	12.2
	5	31	6.7	3	7.3
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
25. The law and due process rights of parents.	1	76	16.3	3	7.3
	2	90	19.3	8	19.5
	3	165	35.4	10	24.4
	4	84	18.0	13	31.7
	5	51	10.9	7	17.1
	TOTAL	466		41	
26. Student rights.	1	76	16.3	2	4.9
	2	98	21.0	7	17.1
	3	160	34.3	11	26.8
	4	87	18.7	16	39.0
	5	45	9.7	5	12.2
	TOTAL	466		41	
27. The mandatory special education law.	1	76	16.3	1	2.4
	2	93	20.0	7	17.1
	3	141	30.3	15	36.6
	4	105	22.5	12	29.3
	5	51	10.9	6	14.6
	TOTAL	466		41	
28. The law and teacher rights.	1	41	8.8	6	14.6
	2	55	11.8	3	7.3
	3	115	24.7	9	22.0
	4	138	29.6	16	39.0
	5	117	25.1	7	17.1
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	TEACHERS %	ADMINISTRATORS NO.	ADMINISTRATORS %
29. Availability of specific skill tests for classroom use.	1	58	12.4	1	2.4
	2	67	14.4	3	7.3
	3	143	30.7	13	31.7
	4	129	27.7	18	43.9
	5	69	14.8	6	14.6
	TOTAL	466		41	
30. Meanings of terms, such as "withdrawn" to describe student characteristics.	1	138	29.6	8	19.5
	2	122	26.2	8	19.5
	3	136	29.2	19	46.3
	4	52	11.2	6	14.6
	5	18	3.9	0	
	TOTAL	466		41	
31. How to administer such tests as Slosson, Purdue, ITPA.	1	135	29.0	5	12.2
	2	79	17.0	13	31.7
	3	117	25.1	10	24.4
	4	82	17.6	9	22.0
	5	53	11.4	4	9.8
	TOTAL	466		41	
32. Evaluating instructional programs and materials.	1	59	12.7	0	
	2	79	17.0	3	7.3
	3	145	31.1	7	17.1
	4	133	28.5	22	53.7
	5	50	10.7	9	22.0
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	TEACHERS %	ADMINISTRATORS NO.	ADMINISTRATORS %
33. Use of behavioral modification techniques	1	51	10.9	1	2.4
	2	59	12.7	2	4.9
	3	136	29.2	5	12.2
	4	132	28.3	18	43.9
	5	88	18.9	15	36.6
	TOTAL	466		41	
34. Sources for high interest low vocabulary materials	1	61	13.1	1	2.4
	2	53	11.4	3	7.3
	3	116	29.4	14	34.1
	4	122	26.2	14	34.1
	5	114	24.5	9	22.0
	TOTAL	466		41	
35. Sources for free and inexpensive instructional materials	1	48	10.3	1	2.4
	2	56	12.0	6	14.6
	3	97	20.8	14	34.1
	4	132	28.3	14	34.1
	5	133	28.5	6	14.6
	TOTAL	466		41	
36. How to use the results of visual and auditory perception tests	1	50	10.7	0	
	2	64	13.7	9	22.0
	3	141	30.3	7	17.1
	4	149	32.0	16	39.0
	5	62	13.3	9	22.0
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
37. Teacher-prepared instructional materials	1	60	12.9	1	2.4
	2	65	13.9	5	12.2
	3	127	27.3	19	46.3
	4	106	22.7	13	31.7
	5	108	23.2	3	7.3
	TOTAL	466		41	
38. How to recognize and what to do about possible implications subtle classroom behaviors	1	49	10.5	2	4.9
	2	57	12.2	3	7.3
	3	141	30.3	9	22.0
	4	128	27.5	21	51.2
	5	91	19.5	6	14.6
	TOTAL	466		41	
39. Utilizing open space/ open classroom techniques	1	109	23.4	5	12.2
	2	80	17.2	9	22.0
	3	129	27.7	15	36.6
	4	95	20.4	10	24.4
	5	53	11.4	2	4.9
	TOTAL	466		41	
40. Use of closed circuit television in the classroom	1	146	31.3	8	19.5
	2	86	18.5	3	7.3
	3	130	27.9	18	43.9
	4	53	11.4	7	17.1
	5	51	10.9	5	12.2
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
41. Use of the tape recorder	1	167	35.8	8	19.5
	2	81	17.4	9	22.0
	3	123	26.4	16	39.0
	4	60	12.9	5	12.2
	5	35	7.5	3	7.3
	TOTAL	466		41	
42. Role playing and dramatization as aids to teaching	1	123	26.4	3	7.3
	2	88	18.9	7	17.1
	3	134	28.8	18	43.9
	4	84	18.0	8	19.5
	5	37	7.9	5	12.2
	TOTAL	466		41	
43. Micro-teaching skills	1	150	32.2	5	12.2
	2	86	18.5	5	12.2
	3	133	28.5	21	51.2
	4	60	12.9	7	17.1
	5	37	7.9	3	7.3
	TOTAL	466		41	
44. The camera as a teaching aid	1	134	28.8	4	9.8
