

1983

Creation and testing of a prescriptive-diagnostic staff development instrument for K-12 teachers

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**CREATION AND TESTING OF A PRESCRIPTIVE-DIAGNOSTIC STAFF
DEVELOPMENT INSTRUMENT FOR K-12 TEACHERS**

Iowa State University

PH.D. 1983

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**Creation and testing of a prescriptive-diagnostic staff development
instrument for K-12 teachers**

by

Nancy Kinn Schycker

**A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY**

**Department: Professional Studies in Education
Major: Education (Educational Administration)**

Approved:

Signature was redacted for privacy.

In Charge of Major Work

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For the Graduate College

**Iowa State University
Ames, Iowa**

1983

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CHAPTER I. STATEMENT OF THE PROBLEM

Introduction

The public's increasing concern about the inadequacy of public education (31, 32) is being echoed by educational leaders themselves (24, 72). "The teaching profession has reached the crossroads of disaster, demanding a national response greater than the outpouring that occurred after the Soviet Union's Sputnik launch", former U.S. Education Commissioner and President of the Carnegie Foundation for the Advancement of Teaching, Ernest Boyer, said recently (13).

Such sentiments have been prompted by, and followed in the footsteps of, two decades of hundreds of educationally innovative ideas involving changes in time, space, facilities, media, materials and the use of personnel. All have made little or no difference in student learning. This allegation was substantiated in the 1970s by the American Institute for Research in a three-year study funded by a \$1.8 million grant awarded by the U.S. Office of Education (2).

Further, Madeline Hunter (47), Principal of the University of California at Los Angeles University Elementary School, stated:

Research has shown . . . little consistently significant increase in learning as a result of most of today's innovative programs. The one factor that has shown consistently a significant increase in learning is that of a competent teacher. (p. 9)

Professor Thomas L. Good, one of a handful of internationally recognized experts in teaching effectiveness research, agrees that "individual teachers can and do make an important difference in what and how

well students learn" (34).

Research directed toward the identification of essential ingredients in the "effective teacher," with the intent of replication, has progressed rapidly and fruitfully in the last ten years (71, 92). Nonetheless, a persistent dilemma for those concerned about the issue of translating knowledge into practice is the blend of decisions which must be made in order to provide teachers (and other school personnel) with the highest quality of information about the best classroom practices. Many researchers and practitioners (5, 33, 34) are concerned that available research on teaching findings is not yet widely used as content for teacher education and/or staff development.

Presently, many inservice programs lack a conceptual framework. Some are not programs at all, but are rather a series of disparate experiences. No systematic growth, no direction, no designed sequence of experiences leading toward specified goals of improved performance are involved in such programs. They resemble, instead, composites of popular notions rather than the diagnostic/prescriptive strategies that are necessary to bring about improved student achievement (7, 63, 64, 70).

Statement of the Problem

In order to overcome many of these concerns about inservice and continuing education programs for practicing professionals in local school organizations, it is necessary to create a systematic, holistic approach to defining and addressing their professional needs (86, 108). This requires staff development projects that incorporate research as the

basis for changing teacher behavior. Effectively changing individual behavior necessitates using both inhouse research (data-collection and feedback) and applications of research (knowledge, utilization and training) (4, 92).

Germane to a successful diagnostic-prescriptive staff development system is a knowledge of teachers' values and attitudes toward education (24, 76). Likewise, their readiness for, and knowledge of, skills in currently effective staff development areas is essential. A search of all presently available and effective staff development of interventions has been conducted by the School Improvement Model (SIM) Project staff over the past year (100). This fact, coupled with the desirability of the program's systems approach to raising student achievement and the availability of its subjects for testing has made that project a fertile base for this study.

It is the intent of this investigation to locate and/or to create and, subsequently, administer valid and reliable instrumentation. This will be designed to assess teachers' values and attitudes toward education, plus their entry level knowledge of effective staff development concepts and methodologies prior to inservice training.

The problem can be more specifically defined by the following questions:

1. What skills and knowledge does the literature address as being necessary for the effective teacher to possess?
2. What does the literature address as the major dimensions for judging a person's teaching philosophy?
3. What objectives do each of these resources specify?

4. What items, on a diagnostic instrument made up of items carefully selected from the objectives of research-based interventions, will have discriminating power?
5. Who/what are the best resources for successful interventions?
6. Does the effectiveness of the discriminating items vary according to sex, age, experience or level of education?

Purpose of the Study

A diagnostic profile can potentially be of infinite value as a teaching tool for the staff development trainer. Such an approach, harnessed to appropriate interventions, holds a promise for the establishment and maintenance of effective teacher behavior. Further, the degree to which criteria such as sex, level of education, and experience predict a teacher's knowledge of current interventions or their philosophy of education will be explored by this investigation.

It is the intention of this study to:

1. identify, via the School Improvement Model's systems approach, viable inservice interventions,
2. determine the major dimensions for judging a person's teaching philosophy,
3. create diagnostic-prescriptive staff development instrumentation, and
4. field test the combined instrumentation.

Objectives of the Study

In order to accomplish the purposes of the study, it will be necessary:

1. to generate a list of interventions, based on a review of the literature, that will have a significant impact on the skills

- and knowledge necessary for effective teaching,
2. to create a list of objectives based on each intervention,
 3. to develop a list of test items based on the intervention objectives,
 4. to create prescriptive-diagnostic instruments that will be administered to teachers in order to measure their knowledge of intervention skills prior to inservice training,
 5. to field test the assessment instruments.
 6. to locate/adopt diagnostic instrumentation that will be administered to teachers in order to provide an objective measure of their educational philosophies, and
 7. to determine if the effectiveness of the discriminating test items vary by sex, experience or level of education.

The Hypotheses

The literature suggests the following global postulate concerning the differential impact of staff development:

The entry-level knowledge of an intervention will differ among teachers, and these differences can be partially predicted through each of the following background variables: sex, experience, level of education, and educational philosophy.

The study can be more specifically defined by the following assumption and operational hypotheses (see Figure 1):

Assumption: The scores on both the assessments of educational philosophy and interventions will be approximately normally distributed.

Hypothesis I: (Figure 1 - Model A) Intervention scores can be predicted through a combination of the following variables:

- a. sex
- b. level of education
- c. experience

Hypothesis II: (Figure 1 - Model B) Intervention scores can be predicted through a combination of the following variables:

- a. sex
- b. level of education
- c. experience

with the Multiphasic Assessment of Philosophy of Education (MAPE) variables of:

- d. Classroom Climate
- e. Individual Differences
- f. Teaching Style
- g. Learning Emphasis
- h. Procedures and Planning
- i. Theoretical Base

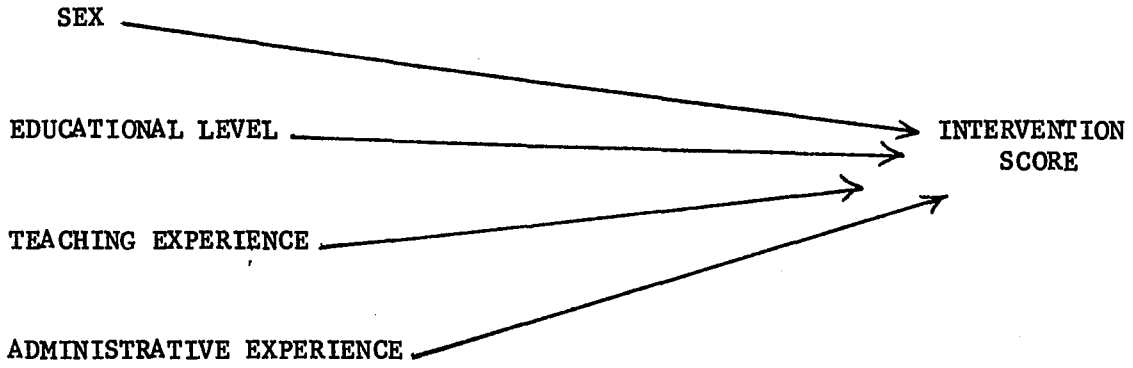
serving as intervening variables.

Assumptions

The design of this study was based on the following assumptions:

1. That schools can make a difference in student achievement.
2. That nearly all tasks required for building and maintaining quality educational programs rely heavily on people to perform them.
3. That, unless teaching behavior is changed, the delivery system of education to students will remain the same.
4. That there is a need for continuing education for educators.
5. That, when change is systematically planned, the chances of improving inservice education are enhanced.
6. That individual preferences for inservice activities do not necessarily reflect needs.
7. That the educational philosophy and knowledge of contemporary

Hypothesis I: Model A



Hypothesis II: Model B

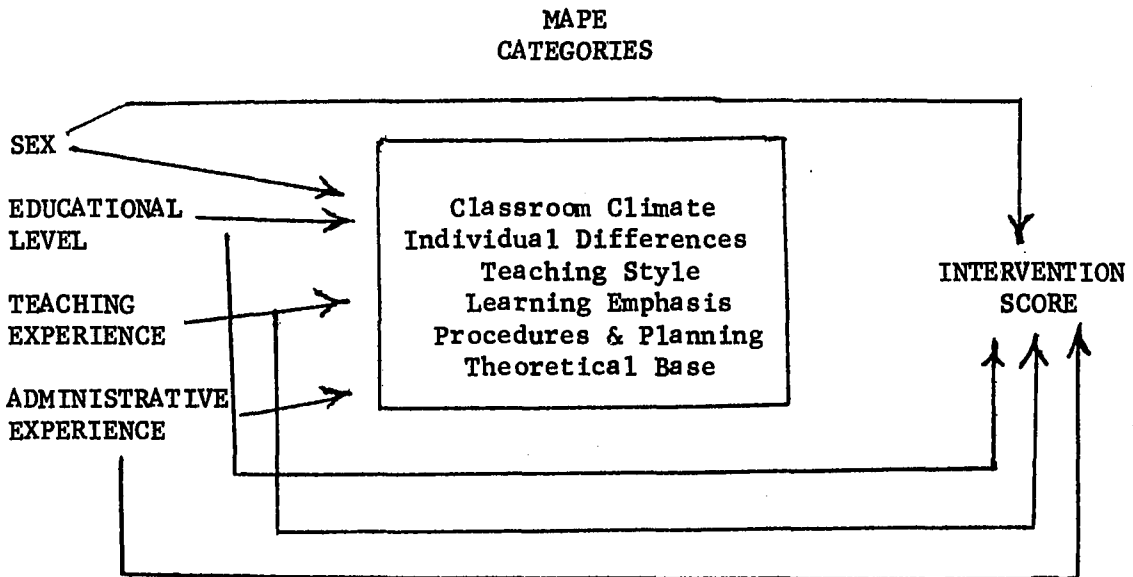


Figure 1. Design of the study

intervention concepts and methodology can be measured by paper and pencil tests.

8. That the School Improvement Model Project has identified effective interventions.
9. That the cooperation of SIM's school organizations can be obtained. That is to say, arrangements will be made through the Field Coordinators for teachers and administrators to take both the education philosophy and intervention assessments under controlled conditions.

Delimitations

The study was delimited as follows:

1. Fourth- and eighth-grade teachers¹ and all principals/division heads in SIM will be diagnosed.
 - a. BRECK--a private K-12 school organization in Minneapolis, MN
 - b. EDINA PUBLIC SCHOOLS--K-12 district in Edina, MN
 - c. MINNEAPOLIS PUBLIC SCHOOLS--K-12 district in Minneapolis, MN
 - d. NORTHFIELD PUBLIC SCHOOLS--K-12 district in Northfield, MN
 - e. SPIRIT LAKE COMMUNITY SCHOOLS--K-12 district in Spirit Lake, IA
2. The subjects will be members of a school organization (SIM) recently involved in an effort to improve learning through performance appraisal; thus, they may demonstrate a more positive disposition toward educational research than subjects chosen at random.
3. The diagnostic instruments will be administered to selected teachers, principals, or supervisors within SIM during the fall of 1982.
4. The instruments will be administered at the respective SIM school organization's facilities.

¹All in organization except in Minneapolis where only one-third of the schools will be involved.

Definitions of Terms

The following definitions of terms are presented to give clarity to their use and meaning in this study:

ACHIEVEMENT	Knowledge, understanding, and skills acquired as a result of specified educational experiences (14).
ASSESSMENT, TRAINING	A systematic written procedure designed to assess the degree to which the respondent has acquired certain information and mastered certain skills relevant to the instructional objectives of a specific staff development training strategy.
COMPETENCIES, TEACHING	Performance of teaching skills that can be utilized by teachers in the classroom to increase learning (82).
CONTINUING EDUCATION	A great, unspecified diversity of educational endeavor beyond the usual sequence of schools and colleges (40).
CRITERION-REFERENCED TEST	(Content-referenced test), a test designed to measure the respondent's mastery of a specified content/skills domain or a list of instructional objectives (14).
DIAGNOSTIC	The art of the investigation or analysis of the cause or nature of a condition, situation or problem (110)
DIAGNOSTIC PROFILE	A graphic presentation of the strengths and weaknesses of an educator as they relate to the knowledge and skills deemed pertinent to their profession.
DISCRIMINATING POWER	See item discrimination index.
DISTRACTORS	The incorrect alternative on multiple-choice items (14).
DIVISION HEAD	Person in charge of a private school.
EDUCATOR	One skilled in teaching; a student of the theory and practice of education (110).
EVALUATION, EDUCATIONAL	Degree to which educational objectives have been achieved (1).

FIELD COORDINATOR	Representative from SIM school organization who is responsible for coordinating the efforts of his/her organization and those of SIM.
FORMATIVE EVALUATION	Evaluation obtained during the process of instruction to evaluate either the learner's progress or the effectiveness of the instructional program (14).
INSERVICE-EDUCATION	Any planned program of learning opportunities afforded staff members of schools, colleges, or other educational agencies for purposes of improving the performance of the individual in already assigned positions (40).
FOILS	See distractors.
INTERVENTION	Staff development training strategy (68).
ITEM	A single question or exercise on a test (14).
ITEM ANALYSIS	Any statistical procedure used to determine the quality of a test item; usually includes difficulty and discrimination indices (14).
ITEM DIFFICULTY INDEX	The percent/proportion of test takers in a specified group who answer an item correctly (14).
ITEM DISCRIMINATION INDEX	Measure of the degree to which an item differentiates between people having varying degrees of mastery of the material tested (14).
LEARNING	The modification or changing of behavior through instruction, practices, or experiences (110).
MEASUREMENT, EDUCATIONAL	The process that attempts to obtain a quantified representation of the degree to which a student reflects a trait (1).
NORM-REFERENCED TEST	A test designed to differentiate between persons having varying degrees of the ability or characteristic measured and whose scores are interpreted by comparison to other people in the norm group (1).
OBJECTIVE, BEHAVIORAL	An instructional objective that includes specification of the knowledge and/or skill to be demonstrated, the conditions under which the performance will be demonstrated, and the minimal acceptable level of proficiency (14).