	2	96	20.6	6	14.6
	3	121	26.0	19	46.3
	4	80	17.2	8	19.5
	5	35	7.5	5	9.8
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	TEACHERS %	ADMINISTRATORS NO.	ADMINISTRATORS %
45. Use of film and film strip projectors.	1	181	38.8	11	36.8
	2	73	15.7	5	12.2
	3	116	24.9	17	41.5
	4	57	12.2	7	17.1
	5	39	8.4	1	2.4
	TOTAL	466		41	
46. Making slides	1	139	29.8	4	9.8
	2	99	21.2	5	12.2
	3	102	21.9	16	39.0
	4	74	15.9	11	26.8
	5	52	11.2	5	12.2
	TOTAL	466		41	
47. Use of the slide projector	1	186	39.9	11	26.8
	2	91	19.5	7	17.1
	3	108	23.2	17	41.5
	4	57	12.2	4	9.8
	5	24	5.2	2	4.9
	TOTAL	466		41	
48. Use of overhead projectors; transparencies	1	171	36.7	10	24.4
	2	86	18.5	6	14.6
	3	110	23.6	16	39.0
	4	62	13.3	6	14.6
	5	37	7.9	3	7.3
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
53. Group consensus decision-making skills.	1	94	20.2	4	9.8
	2	85	18.2	2	4.9
	3	153	32.8	10.	24.4
	4	96	20.6	19	46.3
	5	38	8.2	6	14.6
	TOTAL	466		41	
54. Dealing with the "hidden agenda"	1	136	29.2	3	7.3
	2	92	19.7	4	9.8
	3	151	32.4	19	46.3
	4	60	12.9	9	22.0
	5	27	5.8	6	14.6
	TOTAL	466		41	
55. How to conduct an educational planning and placement committee (EPPC)	1	150	32.2	7	17.1
	2	73	15.7	8	19.5
	3	132	28.3	21	51.2
	4	70	15.0	5	12.2
	5	41	8.8	0	
	TOTAL	466		41	
56. Brainstorming, fishbowling, and other discussion skills	1	106	22.7	3	7.3
	2	88	18.9	6	14.6
	3	118	25.3	16	39.0
	4	100	21.5	14	34.1
	5	54	11.6	2	4.9
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
57. Transactional analysis skills.	1	119	25.5	5	12.2
	2	87	18.7	6	14.6
	3	123	26.4	15	36.6
	4	89	19.1	12	29.3
	5	48	10.3	3	7.3
	TOTAL	466		41	
58. Working with and supervising teacher aides	1	117	25.1	5	12.2
	2	78	16.7	7	17.1
	3	138	29.6	17	41.5
	4	81	17.4	8	19.5
	5	52	11.2	4	9.8
	TOTAL	466		41	
59. Involvement of para-professionals	1	96	20.6	6	14.6
	2	88	18.9	8	19.5
	3	122	26.2	11	26.8
	4	98	21.0	11	26.8
	5	62	13.3	5	12.2
	TOTAL	466		41	
60. Leading parent education programs	1	119	25.5	3	7.3
	2	80	17.2	9	22.0
	3	124	26.6	14	34.1
	4	92	19.7	7	17.1
	5	51	10.9	8	19.5
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	TEACHERS %	ADMINISTRATORS NO.	ADMINISTRATORS %
61. Administrative leadership style and skill development.	1	140	30.0	0	
	2	91	19.5	4	9.8
	3	121	26.0	17	41.5
	4	76	14.3	11	26.8
	5	38	8.2	9	22.0
	TOTAL	466		41	
62. Change agent leadership skills	1	156	33.5	4	9.8
	2	75	16.1	3	7.3
	3	142	30.5	19	46.3
	4	62	13.3	12	28.3
	5	31	6.7	3	7.3
	TOTAL	466		41	
63. Initiator leadership skills	1	146	31.3	3	7.3
	2	70	15.0	3	7.3
	3	136	29.2	17	41.5
	4	84	18.0	15	36.6
	5	30	6.4	3	7.3
	TOTAL	466		41	
64. Participatory leadership skills	1	145	31.1	3	7.3
	2	71	15.2	4	9.8
	3	129	27.7	14	34.1
	4	92	19.7	17	41.5
	5	29	6.2	3	7.3
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
65. Consultant skills in leadership.	1	152	32.6	3	7.3
	2	60	12.9	4	9.8
	3	143	30.7	17	41.5
	4	79	17.0	13	31.7
	5	32	6.9	4	9.8
	TOTAL	466		41	
66. Conducting in-service education workshops	1	123	26.4	0	
	2	60	12.9	5	12.2
	3	121	26.0	11	26.8
	4	96	20.6	15	36.6
	5	66	14.2	10	24.4
	TOTAL	466		41	
67. Leadership in sharing instructional materials and techniques	1	102	21.9	1	2.4
	2	59	12.7	4	9.8
	3	146	31.3	14	34.1
	4	97	20.8	16	39.0
	5	62	13.3	6	14.6
	TOTAL	466		41	
68. In-service leadership concerning student learning needs	1	103	22.1	1	2.4
	2	51	10.9	3	7.3
	3	132	28.3	9	22.0
	4	109	23.4	18	43.9
	5	71	15.2	10	24.4
	TOTAL	466		41	