OBJECTIVE, INSTRUCTIONAL	A statement describing the intended outcomes of an instructional program (14).
PRESCRIPTIVE	A written direction for a corrective agent (110).
PRINCIPLES OF LEARNING	Basic scientifically established laws or rules that can bring about changes in behavior (learning).
PROTOTYPE	An original model on which something is patterned (110).
RELIABILITY	How consistently a test measures over time, occasions, or samples of items; the degree to which test scores are affected by measurement errors. Measured by a reliability coefficient and the standard error of measurement (14).
SCHOOL ORGANIZATION	An administrative and functional structure for either private or public schools within the School Improvement Model (68).
STAFF	Persons for whom inservice education activities are planned (40).
STAFF DEVELOPMENT	See inservice education.
STUDENT	A scholar, a learner, one who studies: an attentive and systematic observer (110).
SUMMATIVE EVALUATION	Evaluation obtained at the end of a segment of instruction to determine if students have learned the material and/or to determine if the instruction has been effective (14).
SYSTEMS APPROACH	A plan of action that seeks the answers to four questions: What is it that you wish to achieve? What resources do you have and need to achieve your objectives? How will you go about achieving your objectives? How well have you accomplished your objectives (79)?
TABLE OF SPECIFICATIONS	A two-way table, one dimension of which is a breakdown of behavioral changes, and the other of subject matter topics (1).
TEST	Any systematic procedure for measuring sample behavior (1).

THEORY

A set of interrelated constructs (concepts), definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomena (56).

VALIDITY

The degree to which a test measures what it is designed to measure or predicts some external criterion; major subcategories include content validity, construct validity, and criterion-related validity (14).

CHAPTER II. REVIEW OF LITERATURE

Introduction

The problem for this study emerges from a universally felt need for improved staff development practices through which educators may ultimately improve student achievement. A growing body of research identifies relevant subtopics that provide a background for this investigation. The ensuing review of literature, therefore, has been organized around the following topics:

1. Need for Staff Development
2. Standard Staff Development Practices
3. Elements of Effective Staff Development Systems
4. Currently Effective Staff Development Interventions
5. How to Create Diagnostic-Prescriptive Assessments
6. Related Research on Testing Teachers' Skills

Initial sources of information were the ERIC System, the IARS System, Dissertation Abstracts, library indexes, and Educational Administration Abstracts. Additional sources were identified from citations in books and journals read, personal interviews/telephone contacts, and written correspondence with the more prominent researchers identified.

Limitations of the review that should be noted are:

1. There is no systematic study of sources outside the United States.
2. Most studies are from published sources, and it is well-known that published sources are biased toward those with significant results.

Need for Staff Development

Concern for education's inadequacy

The national outcry for schools to be accountable for student growth (31, 32, 72) has served as the impetus for the establishment of battle lines between teachers, teacher organizations, and those historically charged with educational administration and improving instruction (6, 59). Colleges of education which have traditionally exerted control over teacher inservice education now find it necessary to form alliances with school districts and teacher organizations (6, 38, 39, 99, 105).

Simultaneous with this surge of attention to inservice education is the recent research-based refutation of the notion that schools don't/ can't make a difference in student achievement (17, 98, 102). No longer can we blame the home for Johnny's inability to learn. The schools must accept the responsibility.

Reliance on staffs

This acknowledgment has given credence to the value of efforts of inservice school staffs (70, 80) which, according to Harris, are "the heart of the operation of schools" (40). Reality is that nearly all tasks required for building and maintaining quality educational programs rely heavily upon people, namely teachers, to perform them. The quality of education given to youth is directly related to the effectiveness of the individuals who staff the schools. According to Manatt, Director of the School Improvement Model and Professor at Iowa State University, "If you can't change teaching behavior, you can't change the delivery

system of education to boys and girls" (69). The typical teacher practices the teaching profession in isolation; yet he/she has the primary responsibility for the content and conduct of teaching and for the quality of instruction. Meeting this responsibility cannot be approached casually as knowledge changes and develops and as enlarged understanding of the nature and characteristics of how students learn is gained.

The term "staff" primarily addresses a pool of persons who have been educators for some time and who, in all likelihood, will continue to remain (40, 36). In the 1980s, nationwide declining school enrollments, coupled with the contraction of enrollments in initial teacher education, were so severe (36) that a static body of teachers was created. In order to be vital, it must not remain static; workable strategies for continuous renewal must be developed (23, 40). Teaching that is solely dependent on content and methods learned in college is, in a short time, inadequate. The rapid change and expanding knowledge within the field of education has made it such that the moment educators leave their training institution, they embark upon a "journey of obsolescence" (94). With the prospect of few new recruits, the profession needs systematically-conceived, ongoing inservice education if it is to cope with changes. Although the acknowledgment of a need for continuous growth within the populace of an organization, it is not solely indigenous of education. The military, health services, and industry have all been cognizant of this necessity and have made extensive use of inservice education for their personnel (59).

Educators, themselves, expound that inservice education is needed

(6, 60, 86, 111). Notwithstanding, there is general agreement that past inservice approaches have not been effective (6, 7, 13, 23, 86). Traditionally, inservice education has been reactive rather than proactive (40, 78). This unplanned change has taken the form of reactions, protective arrangements, coping mechanisms, and even organized resistance. A major problem with this approach is the lack of predictability of outcomes accompanied by a high percentage of negative outcomes (40).

Research gives direction

Planned change is not guaranteed to be a panacea. However, there is evidence that, when change goals are rationally selected, actions are controlled to assure reasonable change rates and precautions are taken to assure minimum negative effect, the chances of improving inservice education and, ultimately, student achievement are greatly enhanced (7, 30, 39, 40, 70, 80, 106, 111, 114). Thus, current pressures on public education mandate that supervisors, and those responsible for staff development, use more scientific methods in their attempts to improve instruction. This clamor has given credence to a growing research-base that indicates that in order to effect changes that are productive and lasting within our schools, it is necessary to establish systems of staff development from which to operate that link research, development and classroom operation (4, 7, 8, 23, 29, 42, 78, 105). The shotgun approach is no longer a viable alternative to inservice education (6, 53, 70, 78, 81, 93). Presently, however, ongoing focused staff development efforts are virtually nonexistent at most schools (109, 114).

Standard Staff Development Practices

The following staff development procedures prevailing in education today have been identified by Bishop (9).

1. School Related Courses, Seminars, Institutes, Conferences and Workshops--This category refers to professionally endorsed activities that may or may not be directly under the aegis of a school organization.
2. Inter- and Intraschool Programs, Activities and Projects--Staff development practices included in this category are designed to occur on the school-building or district level.
3. Consultant Directed Programs--Staff development programs may employ persons with expertise in a desired area to work on a continuing basis with school personnel.
4. Production and Use of Instructional Media, Resources and Materials--Programs of this type make primary use of verbal, audio, visual and nonelectronic/electronic technologies. In staff development operation, these technologies may be used individually or collectively at designated times or at the convenience of the staff.
5. Individual Centered Personal and Professional Growth Plans--Plans comprising this category may stress individually targeted activities where teachers identify objectives and work with supervisors or peers regarding regarding means, progress, standards, and evaluation.
6. School or Regional Consortia Programs--Programs in this category emphasize a professional partnership among schools, districts, regional facilities or organizations.
7. Extended Year Programs and Assignments--This category covers programs and assignments that may extend beyond the usual school year.

Models of present day "State of the Art" staff development delivery systems are embraced by state-funded teacher centers, district-funded teacher centers, special education, Department of Education, districts implementing state plans, universities, data banks, professional organizations, and private industry. The following list attempts to provide

a cross section of those agencies representing all parts of the nation that are singled out either by leading journals and/or by participation in national staff development conferences. Some were further clarified through phone contact between this investigator and agency administrators.

The Scarsdale Teachers' Institute, Scarsdale, New York, is an example of teachers who negotiate with their school district for funds to create a teacher-led, teacher-administered inservice facility under the auspices of their teachers' association (62, 97).

Staff development is initiated after a needs assessment in the form of a questionnaire sent to teachers asking them to "check the event and courses that interest you" (97) and is sent to each staff member. Evaluation of subsequent inservice takes the posture of another questionnaire with questions such as, "What materials do you feel fulfilled the course objective especially well?" (96, 97). This, of course, lets teachers have what they want, not necessarily what they need.

The Alaska Special Education Inservice Training Center (ASEITC), Solodona, Alaska, is representative of an organization that is funded by both the Office of Special Education and the Department of Education. It operates with Title VI-B funds as a principal feature of Alaska's Comprehensive System of Personnel Development. The training concept developed by ASEITC is based on four principles. They are that inservice training:

1. should be based upon the needs of each individual being trained,
2. should be cooperatively designed by those providing the training

and those receiving the training,

3. should be field based, and
4. should provide follow-up activities which insure implementation of what has been learned by the trainees in his or her home teaching situation.

The model ascertains its constituents' "needs" by having them complete a preassessment booklet that asks them to, "Check those topics below you wish training in" (87, 113). Compilation of the perceived needs results in an "Individualized Inservice Training Plan" for which the participants attend training at the Center. On the last day of a two-week program, attainment of the objectives is measured on a Likert-type evaluation form which "details more of the training and represents an overall evaluation" (87, 113). Again, this model relies totally on the accuracy of the teachers' perceptions of their needs.

Kettle Moraine Schools, Wales, Wisconsin, which was touted as possessing "A Staff Development Model That Works" (62) at the Annual 1982 Association for Curriculum Development (ASCD) Conference: Leadership in Educating for a New Century displayed a variation on the general inservice/staff development model from the Wisconsin Department of Public Instruction K-12. It was billed as being a model based on needs identified at the District, building and individual levels. Further inquiry revealed a needs assessment process that utilized a Continuing Staff Education Individual Needs Request Form on which teachers are asked to "relate specifically how this activity will improve you in your job and is not redundant with previous training." The reverse side of this form provides space for the evaluation of approved activities with questions

such as, "Did this activity meet your individual needs?" (62, 10, 58).

Center for Professional Teacher Education, University of Texas at Arlington depicts still another variety of a system that is university sponsored and designed to "help teachers improve their instruction-effectiveness" according to the ASCD conference program (62).

The model boasts of "emphasizing self-diagnosis with supporting strategies" (62). Upon further investigation, "self-diagnosis" is ascertained by a self-assessment instrument that asks teachers, on a Likert-type scale, to identify "How do I conduct instruction in the classroom or do I do the following" (90, 91). Future training is then based on the teachers' perceived needs. No formal mechanism to determine the degree to which the goals and objectives of the training were met was administered (62, 90, 91).

The Detroit Center for Professional Growth and Development, in Detroit, Michigan, is a state-funded teacher center with still another approach to providing those concerned with staff development implementation "more discriminating information." The organization supports the premise that "overall feelings about inservice activities" are not sufficient to evaluate "what works well in inservice education." In a purported attempt to gain additional insights, they have prepared a computerized data bank containing information on, to date, 926 workshops that cover a wide assortment of topics from stress to puppetry. On each program is compiled participants' perceptions of the activity, length, location held, characteristics of the participants and characteristics of the schools represented. Evaluation criteria for workshop

results are recorded by participants on a questionnaire with a five-point, satisfaction rating-scale. A sample aspect to be rated may be, "activity leader's presentation of the subject" (43).

ASCD'S STAFF DEVELOPMENT CONTRACT PROGRAMS (43) are a sample of that which is offered via professional organizations. The basic steps in the process of designing a contract program are to:

1. Identify, ideally together with participants, a set of priority expectations for the program. These expectations should be realistic in view of specific time and budgetary limitations.
2. Convert these expectations, with the assistance of ASCS's contract program manager, into specific learning objectives for the program.
3. Communicate these expectations and objectives through the contract program manager to several potential workshop consultants.
4. Formulate, in dialogue with the recommended consultant, a final set of learning objectives for the program. These final objectives should reflect a close fit between the consultant's area of expertise and participants' needs and expectations.
5. Communicate these final learning objectives to workshop participants in advance of the program, aided by ASCD's contract program Participant Pre-Assessment Instrument. (What are your "perceived" needs?)
6. Communicate the findings of the Pre-Assessment Instrument to the workshop consultant.
7. Evaluate the program against its prespecified objectives, aided by ASCD's contract program Evaluation Instrument.
8. Plan for systematic follow-up, reinforcement, and feedback.

All of the aforementioned vehicles for staff development espouse the need for assessing the participants' deficiencies, but none get past their perceived needs. Likewise, all agencies embrace the desirability to evaluate whether or not the goals and objectives of the training were

met, but none get past perceptions or "happiness quotients" in establishing criteria. Further, interviews with nearly fifty prominent professionals in the field of staff development by Education Week (104) suggested that staff development training is rarely measured.

Elements of Effective Staff Development Systems

Research-based procedures

Although there is no one good overall system that everyone can use (61, 65), a growing body of literature does identify individual procedures utilized in effective inservice systems. Effective systems should:

1. be designed so programs are integrated into, and supported by the organization within which they function (29, 61, 70, 78, 80, 108, 111),
2. be designed to result in collaborative programs (70, 80, 108),
3. be grounded in the needs of the participants (6, 21, 42, 53, 61, 70, 78, 80, 81, 100, 111),
4. be responsive to changing needs, taking into account findings of research on innovation and change theories (70, 80, 106),
5. be accessible/convenient (6, 61, 70, 80),
6. be evaluated and compatible with the underlying philosophy and approach of the district (7, 80, 86),
7. offer participants opportunities to experience and to "reality check" new behaviors (with feedback) in a safe environment (6, 22, 27, 55, 61, 78, 114),
8. be continuous and holistic (6, 27, 61, 78),
9. offer reasonable reward to participants (78, 114) other than money (114),
10. be presented locally (6, 27, 61, 108),
11. provide opportunities for observations of other projects (6, 27, 55, 61),

12. provide staff support activities (6, 27, 55, 61, and
13. be based on specific and cogent written objectives (15, 86, 111).

Self-perception inadequate as needs assessment

There is agreement among scholars that inservice training should be "grounded in the needs of the participants" (6, 21, 41, 53, 70, 78, 80, 81, 100, 111) and that evaluation is of significant importance (52, 55, 70, 86). It is questionable, however, whether solicitation of teachers' opinions is an adequate measure either for determining inservice needs or the success or failure of an experience. Olivero illustrates the validity of the first portion of the preceding statement when he summarizes the findings of a recent study completed by California site administrators, ". . . most people aren't aware of what they need until they are in a position where they become cognizant of the void" (78).

Questions about the validity of self-perceptions as measures of needs have been raised by others such as Brown (14) and Moburg (75) who advised that ". . . research be conducted which compares the self-perceived instructional needs of teachers with a needs assessment obtained through other means."

A recent study conducted by Jones measured both the knowledge and perception of needs in reading readiness of 86 K-6 classroom teachers. The findings indicated virtually little correlation between the two. The fact that the teachers expressed only little to moderate need for knowledge and that they demonstrated lack of mastery of skills and understanding in reading and reading instruction would seem to imply that needs

perceptions are an inadequate indicator of staff needs (52).

The validity of solely soliciting teachers' opinions as an adequate measure of success or failure of an experience is questioned by Harty (41), McDonald (65), as well as Jones (52). In Jones' study, questions were asked to determine the teachers' participation in specific kinds of programs and their opinions about the most beneficial type of inservice educations. The types of inservice education felt to be most beneficial were demonstrated lessons and workshops. However, in order for demonstration lessons and workshops to be assumed valid, the teachers must already possess the knowledge background needed to apply the methodology effectively and to generalize the techniques to a variety of applications. Unfortunately, these teachers apparently did not possess a solid foundation in knowledge of reading and were not aware of much need for additional knowledge. Their preferences for inservice activities therefore did not necessarily reflect their real needs. Therefore, a person charged with the task of determining inservice needs, according to Jones (52), must consider alternate methods, one of which may be formal testing (6, 14, 52), in order to provide a diagnostic profile for a particular inservice client.

The teacher decision-making process

Emerging from an extensive review of the literature on teacher-effectiveness is the view of the role of the teacher as that of a professional decision-maker in the classroom (25, 49, 83). The quality of these decisions, which center on what and how to teach, are the prime

factors in determining student achievement. It follows, then, that the focus of staff development should be on the individual and, more specifically, on those entities that provide the foundation upon which teachers make their decisions. For the sake of brevity, they can be categorized as: individual philosophy, knowledge of learning theory/principles, and possession of skills/competencies. Only when teachers are cognizant of a core of values, knowledge and skills will they be able to rationally resist the prevailing fads in the educational community.

Individual philosophy Individuals possess a philosophy of life whether or not they are aware of it. Teachers' philosophies, personal values and beliefs form a portion of the foundation from which they make choices or decisions relative to their personal and professional lives (14, 25). The research of Combs (18) concludes that the system of beliefs that helps hold of others is an extremely important variable in their effectiveness. Further, Purkey and Avila (89) emphasized that it is of paramount importance for teachers to become aware of how they see themselves and the world around them. Usher and Hanke (107) stressed that the nature and quality of teachers' personal beliefs become crucial, for teachers convey their beliefs through their methods, knowledge and procedures used in the classroom. Goodlad (35) echoes this sentiment and calls upon teachers to examine their beliefs and to act responsibly. Today, educators appreciate the fact that value neutrality on the part of the teacher is an impossibility (14, 25). Thus, if teachers cannot remain neutral, it is imperative that they cultivate an awareness of the values they do espouse. How teachers organize

curriculum, interact with and evaluate students, and view themselves within the teaching-learning context are all affected by the basic philosophical orientation they bring to the classroom.

Teaching skills/competencies A rationale for the need to define and cultivate teacher competencies is set forth by Popham and Peter. Popham (85) stated,

Every profession worthy of the name derives its professionalism precisely from the fact that its members possess a special expertise not present in non-members of the profession. Lawyers can prepare legal briefs. Surgeons can perform operations. Accountants can balance financial reports. People off the street can't do these things. But do teachers bring anything to bear on an instructional situation other than a general education, native intelligence, reasonable dedication, and borrowed teaching tricks? These attributes will permit a teacher to get through the school day, and a number of pupils will undoubtedly learn something. But contrast our current educational situation with the enormous dividends we might be getting if members of the teaching profession possessed really unique capabilities to promote desirable behavior changes in learners. (p. 601)

Likewise, Peter (82) said,

Competency-based criteria are traditional in many professions. Precise criteria for competence have been established for specific skills required by students of medicine, dentistry, and architecture, among other professions. Further, the board examinations for admission into these professions require not only proof of adequate knowledge but also demonstration of master of specific and complex professional skills. (p. 7)

To this end, Popham (85), Peter (82) and Rosenshine (92) expound that teachers should be skilled goal achievers in the classroom. It follows that command of a larger repertoire of competencies will increase the likelihood of making the correct decisions that ultimately reflect effective teaching (71).

A recent monograph by Medley (71) summarizing 289 empirical studies

on teacher effectiveness focused in on three teaching foundations. The profile of the effective teacher that emerged was as follows:

In the maintenance of the learning environment there was:

1. less deviant, disruptive pupil behavior
2. fewer teacher rebukes
3. less criticism
4. less time spent on classroom management
5. more praise, positive motivation.

In the use of pupil time there was:

1. more class time spent in task-related "academic" activities
2. more time spent working with large groups or whole class
3. less time spent working with small groups
4. small groups of pupils working independently less of the time
5. less independent seatwork.

The method of instruction provided:

1. more "low-level" questions
2. fewer "high-level" questions
3. less likelihood of amplifying, discussing or using pupil answers
4. less feedback on pupil questions
5. more attention to pupils when they are working independently.

Solid evidence reinforces the premise that identified teaching strategies are associated with positive outcomes in student learning (33, 103).

Medley, Rosenshine, Edmonds and Mortimore et al. (in 103) have singled out sixteen such teaching behaviors and strategies:

- | | |
|-------------------------|--------------------------------|
| 1. Objective Setting | 9. Check for Understanding |
| 2. High Expectations | 10. Modeling |
| 3. Classroom Management | 11. Guided Practice |
| 4. Questioning | 12. Independent Practice |
| 5. Planning | 13. Student Motivation |
| 6. Structuring Comments | 14. Check for Mastery |
| 7. Probing | 15. Time-On-Task |
| 8. Praise/Criticism | 16. Use of Media and Materials |

Furthermore, recent research has illustrated that some of the techniques used by effective teachers cannot only be identified, but can be

be taught to others who in turn can use them successfully in their classrooms (103).

Knowledge/principles of learning theory As was pointed out in Jones' study (52), for teachers to apply methodology effectively and to generalize the techniques to a variety of applications, they must possess the knowledge background as well. In still another context, Doll, author of Decision Making in Curriculum Improvement, affirms the contention that teachers desperately need knowledge and understanding of the whole curriculum movement. Otherwise, states Doll, he or she is likely "to fall prey to faddish schemes" (26).

In a like manner, research has identified specific valid principles of learning that, when utilized in decision-making, correlate positively with student achievement (26, 82, 92). Thus, teacher understanding of the learning process is crucial to being able to increase student achievement.

Hunter (47) has stated that, "Teaching is an art based on science" (p. 1). She regards the validated principles of learning that have been identified by both the fields of developmental psychology and educational psychology as the foundation for the science of teaching or teaching competencies that can increase learning. In one of Hunter's five books which translate various principles of learning into classroom practices, Teach More Faster (46), she stated,

There ought to be some way to make this job of teaching easier and more predictably successful. There is!

Of all the factors important in learning, by far the most important is your ability as a teacher to promote that

learning in your students. The profession of teaching, in fact, is based upon the application of knowledge from psychology, from curriculum theory, and from the academic disciplines as it becomes fused in the teaching-learning act. The difference between teaching and keeping the school, or supervising students while they learn, lies primarily in the use of funded knowledge to make learning or achievement of an educational goal easier, more rapid, and more predictably successful for a student. It is the difference between just arranging for a person to have access to a pool in the hope he will learn to swim or giving him expert instruction to see that he does.

Teaching is a learned profession not a genetically based or "God given" trait. Of course individuals vary in aptitudes and interests which make it harder or easier to become competent in the profession of teaching, but teachers are not born, they're made. (p. 1)

Hunter, in her national and international staff development training, has perpetuated four validated principles of learning that are accepted by most learning theorists regardless of whether they are of the behaviorist, Gestalt or humanistic orientation. They are: motivation, reinforcement, retention, and transfer of learning.

In 1982, the state of Florida's legislature gave credence to teaching as a profession by enacting State Board Rule 6A-5.75 which requires verification of demonstration of generic teaching competencies of its beginning teachers through a formative and summative evaluation process. This requirement precipitated the formation of a coalition open to all school districts, teacher education centers, colleges, and universities in Florida. The coalition focused its efforts on the development of a system to measure teacher performance. This entailed assembling the research-based knowledge pertaining to teacher effectiveness and organizing it in such a way that it could be used in the development of a performance observation system in conjunction with corresponding training

materials for local Beginning Teacher Support Systems. Furthermore, the knowledge base of teacher effectiveness was integrated with the Florida generic teaching competencies. The undertaking culminated with the reconciliation of generic teaching competencies with thirty-four principles of learning drawn from over three hundred and ten empirical studies (27).

Current Effective Staff Development Interventions

Teacher Decision-Making Model

Hunter, who identifies the capacity to make diagnostic decisions as that which separates the "technicians from the artists" in teaching (46, 50), has embraced psychology and educational psychology to create a Teacher Decision-Making Model. The refinement of the Model evolved from findings from a ten-year investigation entitled, Project Linkage (48). The Project was a joint venture between a state department of education, a major university and an urban school district in which hundreds of successful and unsuccessful teachers were identified in order to factor out and label those decisions and practices that would identify the successful teacher. After identification, the project developed methodology to translate and convey its findings into staff development practices in order for the skills identified to become an integral part of the teachers' daily decisions and practice in a classroom. Results in terms of teachers' classroom performance and student achievement were monitored and used as feedback to modify the inservice activities.

The project objective was not to clone "the perfect teacher", but

rather to acquaint teachers with the "critical nutrients" that serve as catalysts in achieving a good "academic diet" for all of their students. The specific "menu" was left up to each teacher. The results reflected significant increased learning for the students involved in the study.

Subsequently, Hunter and her associates have provided extensive training for educators, nationally and internationally, based on the insights gained from the investigation (50). Her research has also provided valuable input into the design and implementation of the School Improvement Model Project headed by Manatt and his research team out of Iowa State University.

The components of Hunter's Decision-Making Model (49) are:

Content - Is the content to be learned appropriate for this group of learners?

Learner Behavior -

1. input - How can this content best be delivered to these students?
2. output - How can the learning that has taken place be validated?

Teacher Behavior - What can the teacher do to increase the likelihood that these students will learn?

1. Motivation Theory
2. Retention Theory
3. Reinforcement Theory
4. Transfer Theory

Instructional Objective - Is the content to be learned stated specifically and in terms of observable student behavior?

Lesson Design - Have the elements of lesson design been examined and included, if appropriate, for these students in this situation?

1. Anticipatory Set

- | | |
|----------------------------|----------------------------|
| 2. Statement of Objectives | 5. Check for Understanding |
| 3. Input | 6. Guided Practice |
| 4. Modeling | 7. Independent Practice |

Monitor and Adjust Instruction - Is student progress toward the intended learning outcomes being monitored? Are adjustments being made in instruction, if needed, based on student needs?

School Improvement Model (SIM)

The School Improvement Model Consortium (68) is a group of five K-12 school organizations and Iowa State University's College of Education united in a massive four-year research project focused on improving teacher and administrator performance as a means of improving student achievement (Figure 2). Funding, from the Northwest Area Foundation and the consortium organizations, provides a field-based venture operating out of Edina, Minneapolis and Northfield, Minnesota; Spirit Lake, Iowa; and Breck, an independent school located in Minneapolis.

Each organization within the project is guided by a separate steering committee, cochaired by a school administrator and ISU consultant, with representation from the ranks of teachers, administrators, parents, and other school personnel. The steering committee's first charge is to create a philosophy of education for its organization, through which all future decisions are to be screened.

It is the mission of the School Improvement Model to make four salient linkages heretofore unattained in K-12 education. They are:

1. Teacher Performance Evaluation is described, appraised and related to student learning,
2. Administrators' Behavior, relationships to each other, to teachers and to students is described, measured, appraised and related to teacher performance.

A Total Systems Approach for Raising Student Achievement

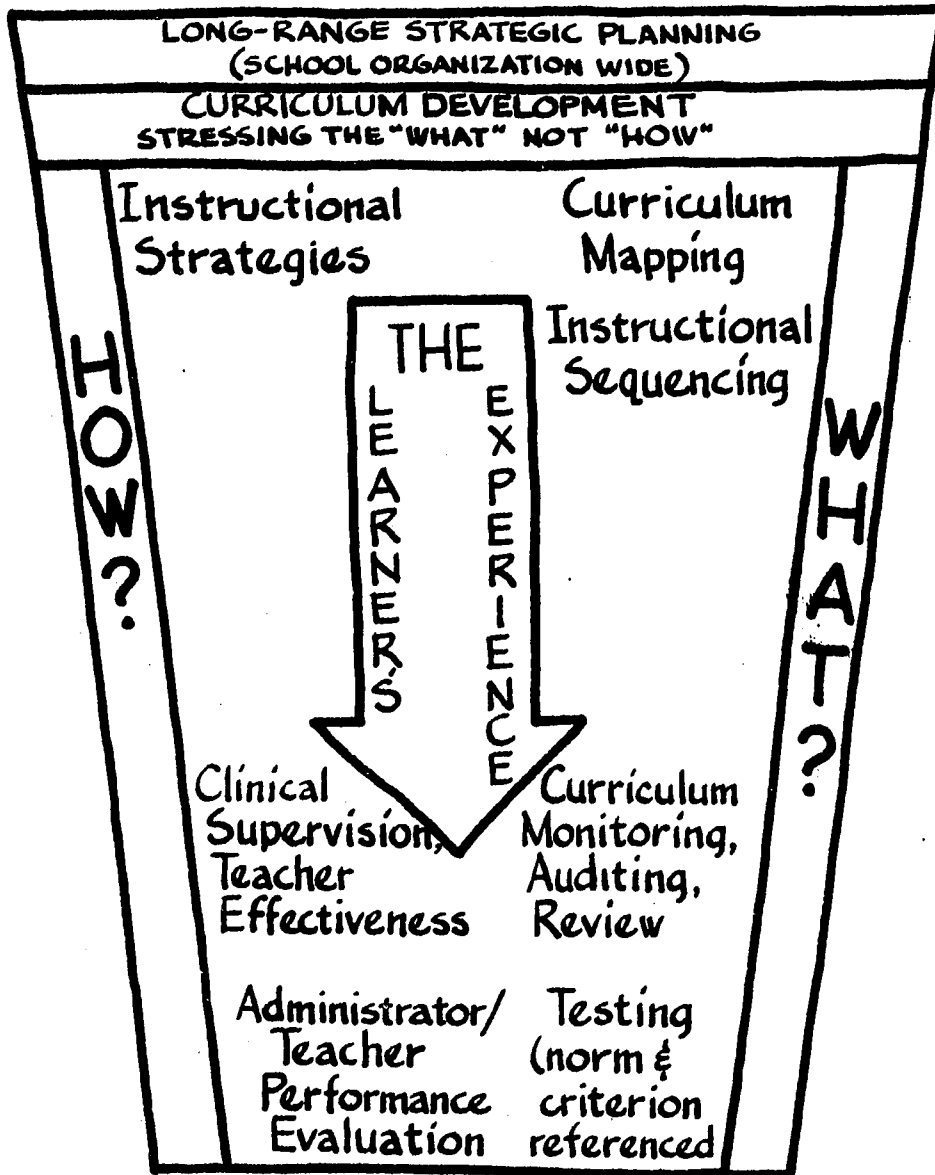


Figure 2. A total systems approach for raising student achievement (A model developed by the Northwest Area Foundation's School Improvement Model Project, a consortium of five school organizations and the Research Institute for Studies in Education at Iowa State University, Ames, Iowa, Richard P. Manatt, Director, E005 Quadrangle, Iowa State University, Ames, Iowa 50011).