TABLE A-1 (CONTINUED)

DEPENDENT VARIABLES	LIKERT SCALE	TEACHERS NO.	%	ADMINISTRATORS NO.	%
69. Building individual and group potential.	1	90	19.3	1	2.4
	2	72	15.5	3	7.3
	3	139	29.8	13	31.7
	4	105	22.5	20	48.8
	5	60	12.9	4	9.8
	TOTAL	466		41	
70. Finding people/ materials to conduct in-service activities	1	106	22.7	1	2.4
	2	57	12.2	4	9.8
	3	114	24.5	16	39.0
	4	110	23.6	13	31.7
	5	79	17.0	7	17.1
	TOTAL	466		41	

APPENDIX B

LETTER TO PRINCIPALS

SURVEY INSTRUMENT

Garden City Public Schools
1333 Radcliff
Garden City, Michigan 48135

January 26, 1976

Dear Principal:

Thank you for your wonderful help, and for the opportunity for me to do my study of teacher needs concerning in-service education in your school.

The following is a list of goals of my study. This should be helpful to you in answering some of the general questions that the teachers may have concerning the survey.

Principals, please complete a survey also, since input regarding administrative perceptions of the teacher needs is also involved as a variable in the study.

Again, thank you for your help.

Sincerely,

Mary Lou Durbin
Assistant Director
Special Services
Garden City Schools

MLD/hmc

GOALS OF STUDY

The purpose of this study is to explore the problems in current in-service education, to seek solutions to the following questions, and to make recommendations based upon the findings.

1. What skills, information and recources do the teachers wish to gain through in-service education programs and participation?

2. How do teachers and administrators perceive teacher needs for in-service education?

3. What differences in perceived teacher needs regarding areas of in-service education exist between teachers and administrators?

4. How do teachers perceive their own roles in leadership of in-service educational activities?

5. How do administrators perceive the teacher perceived needs for in-service education?

6. What areas of highest perceived need were revealed concerning the in-service education according to teachers and administrators?

SURVEY PARTICIPANT INFORMATION

Please complete the following concerning your professional experience.

1. YOUR EDUCATIONAL POSITION: (Please Check)
   - ___ Teacher
   - ___ Administrator
   - ___ Other (Please Specify)

2. SEX:
   - ___ Male
   - ___ Female

3. SCHOOL LEVEL: (Please Check)
   - ___ Elementary
   - ___ Junior High
   - ___ Senior High

4. YOUR STUDENTS' GRADE LEVEL:
   _____ (Write In)

5. SUBJECT OR DEPARTMENT TEACHING AREAS:
   _____ (Write In)

6. YOUR PERSONAL HIGHEST EDUCATION DEGREE:
   _____ Degree

7. YOUR NUMBER OF YEARS TEACHING EXPERIENCE:
   _____ Years

8. ADMINISTRATIVE EXPERIENCE:
   _____ Years

SURVEY

PURPOSE

To determine teacher perceived needs and preferences concerning in-service education.

DIRECTIONS

Select a number in the following key to report the strength of your personal felt need for in-service education concerning each item. Please rate each item.