3. Classroom Curriculum, as well as testing techniques, are matched to the goals and aims of the school "community", and
4. Interventions, in the form of training, changes in instructional strategy and improvement of leadership will be created and provided for each school community in amounts and ways judged necessary from the findings of line one, two and three in the particular school organization. (68)

Identification of Selected Interventions

When seeking effective interventions, one is besieged by countless "brands" of staff development. Fortunately, for purposes of this investigation, the School Improvement Model researchers, in their quest to improve teacher performance associated with student achievement, have utilized research-based performance criteria (68), in conjunction with their school organizations' needs, as a basis for selection of viable interventions. The interventions and resource persons/trainers selected were:

TEACHER EXPECTATIONS AND STUDENT ACHIEVEMENT (TESA) - was touted as Phi Delta Kappa's "Current Best Seller" (84). This training program uses fifteen separate research-based interactions that are recognized as being supportive and motivating. The interactions are placed within three strands: Response Opportunities, Feedback, and Personal Regard. One of the spin-offs of this technique is that teachers of various disciplines and grade levels are observing each other.

Sam Kerman

Los Angeles County Superintendent of Schools

THE ESSENTIAL ELEMENTS OF INSTRUCTION (47) - emphasizes Hunter's methodology and pulls together the research on principles of learning that promote student achievement. The components of which were identified on page 29 of this paper.

Madeline Hunter

Joan Maxwell

University of California at Los Angeles

University Elementary School

CLASSROOM MANAGEMENT/TIME-ON-TASK (71) - highlights the specific teacher behaviors that research identifies as producing efficient management of time and materials, effective contacts between the teacher and students and smooth-running instructional activities.

Anna Graeber
Research for Better Schools, Inc.

SUGGESTIVE, ACCELERATIVE LEARNING AND TEACHING (SALT) (74) - focuses on an unusual combination of physical relaxation exercises, mental concentration, and suggestive principles to strengthen a person's ego and expand his/her memory capabilities, plus listening to relaxing music while material to be learned is presented. It is an instructional method directed toward tapping the reserve capacities of the learner through conscious means. The method is promoted as making learning easier, more enjoyable, and faster than conventional techniques.

Don Schuster
Iowa State University

COOPERATIVE LEARNING (51) - is a teaching strategy which emphasizes interaction patterns among students and between students and teachers. Social skills are an important aspect of this staff development activity. The essence of cooperative learning is assigning a group goal such as producing a single product.

David Johnson
Roger Johnson
University of Minnesota

Measuring Achievement Objectively

Measurement and Evaluation's Role in Instruction

The literature clearly delineates the teacher's role, in expediting the formal education process, as having to decide (1, 14, 46):

1. WHAT to teach (content).
2. WHICH objectives are appropriate.
3. HOW to teach.
4. IF his/her objectives have been met (achievement level).

By achievement we mean the knowledge, understanding and skills acquired as a result of specified educational experiences. Since mastery of common terminology decisively enhances the understanding of educational

evaluation (1), the following is defined (14):

1. knowledge - certain pieces of information
2. understanding - the ability to express this knowledge in various ways, to see its relation to other knowledge, and to be able to apply it to new situations
3. skills - knowing how to do something

The purpose in measuring achievement is to obtain information that will be helpful in planning and evaluating instruction (14). A rationale for measuring achievement is arrived at through answering three questions:

1. WHY do we measure achievement?
2. WHEN should we measure achievement?
3. HOW should we measure achievement?

Two universally accepted (1, 14) reasons for measuring achievement are:

1. to describe the learner's knowledge, skills and understanding.
2. to use as a basis for making instructional decisions.

Some of the most notable used for information on learners' achievement, relevant to this review, are: feedback, motivation, proficiency and evaluation of instruction. "An examination [test] . . . informs students and teachers of their mutual progress" (14), epitomizes the essence of feedback. Evaluation informs students to what degree they've mastered the content and alerts the teacher as to what the students have or have not learned. The ability to evaluate one's own performance does not come naturally, but rather must be developed (14, 52). The literature is replete with studies substantiating the premise that knowledge of results is highly positively correlated with achievement and, to be most effective, feedback should be both specific and diagnostic.

Testing also motivates by creating in the learner a desire to learn what is presented by the instructor. The capacity of testing to establish proficiency in a given area serves the purpose of determining if the learners have attained a level of performance that equips them to succeed. Further, the results of testing can be used to evaluate instruction. If a high percent of the students do poorly, a wise instructor will first review the reliability and validity of the assessment instrument and, if found to be acceptable, will revise his/her instruction (14).

Achievement is most appropriately measured prior, during, and after instruction. Current research reiterates the need to commence instruction at the student's level. Pretesting provides the instructor with the necessary input to make a valid decision as to where to begin, thus avoiding the potential pitfall of the student becoming either frustrated or bored. Testing during the course of a unit is referred to as formative evaluation. It serves the dual purpose of motivating the learners and providing direction for both the learners and instructor. Testing at the end of instruction, summative evaluation, measures how well the student learned and provides possible insight into the effectiveness of the instruction (1, 11, 14). In other words . . . was the destination arrived at?

Characteristics of a good measuring instrument

Brown (14) has summarized specific characteristics that should be indigenous to any measuring instrument. Their purpose is to insure that the assessment will accurately measure what it is intended to measure.

They are relevance, adequate sampling, standard conditions, appropriate difficulty, consistency and meaningful scores.

The most important dimension of any assessment is relevancy. Without relevance, even with the presence of the other characteristics, the instrument will not be adequate. Relevancy addresses the question of whether or not the goals and objectives of instruction have been reached. This implies not only knowledge of content but also demonstration, on the part of the students, that they understand what they are to do with this content. To satisfy this criteria, it is imperative that the test items be based on material to which all students have been exposed.

An adequate sampling demands minimally that each area of instruction will be represented on the assessment according to its importance. Relevance and adequate sampling form the foundation for ascertaining the content validity of an assessment. Validity addresses if an instrument measures what it is designed to measure and content validity more specifically refers to if the test items sample the most important components of the material covered.

Standard conditions ensure direct comparison of all students' scores. The three aspects of the testing process involved are: items, administration, and scoring. Only if all items require equal degrees of knowledge can scores on different test items be compared. Next, it is important that all respondents have the same amount of time to complete the assessment. Informing the students of the purpose of the test and how the results will aid their learning will encourage them to put forth their best effort. Finally, scoring should be objective, which means

use of procedures that guarantee high agreement between scores.

Appropriate difficulty hinges on the difficultness of individual test items and varies with the purpose of the specific instrument used. In mastery testing, criterion-referenced measurement, the purpose is to determine the degree to which students have attained specified instructional objectives. Thus, the best items are constructed to be answered by all who understand the material. In norm-referenced measurement, the key qualifiers are "comparative", "relative", and "competitive", and the purpose is to make the most precise discrimination possible. Therefore, items which can be answered by fifty to seventy-five percent of the students are best.

Consistency, reliability, is a necessary property of a test because, without it, an individual's scores would vary from time-to-time or occasion-to-occasion. Consistency can be increased by:

1. writing test items concisely
2. using clear directions and standard administrative procedures
3. increasing the length of the test.

All of the characteristics discussed thus far have had one goal--to enhance the likelihood of tests' scores providing information about students' achievement that will be useful to the teacher in making educational decisions. Scores can be interpreted either by comparing them to scores of other students (norm-referenced) or to some standard of content mastery (criterion-referenced). In order to fully understand why the student scored as he/she did, it is necessary to also take into account the characteristics he/she brings to the experience. Although it is unlikely that all tests will achieve all of the aforementioned

characteristics, the closer they come to doing so, the more accurate and useful the information yielded will be.

Planning a test

Since instruction is guided by instructional objectives, it follows that evaluation of achievement should be in terms of them. Thus, achievement is measured in terms of a learner's ability to demonstrate the desired behavioral patterns that reflect the degree to which he/she has attained the educational objectives set forth by the instructor (1). Furthermore, both knowledge (content) and what the student does with the knowledge (skills) are of concern to measuring achievement. Bloom et al. (11) have created a widely cited and used taxonomy of educational objectives that identifies six levels of cognitive skills. From the lowest to the highest they are: knowledge, comprehension, application, analysis, synthesis, and evaluation. It is the intent of both instruction and evaluation to raise the level of skills being dealt with.

Ideally, evaluation should be done by direct observation of the learner's behavior in a natural setting. This, however, is not always possible and/or practical. Therefore, artificial situations are set up to measure achievement indirectly by a variety of data-gathering devices. One such accepted method is a paper-and-pencil test. In the event that mastery is the primary goal, criterion-referenced test items are advocated (1, 14). A commonly recommended procedure for constructing homogeneous test items for a given objective is to set up a table of specifications. This method also insures a high degree of content validity for the finished instrument (1).

No one way is mandated for the formulation of a table of specifications. There are, however, certain desirable key elements (1, 14). First, the content areas to be learned are identified. It is suggested that the desired emphasis on each content area be specified. Next, the behavioral changes/skills to be measured (e.g., Bloom et al.'s Taxonomy) for each content area are indicated preferably identifying the desired emphasis. Using percentages to describe the emphasis assigned to each content and skill category, the weight to give each cell in the table can be determined. Such a table provides direction in writing the test items and provides a basis for determining whether the completed test reflects the desired coverage.

Guidelines for writing test items

Writing good test items requires knowledge of the subject, an understanding of the characteristics and abilities of the learners, the ability to specify what is to be measured and why, the skill to write, and practice with feedback. Feedback can come from the performance of the learners and/or verbal response. Other feedback can be in the form of statistical analysis or collegial review of selected items. General suggestions for creating test items are: 1) cover important material, 2) write simply and clearly, 3) be sure students know how to respond, 4) make items independent of one another, 5) be flexible, and 6) revise and edit.

Multiple-choice test items provide a valid, reliable vehicle to measure not only knowledge of material but most higher-level cognitive skills (1, 14, 28, 73). Further guidelines for writing multiple-choice items are:

1. The stem should present the problem and include all qualifying phrases (1, 14, 28, 73).
2. There should be only one correct alternative (1, 14, 28, 73).
3. Distractors should be plausible but clearly incorrect (1, 14, 28, 73).
4. Minimize the use of negative wording, and underline when used (1, 14, 28, 73).
5. Use "All of the above", "None of the above", and "some of the above" sparingly (14, 73).
6. If an item contains controversial material, cite the authority whose opinion is being used (14, 28).
7. Avoid irrelevant clues to the correct answer (1, 14, 28, 73).
8. Each item should test one central idea or concept (14, 28).
9. List alternatives in logical order; otherwise randomize so as to avoid patterns (14, 28, 73).
10. Be certain that the length of the responses is not related to their tendency to be correct (1, 28, 73).
11. Express the responses so that grammatical consistency is maintained (1, 28, 73).
12. Options should come at the end of the stem (73).
13. Avoid overlapping options (73).
14. Consider eliciting a "best" answer rather than always an "absolute" answer (28).
15. Avoid asking the examinee for personal opinion (28).
16. The responses should be listed rather than written one after another in a compact paragraph (28).
17. Recheck the relationship between item and table of specification (1).

Organizing objective test items into a criterion-referenced test requires a number of major steps (1):

1. Proportional representation between test items and cells in the table of specifications must be ensured.
2. The length of the test has to be established.
3. The order of the test items within the test must be determined.
4. Directions to the test taker must be prepared.
5. A method of scoring and reporting results must be ready for immediate use.

Evaluating and improving the measurement characteristics of tests

According to Ahmann and Glock (1), "perpetual vigilance" is the key to successful test making. Careful reexamination after administration is considered crucial. Each test item should be reexamined after each use by means of an item analysis in order to study its strengths and weaknesses (1, 14, 28) as well as to use as a diagnostic tool in detecting learning difficulties of individual students or of the class as a whole. Generally, item analyses are concerned with three aspects of an item (1, 14, 28, 101). The first is the item difficulty index which is the proportion of students who answer an item correctly. All items of extremely high or low levels should be scrutinized. The second area of concern is the discriminating power of the item. A discriminating item is one which students with high test scores answer correctly more frequently than students with low test scores. The third area of interest is the evaluation of distractors. As a rule of thumb, those distractors chosen by less than two percent of the test takers should be replaced. Those chosen by more than two percent, but less than three percent should be revised (14). On the other hand, if a distractor is chosen more frequently than

the correct answer, it is likely that there is a flaw in the item.

The reliability estimate and the error of measurement are indicators of the overall characteristics of the test as a whole. Reliability is defined as the tendency of a measuring instrument to yield consistent information (1). Three guidelines for improving an instrument's reliability are:

1. Write clear, specific, unambiguous items with definite correct items.
2. Establish and follow standardized procedures for administering and scoring the test.
3. Include enough items to get a stable estimate of students' performance.

There is no single answer as to how many items provide a reliable test. Brown (14) suggests that each unit contain a minimum of twenty-five items and, preferably, forty to fifty items. The Iowa State Testing Center (101) recommends fifty to one hundred items for suitable measurement. There is consensus that it is preferable to improve the quality of individual items rather than add additional items past one hundred (14, 101). A rule of thumb in considering the length of a test is to allow one minute response time per true and false or multiple-choice item. A formula that has achieved wide acceptance as a basis for estimating test reliability is Kuder-Richardson 20 (1, 20, 28, 101). The reliability coefficient is from 0.0 to 1.0. The closer the reliability is to 1.0, the better the test may measure.

Another measure of consistency is the standard error of measurement. It reflects the amount of measurement error in a test score and is used

to determine the range in which the person's true score falls (1, 14, 28, 101).

Validity, as a broad concept, refers to how well the test measures what it is designed to measure. The three main categories are: content validity, construct validity, and criterion-related validity. The type of validity most relevant to achievement tests is content validity (1, 14, 28). It is defined as "the degree to which the items on a test represent the underlying content/skills domain or a list of instructional objectives" (14). This can most readily be attained through the creation of a table of specifications (see pages 40 and 41 of this paper) based on direct input from the instructor/trainer.

Related Research on Assessing Teachers' Skills and Philosophies

Hunt (44, 45) created a model utilizing a systems approach to select, define, implement and evaluate major educational innovations. The setting for the study was a junior high school in West Virginia with a teaching staff of twenty-two and a student enrollment of six hundred thirty-nine. Thirteen competency areas were identified as essential to the implementation of a set of complex innovations. Each area was described in terms of behavioral objectives in the cognitive, affective, and psychomotor domains. These objectives served as the foundation for the training effort and the criteria for evaluation. The study concluded that success can be achieved in implementing major educational innovations via a systems approach that identifies the needed competencies, provides appropriate training to develop required understandings, skills

and attitudes, and establishes criteria for successful attainment. The criteria for selection of the innovations was not specified. Therefore, one might question the value of their having been implemented in the first place.

Malak (67) investigated the feasibility of a diagnostic/prescriptive modular approach to competency-based teacher education. Experts for each of four resource modules provided competencies, criterion, and learning activities for each module. They also each served on an advisory panel for their respective module. The results of the investigation concluded that, with a diagnostic/prescriptive modular approach to training, student teachers were able to work at their own rate of speed and meet the established criteria for success. Even though the design was implemented on a preservice basis, its adaptation to inservice training appears reasonable. Ten female students represented the trial population. Such a small, homogeneous sample lends skepticism to the findings of the study.

A study by Pritchett (88) examined the values of three hundred and sixty of the one thousand three hundred and fifty-three professional staff members listed in the 1971-1972 "Directory to Personnel in Oregon Community Colleges," as a group and as subgroups, via a questionnaire randomly sent to four hundred and seventy-nine of them. The variables examined were: sex, age, education, position and socioeconomic status. Findings produced a composite value profile that endorsed being, "broad minded, capable, honest and responsible." Other findings disclosed those under forty years old emphasized the importance of being

"imaginative", while those over forty years valued being "logical and self-controlled." Increase in formal education tended to accentuate the importance of being "forgiving, loving, intellectual, and independent" and deemphasized "self-control". There was no significant relationship between a father's major occupation and an individual's values. The sample was chosen appropriately and was adequate in size. A seventy-five percent return rate was impressive. Unfortunately, the study does not parallel the present study in terms of subjects used. Transfer of findings from a college setting to an elementary or secondary one may alter the conclusions. The validity of ascertaining a person's value system through direct questioning is dubious.

Wilson (112) and Guertin et al. (37) explored the utility of assessing educational philosophies of educators using the assessment instrument known as the Multidimensional Assessment of Philosophy of Education (MAPE). MAPE's profile is constructed in terms of scores from six subscales that describe a person's educational philosophy. They are: classroom climate, individual differences, teaching style, learning emphasis, procedures and planning, and theoretical base. For sake of brevity, each subscale can be described as a person's attitude toward teaching stemming from either a rule-based or situation-based philosophy of education. From the thirty-five thousand public school educators listed in the 1972-1973 Iowa Department of Public Instructional Annual Survey of Educators, two hundred forty were randomly selected to complete the assessment. Only ninety-eight, or forty-one percent, were returned which limits the credibility of the findings. Findings

indicated that educators as a group (administrators, elementary teachers, science, math and social studies teachers . . . mostly junior high and/or senior high) exhibited situation-based teaching characteristics. Elementary school teachers, as a subgroup, were more situation-based where math teachers indicated more rule-based teacher characteristics. Wilson (112) stated that the forced-choice format of the MAPE, which minimizes distortion produced by the differences in social desirability, also elicited antagonism on the part of many of the respondents.

A study on the effect of two teacher training programs on the student teachers' change of attitude, philosophy, and perception of teaching practices was conducted by Zupp (115). The subjects were seventy-two elementary and secondary teachers who received traditional student teaching training and forty-one who received a program specifically designed for inner-city teachers (TEAM). Pre- and posttests were administered to both groups to ascertain the subjects' attitude, philosophy and perception of teaching practices. Conclusions drawn from the findings indicated that the mean scores of the student teachers who participated in the TEAM program did exhibit a positive increase in their attitudes, but the increase was not significant at the .05 level. It was also concluded that the TEAM training did not produce a significant change in the teachers' personal beliefs. It was determined, however, that those participants in the TEAM training exhibited a significantly ($p < .05$) greater positive degree of change in their perception of teaching practices than did student teachers who participated in the traditional program. These findings suggest that specialized training in preservice

education can, to some degree, modify one's approach to teaching. The applicability of this inference to inservice seems feasible. The number of subjects involved lends credibility to the study. The assignment to each mode of training was not done randomly. Thus, it is difficult to apply the findings to all student teachers.

Summary

The review of literature substantiates a critical need for systematic, ongoing staff development for today's educators. The shortcoming is accentuated by the public's cry for accountability, declining school enrollments resulting in less frequent turnover of staffs, and an ever-expanding body of knowledge relevant to effective teaching/classroom management behaviors.

Present day staff development delivery systems are espoused by state-funded teacher centers, district-funded teacher centers, special education, Department of Education, districts implementing state plans, universities, data banks, professional organizations, and private industry. Unfortunately, most are lacking the framework to provide either adequate needs assessments or evaluation measures.

The literature does not advocate one universal system for everyone, but does identify individual research-based procedures to be given serious consideration such as training should: 1) be supported/designed by the organization within which it functions, 2) be grounded in needs of participants, 3) take into account change theories, 4) be accessible, 5) be compatible with organization's philosophy, 6) offer opportunities for

feedback, 7) be holistic, 8) offer awards/recognition, 9) provide staff support activities, and 10) be based on specific written objectives.

Most recently, the role of the teacher has been seen as that of a professional decision-maker in the classroom. Since the quality of those decisions, which center on what and how to teach, is the prime factor in determining student achievement, it follows that the focus of staff development should be on those entities that provide the foundation upon which teachers make their decisions. More specifically, these areas can be categorized as: individual philosophy, knowledge of learning theory/principles, and possession of skills/competencies.

Since the School Improvement Model provided a total systems approach to raising student achievement and has endorsed methodology compatible with recent research findings on successful staff development systems, its school organizations were chosen as likely vehicles for this study. Specific variables receiving extensive attention in the literature were: high expectations, time-on-task, classroom management, praise, teacher decision-making, group goal setting, accelerative learning and monitoring.

Measurement and evaluation are identified as crucial factors in expediting the formal education process. Characteristics deemed necessary for a good measuring instrument are: relevancy, an adequate sampling, standard conditions, appropriate difficulty, and consistency. The choice of a measuring instrument is determined by its purpose. If mastery is the primary goal, criterion-referenced test items are advocated. Multiple-choice test items provide a valid, reliable vehicle to

measure knowledge of material as well as most higher-level cognitive skills.

Presently, little has been done to design valid and reliable assessment instruments for today's prominent staff development training in the field of education. Consistent with that finding is the lack of information on the relationship, if any, between an individual's knowledge of prominent staff development programs and their sex, experience, age, education and philosophy of education.

CHAPTER III. METHODS AND PROCEDURES

In order to test the hypotheses set forth in Chapter I, it was necessary to create instrumentation to measure an individual's knowledge of the concepts of current teaching methodology. Thus, the study's development took two phases. Phase I developed methodology for construction and subsequent field testing of instrumentation to measure knowledge of research-based teacher behaviors which have been shown to have an association with increased student achievement. Phase II involved the use of instrumentation to determine initial differences among educators' scores on training assessments and developing a model to explain those differences.

Research Design

The present investigation utilized causal-comparative modeling (illustrated in Figure 1) to ascertain potential cause-and-effect relationships between several variables. This method, according to Borg and Gall (12), has experienced success in bridging the gap between descriptive research studies and experimental studies.

The dependent variable was the subject's score on a training assessment.

The independent variables under consideration in Figure 1 Models A and B were the subject's sex, level of education and experience (quadratic). In addition, Model B examined the subject's educational philosophy as it related to:

1. classroom climate
2. individual differences
3. teaching style
4. learning emphasis
5. procedures and planning
6. theoretical base

The Subjects

The investigation focused on practicing teachers and included administrators either working and/or attending school in Minnesota and Iowa. The status of the school populations of the organizations in which the educators practiced was diverse in terms of size, socioeconomic and city vs. rural. More specifically, the subjects of the study can be categorized in terms of which of the three field tests of the investigation in which they participated (refer to Table 1).

Field-Test One--was comprised of one hundred and six subjects who were practicing teachers and/or administrators enrolled in Summer and Fall 1982 classes in the College of Education at Iowa State University. Prototypes I of each of four training assessments were field-tested and subsequently revised.

Field-Test Two--involved fifty-seven subjects (four respondents were administered four instruments) who were practicing teachers and/or administrators enrolled in Fall 1982 classes in the College of Education at Iowa State University. Prototypes II of each of the three training assessments were field-tested and subsequently revised.

Field-Test Three--represented the main thrust of the investigation and included three hundred and nine practicing teachers and/or administrators working in school organizations within the School Improvement Model (SIM). Prototypes III of each of two training assessments were field-tested with ensuing suggestions for minor future revisions. Also administered in Phase III was the Multiphasic Assessment of Philosophy of Education (MAPE).

Table 1. Description of field tests I, II, and III

Field test	Dates	Subjects	Assessments completed					
			MAPE ^a	TESA	EEI	TOT	SALT	
I-- Prototypes I		Practicing teachers and/or administrators enrolled in the following Summer and Fall 1982 Iowa State University classes:						
	7/20	Elementary school curriculum			10			
	7/16	Multiculture nonsexist education			10			
	7/18	Supervision of instruction				17		
	7/22	Advance educational research and design				7		
	9/7	Duties of elementary school principals		21				
		Duties of the superintendency		12				
	7/12	Suggestive accelerative learning and teaching						
TOTAL			26	33	20	24	29	
II-- Prototypes II		Practicing teachers and/or administrators enrolled in the following Fall 1982 Iowa State University classes						
	9/14	Principles of curriculum		12				
	9/14	Advance educational research and design				10		
	9/9	Advance educational research and design			10			
	9/10	Supervision of instruction	4	4	4	4		
	9/12	Rural Iowa junior high school staff					12	
	9/12	Rural Iowa junior high school staff			9			
TOTAL			4	16	23	26		

III--
 Prototypes III

Target population was all practicing
 4th and 8th grade teachers in SIM
 from:

10/11	Breck School	3	84		
11/30 A.M.	Edina School District			13	
11/30 P.M.	Edina School District	15		19	
12/9	Edina School District		25		
11/1	Northfield School District	15	16		
9/21	Spirit Lake School District			76	
10/6	Spirit Lake School District	6	13		
11/15	Minneapolis School District	11		15	
12/2 A.M.	Minneapolis School District	4	14		
12/2 P.M.	Minneapolis School District	3	11		
12/9 A.M.	Minneapolis School District	4	12		
12/9 P.M.	Minneapolis School District	2	11		
TOTAL		63	186	123	-- --

^a Voluntary .

The target subjects in SIM were all fourth-grade reading and math and eighth-grade math teachers from all of the schools within the school organizations of Breck, Edina, Northfield and Spirit Lake. In the Minneapolis School District, one-third of the schools were selected by the Superintendent of Schools to be involved. Teachers were randomly assigned to each school. All fourth- and eighth-grade teachers at the selected schools were involved. Other teachers of all grade levels and all subject areas who received training were also included in the administration of the training assessments.

Selection of Intervention Assessment Topics

The staff development strategies included were selected by steering committees in each of the five host school organizations.

The specific sequence for the development and administration of each assessment was as follows:

1. choose intervention
2. identify goals and objectives
3. write table of specifications
4. create individual pools of items
5. conduct field test number one with prototype I for each assessment
6. revise prototype I for each assessment
7. conduct field test number two with prototype II for each assessment
8. revise prototype II for each assessment
9. conduct field test number three with prototype III for each assessment

10. suggest future revisions.

The committees were cochaired by a school administrator and Iowa State University consultant with representation from the ranks of teachers, administrators, parents, and other school personnel. The committees' first charge was to create a philosophy of education for their organization through which all future decisions were to be screened, including acquisition of staff development strategies. Subsequently, the committee was to guide, advise and evaluate the work of the School Improvement Model staff in creating a total systems approach to school improvement (Figure 2). These committees were charged with the responsibility of studying all current research-based staff development practices and selecting only those which appeared to be most appropriate for the host school organization. Other relevant selection criteria included the amount of time needed for instruction, philosophy acceptability to the school organization, board and faculty, and the cost. Their efforts disclosed the following state of the art:

SCHOOL OR TEACHER EFFECTIVE FACTORS	RELATED STAFF DEVELOPMENT
1. High expectations	Teacher Expectations and Student Achievement, Sam Kerman
2. Time-On-Task	Research for Better Schools, Inc., Anna Graeber
3. Classroom Management Skills	Texas Research and Development Center, Carol Evertson
4. Opporutnity to practice criterion skills	Institute for Research on Teaching, Curriculum Mapping--Peat, Marwich & Mitchell, Fenwish English Curriculum Monitoring--University of Wisconsin Research and Development Center, Tom Romberg

- | | |
|---------------------------------------|---|
| 5. Praise | Michigan State University, Jere Brophy
Teacher Expectations and Student Achievement, Sam Kerman |
| 6. Frequent monitoring of instruction | Criterion-Referenced Tests, Jim Popham
Systematic Monitoring of the Program of Learning (SMPL), Berea |
| 7. Leadership of the principal | Michigan State University, Wilbur Brookover and Larry Lezotte
Harvard, Ron Edmonds
Association for Supervision and Curriculum Development, Gordon Cawelti, Executive Director |
| 8. Teachers' Decision-Making Model | University of California at Los Angeles, University Elementary School, Madeline Hunter and Joan Maxwell |
| 9. Group goal setting | Cooperative Learning, University of Minnesota, Roger and David Johnson |
| 10. Accelerative learning | Suggestive, Accelerative Learning and Teaching, Iowa State University, Don Schuster |

The staff development strategies selected were called "interventions" by the SIM participants. The notion was that staff development training, properly delivered, could be an intervention to improve student achievement in the target subjects of math and reading. It should be understood, however, that teachers of all grade levels and all subjects were able to take part in the training, but that the SIM research focus was directed to only reading and math in the fourth grade and math in the eighth grade. The project selected the following interventions, and accompanying trainers, which are described on pages 31 and 32 of this study:

Classroom Management/Time-On-Task

Anna Graeber, Research for Better Schools, Inc., Philadelphia, Pennsylvania

Cooperative Learning

David and Roger Johnson, University of Minnesota

The Essential Elements of Instruction
Madeline Hunter and Joan Maxwell, University of California
at Los Angeles, University Elementary School

Suggestive, Accelerative Learning and Teaching (SALT)
Don Schuster, Iowa State University

Teacher Expectations and Student Achievement (TESA)
Sam Kerman, Los Angeles County Superintendent of Schools

Introductory seminars, based on each school organization's choices, were conducted for SIM participants. Individual participants were encouraged to participate in those interventions that most accurately met their needs. It was the responsibility of the SIM staff to identify and employ trainers for each intervention. Individual school organizations and trainers worked cooperatively to determine the goals and objectives of ensuing training. Training was conducted locally.