KEY FOR YOUR ANSWERS

0 - NO NEED

1 - A LITTLE NEED

2 - MODERATE NEED

3 - RATHER STRONG NEED

4 - VERY STRONG NEED

I. INFORMATION RECEIVING AREAS

STUDENT BEHAVIORAL CHARACTERISTICS

___ 1. The child with behavioral problems.

___ 2. The child with learning disabilities.

___ 3. The bright but under-achieving student.

___ 4. The slow learner.

___ 5. Identification of specific learning disabilities.

___ 6. The child who daydreams.

___ 7. The tense, anxious child

___ 8. The hyperactive, easily distracted child

___ 9. How to challenge the bright student

___ 10. Enrichment techniques for teaching the "average" student

___ 11. Other (write in choice)

_____

_____

STUDENT LEARNING AND SOCIAL NEEDS

___ 1. Values clarification

___ 2. Affective education

___ 3. Cognitive learning skills

___ 4. Psychomotor skills

___ 5. Educational needs of minority groups

___ 6. Bilingual student needs

___ 7. Differences in dialect or language patterns (What to do and how to in teaching)

___ 8. Other (write in) _____

_____

CLASSROOM TECHNIQUES

___ 1. How to rate or assess student social skills

___ 2. How to determine the student's self-concept

___ 3. Practical teaching techniques for use with under-achievers

___ 4. Sources for obtaining instructional aids and materials

___ 5. Knowing who may be helpful as resource persons

___ 6. Determining which student should be referred for special help

___ 7. How to make a student referral for special help

___ 8. Other (write in) _____

_____

OTHER

___ 1. The Law and Due Process Rights of Parents

___ 2. Student Rights

___ 3. The Mandatory Special Education Law

___ 4. The Law and Teacher Rights

___ 5. Other (write in) _____

_____

INSTRUCTIONAL WORKSHOP AREAS

___ 1. Availability of specific skill tests for use in the classroom

___ 2. Meanings of such terms as "withdrawn," "aggressive," etc., as they are used to describe student characteristics

___ 3. How to administer tests such as the Slosson, Purdue, Perceptual Motor Survey, Illinois Test of Psycho-Linguistic Abilities (ITPA), etc.

___ 4. Evaluating instructional programs and materials

___ 5. Use of behavioral changing or modification techniques for pupil motivation

___ 6. Sources for high interest, low vocabulary reading materials

___ 7. Sources for free and inexpensive instructional materials

___ 8. How to use the results of visual and auditory perception tests to help students

___ 9. Teacher-prepared instructional materials from scraps and inexpensive items

___10. How to recognize and what to do about possible implications of seemingly subtle classroom behaviors, such as student withdrawal, attention-seeking, etc.

___11. Utilizing open space/open classroom techniques

___12. Other (write in) _____

_____

II. SKILL MASTERY AREAS

MEDIA SKILLS

___ 1. Use of closed circuit television in the classroom

___ 2. Use of the tape recorder

___ 3. Role playing and dramatization as aids to teaching

___ 4. Micro-teaching skills

___ 5. The camera as a teaching aid

___ 6. Use of film and filmstrip projectors

___ 7. Making slides

___ 8. Use of the slide projector

___ 9. Use of overhead projector; transparencies

___10. Video taping

___11. Use of reference materials

___12. Mounting materials (lifts, dry mounting, laminating)

___13. Other (write in) _____

_____

LEADERSHIP SKILLS

___1. Evaluation of Program innovations

___2. Group consensus decision-making skills

___3. Dealing with the "hidden agenda"

___4. How to conduct an Educational Planning and Placement Committee Meeting (EPPC)

___5. Brainstorming, fishbowling and other discussion and sharing skills

___6. Transactional Analysis skills

___7. Working with and supervising teacher aides

___8. Involvement of paraprofessionals

___9. Leading parent education programs

__10. Administrative leadership style and skill development

__11. Other (write in) _____

_____

III. SELF ROLE PERCEPTIONS FOR IN-SERVICE EDUCATION

___1. Change agent leadership skills

___2. Initiator leadership skills

___3. Participatory leadership skills

___4. Consultant skills in leadership

___5. Conducting in-service education workshops

___6. Leadership in sharing instructional materials and techniques

___ 7. In-service leadership concerning student learning needs

___ 8. Building individual and group potential

___ 9. Finding people/materials to conduct in-service activities

___10. Other (write in) _____

_____

Are there any other comments that you wish to make or recommendations to add concerning in-service needs?

_____

_____

_____

_____

_____

Thank you very much for completing this survey. Your cooperation has been very helpful.

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