Phase One: Development and Preliminary Field Testing
of Training Assessments

In order to ensure the assessments' content validity, first relevancy was addressed by contacting trainers and SIM field-coordinators to determine the goals and objectives of each intervention. Second, based on this input, adequate sampling was achieved by creating a table of specifications for each intervention. Each trainer was subsequently requested to submit a pool of five multiple-choice test items per objective on the table of specifications. This included a stem, and answer and three foils for each item. The creators were further instructed to design a proportionate number of items to appropriately elicit demonstration of the following cognitive skills from the test-taker:

knowledge	40 percent
comprehension	40 percent
application	20 percent

Upon receipt of the test items, the investigator and a panel of testing experts reviewed, revised, and selected a total of forty items for each assessment instrument. Considerations for selection are on page 38 of this study.

Reliability was addressed first by ensuring direct comparison of all students' scores or, in other words, by proving standard conditions. Since all items chosen required approximately equal degrees of knowledge, scores on the different test items could be compared and given equal weight. Next, it was decided that all respondents would have the same amount of time to complete the assessment. Machine scorable answer sheets that were compatible with the Iowa State University Testing Service equipment provided further objectivity in scoring. A modified Human Subjects Informed Consent Form for use when administering the instruments was approved by the Iowa State University Committee on the Use of Human Subjects in Research and given to all participants.

Field-Test One was then begun (refer to Table 1). Prototype I for each of four training assessments was administered by this investigator. At this time, the one school organization having intended to utilize the Cooperative Learning Training was advised by its steering committee not to pursue its implementation due to lack of interest/support from its staffs, thus eliminating the need for further instrumentation refinement. Respondents were encouraged not only to complete their respective training assessments, but to also critique, in writing and verbally,

all aspects of the assessments' construction. Each item was reexamined by means of an item analysis in order to study its strengths and weaknesses. First, the item difficulty index was examined. All items of extremely high or low levels were scrutinized for possibly being keyed incorrectly and/or lack of clarity in construction. Second, the discriminating power of each item was reviewed. The third area of concern was the evaluation of distractors. Those distractors chosen by less than ten percent of the respondents were either replaced or revised. Those chosen more frequently than the correct answer triggered a thorough review/revision of the item. A Kuder-Richardson 20 reliability estimate for the entire assessment provided further diagnostic input into the revision of training assessments' prototypes I and subsequent compilation of training assessments' prototypes II. The table of specifications was considered when replacing items.

Field-Test Two (refer to Table 1) proceeding as did Field-Test One. After making the appropriate revisions/modifications on prototypes II of each assessment, copies were sent to the trainers for their input and/or approval. At this stage, however, further deliberation on the part of the steering committees eliminated SALT as a potential SIM training strategy. Therefore, Prototypes II included only The Essential Elements of Instruction, Teacher Expectations and Student Achievement, and Classroom Management/Time-On-Task. Prototypes III were the final result with only minor suggestions for future revisions.

Phase Two: Administration and Analysis of Training
and Philosophy of Education Assessments

Field-Test Three (refer to Table 1) was the major segment of this investigation. It proceeded, as did phases one and two, with the following additions:

1. advance copies of training assessments' prototypes III were sent to the School Improvement Model's field-coordinators, at the various school organizations, for their approval,
2. one generic training assessment was created as a result of the final revision.
3. item analyses and Kuder-Richardson 20 reliability coefficients for all training assessments were distributed to trainers and/or field-coordinators to be used as prescriptive tools for future training.

Prior to initiating Field-Test III, staff input served as the basis for rejecting the Classroom Management/Time-On-Task strategy, therefore, The Essential Elements of Instruction and Teacher Expectations and Student Achievement prototypes were field-tested further.

Multidimensional Assessment of Philosophy of Education (MAPE)

In addition to developing and administering the training assessments in Field-Test Three, the Multidimensional Assessment of Philosophy of Education (MAPE) was administered. The MAPE was selected because it was constructed in such a way as to meet several subgoals for an instrument measuring philosophy of education. These were set forth as follows (37):

GOALS

1. Provide material applicable to all, not just teachers with classroom experience.
2. Evaluate personal characteristics without the undesirable implications of a personality test.
3. Avoid total dependence upon theory-based dimensions.
4. Secure subject cooperation.
5. Optimize item validity
6. Obtain maximum return for administration effort.
7. Minimize opportunity for falsification so as to "look good".
8. Eliminate dependence upon skilled personnel for administration, scoring, and interpretation.
9. Extract full information from the data.
10. Communicate full information from the scored result.
11. Minimize obscure, far-fetched interpretation.

MEANS OF ATTAINING

1. Express opinions rather than actual classroom practices.
2. Subject gets to express preferences and opinions.
3. Factor analyze dimensions out of exhaustive item sampling.
4. Intrinsic appeal of expressing interests and preferences.
5. Use item analysis to determine item weightings for subscale scoring.
6. Self-administered.
7. Utilize forced-choice format.
8. Provide computer scoring and interpretation.
9. Depend upon the computer to provide multidimensional scoring.
10. Computer generates a detailed but nontechnical narrative report.
11. Utilize items with high face validity.

The six subscales within the assessment are:

1. classroom climate
2. learning emphasis

- | | |
|---------------------------|----------------------------|
| 3. individual differences | 4. procedures and planning |
| 5. teaching style | 6. theoretical base |

Normative Data--Four hundred and twenty-six Iowa teachers provided the norms currently in use. The scoring program permitted the investigation to supply means and standard deviations from local norm, thereby reporting t-scores and percentiles based upon local norms.

Reliability--Subscale reliability was measured by the split-half correlations corrected for length. With two hundred education majors at the University of Florida at Gainesville, the mean subscale reliability coefficient was 0.80.

Content Validity--was attained by the use of a panel of experts in creating the test items.

Concurrent Validity--was evidenced by high correlations between Edwards Personal Preference Schedule subscales and the MAPE subscales.

Collection of Data

Training Assessments

In field-tests one and two, training assessments were administered by the principal investigator. In field-test three, either the trainer and/or investigator administered the instruments just prior to the commencement of the respective training.

Multidimensional Assessment of Philosophy of Education

In field-test three (Table 1), advance letters were sent to field-coordinators and SIM participants explaining the purpose of the assessment. The assessments were accompanied by a brief overview with

administration and collection directions specific to their school organization. The respondents recorded their responses on machine scorable answer sheets. They later received a ~~graphic~~ profile and a comprehensive, highly individualized computer-generated narrative describing their philosophy.

Distribution was at the time of the administration of the training assessments. They were accompanied by oral and written instructions to be completed at home and returned in a sealed envelope to their field-coordinators forwarded them to this investigator. Responding to the assessment was made optional by the field-coordinators. Accordingly, the number involved in this aspect of the study shrank from three hundred and nine taking the training assessments to one hundred ninety taking the MAPE, and a return rate of only sixty-three. Only fifty-two of these were scorable (see Table 8). Declining school enrollment, with accompanying closing of schools and dismissal of staff members, added to the reluctance of staff members to partake in the completion of this assessment.

Statistical Analysis

Phase-One

The completed answer sheets for the training assessments involved in all three field tests were submitted to the Iowa State University Computation Center for computer test analysis. The analysis consisted of item analysis, score analysis and an overall Kuder-Richardson 20 Reliability estimate. The Kuder-Richardson 20 reliability estimate

$$r_{tt} = \frac{n}{n-1} \frac{S_t^2 - \Sigma pq}{S_t^2} \quad (66)$$

and the error of measurement

$$S_e = S_t \sqrt{1 - r_{tt}} \quad (66)$$

served as indications of the overall characteristics of the assessments.

In order to improve the quality of individual items, the item analysis provided the following series of statistics for each assessment item:

1. distractor analysis--the number of respondents who choose each of the possible answers
2. number attempting the item
3. number omitting the item
4. item difficulty--the number right and the percent correct
5. item variance--

$$S_i^2 = \frac{\Sigma(X_i - M_i)^2}{N} \quad (66)$$

6. standard deviation--

$$S_i \sqrt{\frac{\Sigma(X_i - M_i)^2}{N}} \quad (66)$$

7. Item discrimination--ascertained through point biserial correlation which is the correlation between item performance and total test score.

$$R_{pbis} = \frac{M_p - M_y}{S_y} \sqrt{\frac{p}{q}} \quad (66)$$

Score analysis of test results indicated the number in the test group who obtained each raw score, converted the raw score to percentiles

and to a special form of standard score known as T score.

$$T_i = \left(\frac{X_i - M_i}{S_i} \right) 10 + 50 \quad (66)$$

Further, histograms were used to provide pictorial representation to determine the normalcy of the distribution of the assessment scores.

Phase-Two

The training assessments underwent a computer test analysis as in Phase-One. Further, in order to test the model presented in Chapter I, the data for both the training assessments and the MAPE were coded and prepared for transfer to key-punch cards for statistical treatment at the Iowa State University Computation Center using the Statistical Package for the Social Sciences (SPSS) computer program (77). Guertin et al. (37), at the University of Florida at Gainesville, assisted in the weighting and scoring of each of the following six MAPE subscales:

	<u>High score indicates:</u>	<u>Low Score Indicates:</u>
Subscale 1: Class Climate	Antisubject-Centered Curriculum	Punitive and Controlling
Subscale 2: Individual Differences	Commitment to Individual Differences	Conventional Social Orientation
Subscale 3: Teaching Style	Social-group Learning Focus	Content (Textbooks) Emphasis
Subscale 4: Learning Emphasis	Detailed Planning	Distrust of Conventional Procedures
Subscale 5: Procedures and Planning	Acceptance of Total Responsibility	Hypercritical
Subscale 6: Theoretical	Personalized Teaching	Impersonal Instruction (37)

Further application of appropriate descriptive statistics such as frequencies, cumulative frequencies, percentile distributions, etc. were used on the data for the purpose of reporting specific descriptive information on the instruments used in this study. Stepwise regression analysis answered the inquiries elicited from the investigation's two operational hypotheses.

$$\hat{Y} = b_0 + b_1X_1 + b_2X_2 + \dots + b_mX_m \quad (66)$$

The results are presented and discussed in Chapter IV.

The asterisk (*) was used in the tables to denote significant difference at the 0.05 level, and the double asterisks were used to denote significant difference at the 0.01 level.

CHAPTER IV. FINDINGS

Descriptive statistics relative to the administration of the Essential Elements of Instruction (Essential Elements) and Teacher Expectations and Student Achievement (TESA) Training Assessments, and the subsequent acquisition of the two dependent variables, subjects' scores on these assessments, are presented first. Following this section, descriptive information and statistics are reported relative to the independent variables of sex, level of education, teaching experience, administrative experience and the Multiphasic Assessment of Philosophy of Education (MAPE). The remainder of the chapter will consider each null hypothesis.

Preliminary Data

Descriptive data relative to the administration of the two dependent variables, scores on the Essential Elements and TESA training assessments, are reported in Tables 2 and 3. Both instruments had a possible score of forty. Inspection of these tables revealed that the mean score for Essential Elements was 21.5, or 54% correct, with a standard deviation of 4.8, while the mean score for TESA was 16.3, or 41% correct, with a standard deviation of 6.0. The TESA reliability coefficient was higher, .81 as compared to .67 on the Essential Elements.

The frequency distribution and the cumulative frequency distribution of raw scores, along with the corresponding percentile equivalent for both training assessments, are portrayed in Tables 4 and 5.

Table 2. Raw score mean, standard deviation, standard error of measurement and reliability of Teaching Expectation of Student Achievement Training Assessment (TESA)

N	Mean	SD	SEM	KR-20
187	15.30	6.08	2.66	.81

Table 3. Raw score mean, standard deviation, standard error of measurement and reliability of Essential Elements of Instruction Training Assessment

N	Mean	SD	SEM	KR-20
127	21.51	4.88	2.79	.67

Inspection of these tables indicates that the distribution of raw scores is approximately normal in shape. Histograms of the assessment scores (Figures 3 and 4) are provided as further evidence of the normalcy of the distribution.

The summaries of item analysis results for both assessments are reflected in Tables 6 and 7. The mean item-total correlation (item discrimination) for TESA was .34 while the corresponding value for the Essential Elements was .27. Although not of the magnitude of standardized achievement tests (CTBS .4 - .6), the correlation between a correct response on a single item and the total test score was acceptable. The

Table 4. Frequency, cumulative frequency and percentile distribution of raw scores on the Teacher Expectations and Student Achievement Training Assessment (TESA) (N=187)

Score	Frequency	Cumulative frequency	Percentile rank
0	4	4	4
1	0	4	2
2	2	6	3
3	2	8	4
4	2	10	5
5	1	11	6
6	3	14	7
7	4	18	10
8	2	20	11
9	5	25	13
10	7	32	17
11	9	41	22
12	6	47	25
13	3	50	27
14	12	62	33
15	9	71	38
16	10	81	43
17	19	100	53
18	13	113	60
19	12	125	67
20	16	141	75
21	14	155	83
22	8	163	87
23	7	170	91
24	6	176	94
25	3	179	96
26	3	182	97
27	2	184	98
28	1	185	99
29	1	186	99
30	0	186	99
31	1	187	99+

Table 5. Frequency, cumulative frequency and percentile distribution of scores on the Essential Elements of Instruction Training Assessment (N=127)

Score	Frequency	Cumulative frequency	Percentile rank
4	1	1	1
5	0	1	1
6	0	1	1
7	0	1	1
8	0	1	1
9	0	1	1
10	0	1	1
11	2	3	2
12	4	7	6
13	3	10	8
14	2	12	9
15	0	12	9
16	8	20	16
17	8	28	22
18	3	31	24
19	5	36	28
20	10	46	36
21	13	59	46
22	14	73	57
23	8	81	64
24	9	90	71
25	11	101	80
26	7	108	85
27	7	115	91
28	4	119	94
29	5	124	98
30	0	124	98
31	2	126	99
32	1	127	99+

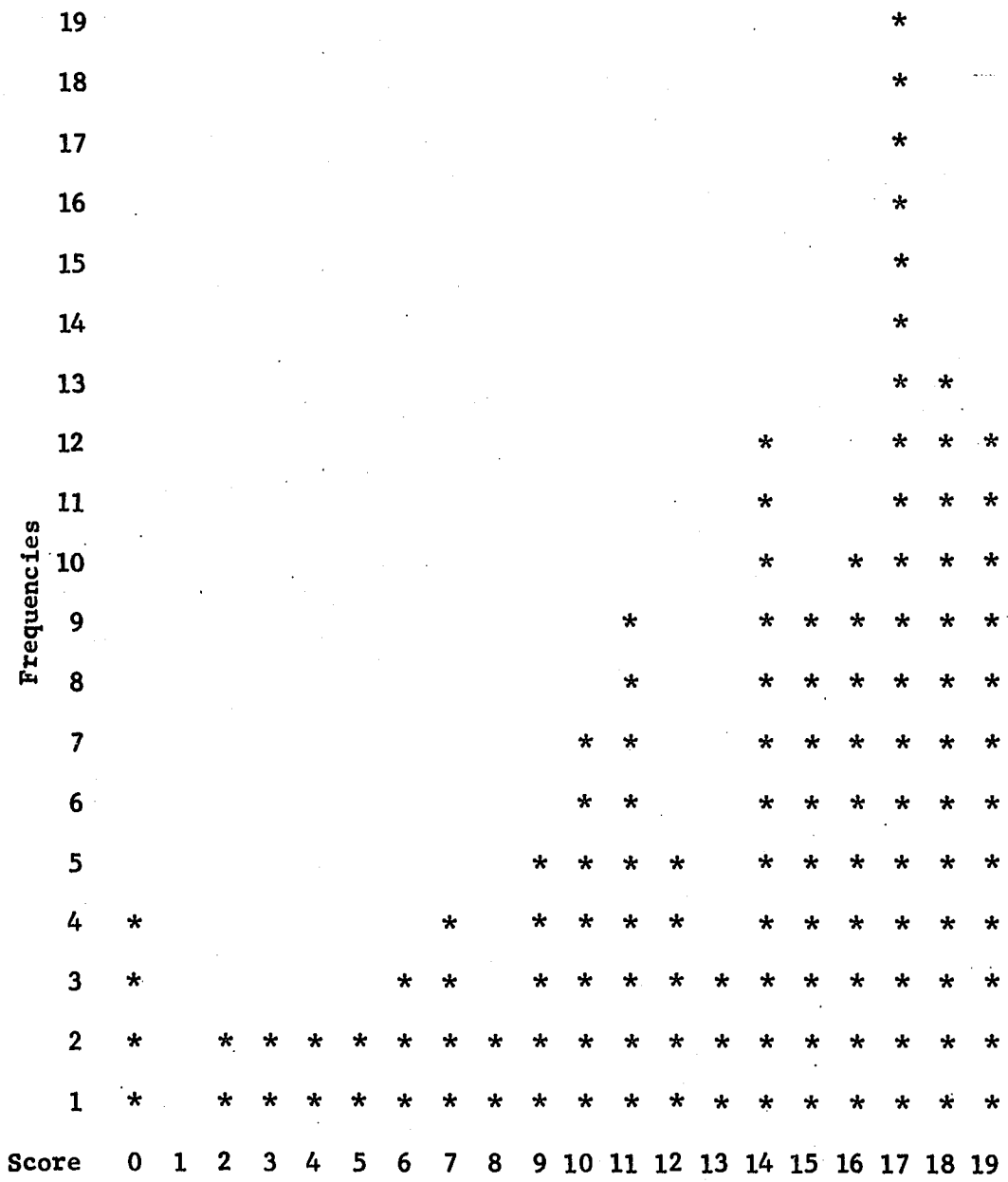


Figure 3. Histogram of scores on Teacher Expectations and Student Achievement Training Assessment (TESA) (N=187)

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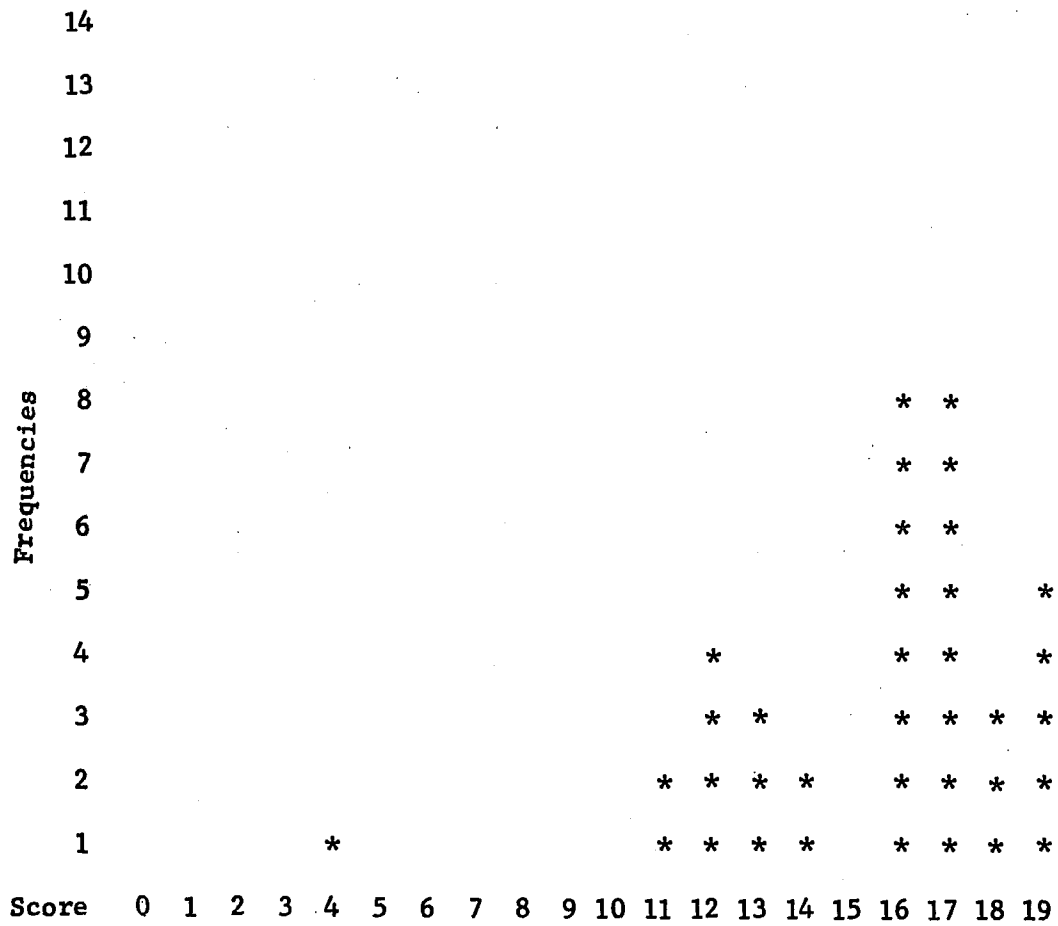


Figure 4. Histogram of scores on Essential Elements of Instruction Training Assessment (N=127)

Table 6. Summary of item analysis results for the Teacher Expectations and Student Achievement Training Assessment (TESA) (N=187)

Item	Item difficulty ^a	Item discrimination ^b
1	53	.29
2	74	.45
3	21	.24
4	35	.20
5	17	.22
6	40	.30
7	12	.25
8	08	.21
9	57	.49
10	45	.51
11	43	.40
12	67	.49
13	20	.25
14	78	.46
15	16	.39
16	25	.37
17	01	.10
18	68	.55
19	09	.10
20	59	.49
21	45	.24
22	19	.17
23	37	.07
24	65	.48
25	47	.42
26	31	.17
27	31	.32
28	81	.56
29	57	.40
30	65	.53
31	49	.40
32	15	.27
33	68	.24
34	49	.37
35	34	.39
36	53	.46
37	32	.15
38	38	.45
39	57	.50
40	13	.15

^aPercent of examinees answering the item correctly.

^bPoint biserial correlation (correlation between item performance and total test score).

Table 7. Summary of item analysis results for the Essential Elements of Instruction Training Assessment (N=127)

Item	Item difficulty ^a	Item discrimination ^b
1	39	.39
2	24	.33
3	28	.22
4	65	.23
5	69	.35
6	65	.23
7	11	.20
8	65	.23
9	77	.13
10	36	.14
11	47	.32
12	46	.24
13	83	.25
14	46	.28
15	10	.08
16	36	.37
17	71	.29
18	60	.37
19	34	.33
20	40	.31
21	68	.33
22	50	.10
23	69	.22
24	70	.26
25	21	.24
26	81	.08
27	63	.28
28	42	.26
29	37	.40
30	47	.25
31	39	.19
32	32	.30
33	74	.18
34	82	.18
35	49	.46
36	27	.03
37	73	.38
38	77	.31
39	71	.46
40	82	.35

^a Percent of examinees answering the item correctly.

^b Point biserial correlation (correlation between item performance and total test score).

average difficulty of items on the TESA Assessment was .41; for the Essential Elements the corresponding figure was .54. Both values fall within what has been traditionally considered an adequate percent of examinees to pass an item and was appropriate to the needs and objectives of the school organizations involved in this investigation. Since it was the intent of these assessments to "diagnose and prescribe" the individual subject's needs, it was deemed appropriate that those falling below the mean would receive intensified help while those in the top ten percentile could serve as resource personnel to the trainers. Further, the item analysis served as a guide for future instruction on the part of the trainers.

Predictor Variables

Descriptive data for the four predictor (independent) variables for both the TESA and Essential Elements groups are reported in Tables 8 and 9. Inspection of these two tables indicates that the two subject groups were fairly similar with respect to level of education, sex, and administrative experience. The Essential Elements group appeared to have somewhat more experienced teachers than did the TESA group. The TESA N shrunk by one due to incomplete data.

These data are summarized in Tables 10 and 11 which present both the means and standard deviations of the four independent variables for both groups. Again, incomplete data brought the N down from 187 to 179 on TESA and 127 to 123 on Essential Elements. When the data were prepared for the correlations and predictive analysis, they were placed

Table 8. Education, teaching experience, administrative experience, and sex of the Teacher Expectations and Student Achievement Training Assessment (TESA) subjects (N=186)^a

<u>Education</u>				
BA-BS	+15 ^b	+30 ^b	MA-MS	Ph.D.-Ed.D
42	26	43	72	3
23%	14%	23%	39%	1%
<u>Teaching experience</u> ^b				
1-4	5-8	9-15	16-25	1%
33	38	64	38	3
20%	20%	35%	20%	5%
<u>Administrative experience</u> ^c				
none	1-4	5-10	11-20	+20
143	21	9	6	1
30%	11%	5%	3%	1%
<u>Sex</u>				
	M		F	
	63		124	
	34%		66%	

^aN shrunk due to incomplete data.

^bNumber of hours.

^cNumber of years.

in coded form which resulted in the means presented in Tables 10 and 11. These derived statistics were necessary for analysis purposes; however, they resulted in nonsensical information to the reader. For example: sex $\bar{X} = 1.66!!!$ Therefore, Tables 8 and 9 will serve as clarification for the reader. Further examination of Tables 10 and 11 shows the pairs again to be similar, with the exception of teaching experience.

Table 9. Education, teaching experience, administrative experience, and sex of the Essential Elements of Instruction Training Assessment subjects (N=127)

<u>Education</u>				
BA-BS	+15 ^a	+30 ^a	MA-MS	Ph.D.-Ed.D
19	18	29	58	3
15%	14%	23%	46%	2%
<u>Teaching experience</u> ^b				
1-4	5-8	9-15	16-25	+25
3	17	42	47	13
6%	13%	33%	37%	11%
<u>Administrative Experience</u> ^b				
none	1-4	5-10	11-20	+20
105	4	5	9	4
83%	3%	4%	7%	3%
<u>Sex</u>				
	M		F	
	63		64	
	50%		50%	

^aNumber of hours.

^bNumber of years.

Possession of a B.A./B.S., plus thirty semester hours, is indicated by a mean score of 3.00 on "most advanced degree". TESA's mean of 2.82/standard deviation of 1.15 were both most closely associated with this category. No educational experience is represented by a mean score of 1.00 on "years of educational experience". TESA's mean of 1.33/standard deviation of .77 and Essential Elements' mean of 1.45/standard deviation of 1.07 were both most nearly associated with this category. In this study, males were identified with a mean of 1.00 and females with 2.00.

Table 10. Means and standard deviations of Teacher Expectations and Student Achievement Training Assessment predictor variables (N=179)^a

	Mean ^b	SD
Education	2.82 BA/BS+12.3 hours	1.22
Teaching experience	2.65	1.15
Administrative experience	1.33	.77
Sex ^c	1.66	.47

^aN shrunk due to incomplete data.

^bNumber of hours.

^c1 = male; 2 = female.

Table 11. Means and standard deviations of Essential Elements of Instruction Training Assessment predictor variables (N=123)^a

	Mean ^b	SD
Education	3.07	1.15
Teaching experience	3.31	1.05
Administrative experience	1.45	1.07
Sex ^c	1.50	.50

^aN shrunk due to incomplete data.

^bNumber of hours.

^c1 = male; 2 = female.

TESA's mean of 1.66/standard deviation of .47 and Essential Elements' mean of 1.50/standard deviation of .50 indicated a distribution with a slight preponderance of females over males on TESA, and an even distribution between the sexes on the Essential Elements. The greatest variance was reflected in teaching experience. A mean of 2.00 represents between five and eight years of experience while a mean of 3.00 represents between nine and fifteen years. The Essential Elements group had a mean of 3.31/standard deviation of 1.15 and TESA's mean was 2.65/standard deviation of 1.05. Thus, subjects in the Essential Elements group had more experience than those in the TESA group.

Volunteer subjects from both the TESA and Essential Elements groups were also administered an additional instrument to obtain a set of additional predictor variables derived from the Multiphasic Assessment of Philosophy of Education (MAPE). Descriptive data for the two subsamples on the demographic variables and the six developed subscales are reported in Tables 12 and 13. The N shrunk due to incomplete data from 37 to 31 and 25 to 21, respectively (see Table 22). Inspection of the two tables revealed that the Essential Elements group possessed slightly more education and teaching experience ($\bar{X} = 3.63$ vs. 3.04, and $\bar{X} = 3.68$ vs. 3.04, respectively; refer to Tables 8 and 9 for legends) but were very comparable with respect to both administrative experience and the ratio of males to females. Differences were also noted in the MAPE variables of Learning Emphasis and Theoretical Base, even though both groups fell below the mean. Refer to page 56 for a more detailed interpretation of high and low scores on the MAPE subscales.

Table 12. Means and standard deviations of the six subscales of the Multiphasic Assessment of Educational Philosophy and the demographic predictor variables for the Teacher Expectations and Student Achievement Training Assessment (N=31)^a

	Mean	S.D.
Classroom climate	43.70	7.26
Individual differences	47.02	11.38
Teaching style	56.74	10.87
Learning emphasis	47.13	10.85
Procedures and planning	51.18	10.84
Theoretical base	58.13	10.98
Education ^b	3.04	1.10
Teaching experience ^b	3.04	1.10
Administrative experience ^b	1.17	0.65
Sex ^c	1.60	0.49

^aLoss of N through incomplete data and/or refusal on part of subjects to participate.

^bNumber of hours.

^c1 = male; 2 = female.

Table 13. Means and standard deviations of the six subscales of the Multiphasic Assessment of Educational Philosophy and the demographic predictor variables for the Essential Elements of Instruction Training Assessment (N=21)^a

	Mean	S.D.
Classroom climate	43.76	10.27
Individual differences	50.37	8.99
Teaching style	54.15	13.38
Learning emphasis	40.61	8.99
Procedures and planning	51.57	10.19
Theoretical base	64.07	9.62
Education ^b	3.63	0.89
Teaching experience ^b	3.68	0.82
Administrative experience ^b	1.26	0.93
Sex ^c	1.68	0.47

^aLoss of N through incomplete data and/or refusal on part of subjects to participate.

^bNumber of hours.

^c1 = male; 2 = female.

Hypotheses

In order to ascertain if the entry level knowledge of an intervention will differ among teachers and administrators and if these differences can be partially predicted through various variables, the following hypotheses have been tested:

Research Hypothesis I

It was operationally hypothesized that intervention scores can be predicted through a combination of the following variables:

- a. sex
- b. level of education
- c. experience

Null hypotheses

1. The correlation between observed scores on the TESA Assessment and the subjects' sex will not differ significantly from zero.
2. The correlation between observed scores on the TESA Assessment and the subjects' level of education will not differ significantly from zero.
3. The correlation between observed scores on the TESA Assessment and the subjects' teaching experience will not differ significantly from zero.
4. The correlation between observed scores on the TESA Assessment and the subjects' administrative experience will not differ significantly from zero.
5. The correlation between observed scores on the Essential Elements Assessment and the subjects' sex will not differ significantly

from zero.

6. The correlation between observed scores on the Essential Elements Assessment and the subjects' level of education will not differ significantly from zero.
7. The correlation between observed scores on the Essential Elements Assessment and the subjects' teaching experience will not differ significantly from zero.
8. The correlation between observed scores on the Essential Elements Assessment and the subjects' administrative experience will not differ significantly from zero.
9. The prediction of observed scores on the TESA assessment will not differ significantly from zero through the use of one or more of the following variables.
 - a. sex
 - b. level of education
 - c. teaching experience
 - d. administrative experience
10. The prediction of observed scores on the Essential Elements Assessment will not differ significantly from zero through the use of one or more of the following variables:
 - a. sex
 - b. level of education
 - c. teaching experience
 - d. administrative experience

Research Hypothesis II

It was operationally hypothesized that intervention scores can be predicted through a combination of the following variables:

- a. sex
- b. level of education
- c. experience (quadratic)

with the Multiphasic Assessment of Philosophy of Education (MAPE) variables of:

- d. Classroom Climate
- e. Individual Differences
- f. Teaching Style
- g. Learning Emphasis
- h. Procedures and Planning
- i. Theoretical Base

serving as intervening variables.

Null hypotheses

1. The correlation between observed scores on the TESA Assessment and the MAPE subscale of Classroom Climate will not differ significantly from zero.
2. The correlation between observed scores on the TESA Assessment and the MAPE subscale of Individual Differences will not differ significantly from zero.
3. The correlation between observed scores on the TESA Assessment and the MAPE subscale of Teaching Style will not differ significantly from zero.
4. The correlation between observed scores on the TESA Assessment and the MAPE subscale of Learning Emphasis will not differ significantly from zero.

5. The correlation between observed scores on the TESA Assessment and the MAPE subscale of Procedures and Planning will not differ significantly from zero.
6. The correlation between observed scores on the TESA Assessment and the MAPE subscale of Theoretical Base will not differ significantly from zero.
7. The prediction of observed scores on the TESA Assessment will not be significantly better than the mean alone when considering the following variables:
 - a. sex
 - b. level of education
 - c. teaching experience
 - d. administrative experience
 - e. Classroom Climate
 - f. Individual Differences
 - g. Teaching Style
 - h. Learning Emphasis
 - i. Procedures and Planning
 - j. Theoretical Base
8. The correlation between observed scores on the Essential Elements Assessment and the MAPE subscale of Classroom Climate will not differ significantly from zero.
9. The correlation between observed scores on the Essential Elements Assessment and the MAPE subscale of Individual Differences will not differ significantly from zero.
10. The correlation between observed scores on the Essential Elements Assessment and the MAPE subscale of Teaching Style will not differ significantly from zero.
11. The correlation between observed scores on the Essential Elements Assessment and the MAPE subscale of Learning Emphasis will not

- differ significantly from zero.
12. The correlation between observed scores on the Essential Elements Assessment and the MAPE subscale of Procedures and Planning will not differ significantly from zero.
 13. The correlation between observed scores on the Essential Elements Assessment and the MAPE subscale of Theoretical Base will not differ significantly from zero.
 14. The prediction of observed scores on the Essential Elements Assessment will not be significantly better than the mean alone when considering the following variables:
 - a. sex
 - b. level of education
 - c. teaching experience
 - d. administrative experience
 - e. Classroom Climate
 - f. Individual Differences
 - g. Teaching Style
 - h. Learning Emphasis
 - i. Procedures and Planning
 - j. Theoretical Base

Research Hypothesis I

The correlations between the dependent and independent variables and the intercorrelations for the independent variables for both the TESA and Essential Elements groups are reported in Tables 14 and 15. Generally speaking, the null hypotheses could not be rejected and, thus, remain tenable. More specifically, no significant correlation ($P < .05$) was found to exist between scores on the TESA assessment and sex, educational level, teaching experience or administrative experience. However, further inspection of the intercorrelations

Table 14. Correlation coefficient matrix for the Teacher Expectations and Student Achievement Training Assessment predictor variables (N=31)^a

	TESA	Sex	Educa- tion	Teach- ing ex- perience	Adminis- trative experience
TESA	1.00	.12	-.06	-.13	.02
Sex	.12	1.00	-.26*	-.05	-.24*
Education	-.06	-.12**	1.00	.43**	.29**
Teaching experience	-.13	-.05	.43**	1.00	.02
Administrative experience	.02	-.24*	.29**	.02	1.00

^aN lost through incomplete data and/or refusal on part of subjects to participate.

*P < .05.

**P < .01.

revealed significant correlations between the sex of the subject, his/her level of education, and his/her administrative experience (P < .05). Level of education was also significantly correlated to teaching experience and administrative experience.

Further, no significant correlation (P < .05) was found to exist between scores on the Essential Elements assessment and sex, educational level, or administrative experience. Inspection of the intercorrelations revealed a pattern similar to that of the TESA group.

Table 15. Correlation coefficient matrix for the Essential Elements of Instruction Training Assessment predictor variables (N=21)^a

	Essential elements of instruc- tion	Sex	Educa- tion	Teach- ing ex- perience	Adminis- trative experience
Essential elements	1.00	-.03	.09	-.27**	.13
Sex	-.03	1.00	-.21*	.06	-.17
Education	.09	-.21**	1.00	.19	.35**
Teaching experience	-.27**	.06	.19*	1.00	.16
Administrative experience	.13	-.17	.35**	.16	1.00

^a N lost through incomplete data and/or refusal on part of subjects to participate.

* P < .05.

** P < .01.

Reference to Table 16 indicates that no significant prediction of scores on the TESA assessment was possible using either singly or in combination of the subjects' sex, level of education, teaching experience or administrative experience. The results of the stepwise multiple regression analysis reported in Table 16 indicate that it is only possible to account for three percent of the total variance of the TESA assessment scores.

Two null hypotheses, however, were rejected. A significant

Table 16. Stepwise multiple regression for the dependent variable: Teacher Expectations and Student Achievement Training Assessment (N=187)

Step	Predictor variable	F level	df	Significance	R	R ² cumulative	R ² change
1	Teaching experience	3.00	1,177	P > .05	.13	.02	.02
2	Sex	2.65	2,176	P > .05	.17	.03	.01
3	Administrative experience	1.93	3,175	P > .05	.18	.03	.00
4	Education	1.45	4,174	P > .05	.13	.03	.00

Table 17. Stepwise multiple regression for the dependent variable: Essential Elements of Instruction Training Assessment (N=127)

Step	Predictor variable	F level	df	Significance	R	R ² cumulative	R ² change
1	Teaching experience	9.35	1,121	P > .01	.27	.07	.07
2	Education	6.02	2,120	P > .01	.30	.09	.02
3	Administrative experience	4.05	3,119	P > .01	.30	.09	.00
4	Sex	3.03	4,118	P > .05	.30	.09	.00

negative correlation ($P < .05$) was found to exist between scores on the Essential Elements assessment and the subjects' teaching experience. That is to say, teachers with less experience attained higher scores.

Furthermore, Table 17 reports that a significant prediction of scores on the Essential Elements assessment was possible ($P < .01$). The variable entered on the first step of the stepwise multiple regression analysis was teaching experience. This variable was significant at the .01 level and accounted for seven percent of the variance of the Essential Elements assessment scores. This infers that teachers with more experience attained higher scores. Although the addition of the remaining three variables still resulted in a significant prediction of the Essential Elements scores, the increase in the amount of variance accounted for was not significant. The resulting multiple regression equations for TESA and Essential Elements, respectively, are reported in Tables 18 and 19. The terms in the equation have been reported for both raw (B) and standardized (Beta) values of the variables.

Research Hypothesis II

Tables 20 and 21 report the correlations between the dependent and independent variables and the intercorrelations for the independent variables for the TESA and the Essential Elements Volunteer sample groups relating to the MAPE subscales. Due to the volunteer response, only sixty-three out of one hundred ninety (thirty-three percent) were returned. Furthermore, the negative attitude carried over to only fifty-two out of the sixty-three returned (eighty-three percent were scorable).

Table 18. Multiple regression equation for the prediction of TESA

Variable	B	Beta
Teaching experience	-0.64	-0.13
Sex	1.54	0.13
Administrative experience	0.38	0.05
Education	0.06	0.01
(Constant)	15.12	

Table 19. Multiple regression equation for the prediction of Essential Elements

Variable	B	Beta
Teaching experience	-1.33	-0.29
Education	0.55	0.13
Administrative experience	0.19	0.04
Sex	0.25	0.02
(Constant)	23.65	

Table 20. Correlation coefficient matrix for the Teacher Expectations and Student Achievement Training Assessment, demographic, and Multiphasic Assessment of Educational Philosophy predictor variables (N=31)^a

	TESA	Sex	Educa- tion	Teaching experience	Adminis- trative experience
TESA	100	-11	01	06	18
Sex	-11	100	-62**	-46**	-34
Education	01	-62**	100	33	43*
Teaching experience	06	-46**	32	100	-13
Administrative experience	18	-34	43**	-13	100
Classroom climate	-13	17	-22	-19	18
Individual differences	05	19	-18	09	-37*
Teaching style	06	-15	03	07	42*
Learning emphasis	-04	13	-28	15	-31
Procedures and planning	17	-14	-04	-09	30
Theoretical base	-28	-03	02	07	25

^aDecimals omitted.

*P < .05.

**P < .01.

Classroom climate	Individual differences	Teaching style	Learning emphasis	Procedures and planning	Theo- retical base
-13	05	06	-04	17	-28
17	19	-15	13	-14	-03
-22	-18	03	-28	-04	02
-19	09	07	15	-09	07
18	-37*	42*	-31	30	25
100	-57**	38	-39*	27	54**
-57**	100	-41*	12	00	-19
38*	-41*	100	24	10	15
-39*	12	24	100	-36*	-23
27	00	10	-36*	100	48**
54**	-19	15	-23	48**	100

Table 21. Correlation coefficient matrix for the Essential Elements of Instruction Training Assessment, demographic, and Multiphasic Assessment of Educational Philosophy predictor variables (N=21)^a

	Essential elements	Sex	Educa- tion	Teaching experience	Adminis- trative experience
Essential elements	100	04	-21	-23	-66**
Sex	04	100	23	01	07
Education	-21	23	100	58**	38
Teaching experience	-23	01	58**	100	18
Administrative experience	-66**	07	38	18	100
Classroom climate	01	-15	-10	31	-23
Individual differences	01	-06	27	27	26
Teaching style	51*	00	00	08	-40
Learning emphasis	39	19	-10	-35	-35
Procedures and planning	28	16	-12	-05	-29
Theoretical base	22	05	00	-06	-18

^aDecimals omitted.

* $P < .05$.

** $P < .01$.

Classroom climate	Individual differences	Teaching style	Learning emphasis	Procedures and planning	Theo- retical base
01	01	51*	39	28	22
-15	-06	00	19	16	05
-10	27	00	-10	-12	00
31	27	08	-35	-05	-06
-23	26	-40	-35	-29	-18
100	-16	55**	06	00	-08
-16	100	05	-48*	02	-31
55**	05	100	16	47*	31
06	-48*	16	100	-18	00
00	02	47*	-18	100	65**
-08	-31	31	00	65**	100

This is reflected in Table 22. Based on the data returned, null hypotheses one through six relating to the six MAPE subscales were not rejected at the .05 level of significance. No significant relationship was found to exist between the various MAPE scales and the Teacher Expectations and Student Achievement Training Assessment. Consistent with the findings of Research Hypothesis I, the four demographic predictor variables were also not found to be significantly correlated ($P < .05$) to the Teacher Expectations and Student Achievement Training Assessment.

Table 22. School organization's response to the Multiphasic Assessment of Philosophy of Education (MAPE)

School organization	Administered	Returned	Scorable
Breck School	84 ^c	3	1
Edina School District	19 ^b	15	13
Minneapolis School District	63 ^b	24	19
Northfield School District	16 ^b	15	13
Spirit Lake School District	8 ^a	6	6
Total assessments	190	63	52

^a Distributed only to SIM participants.

^b Distributed to all taking the intervention training.

^c Participants were advised by their union leaders not to take assessment and to return them immediately.

Further inspection of Table 20 revealed significant intercorrelations among the MAPE subscales. Specifically, Classroom Climate was significantly negatively correlated to Individual Differences and significantly positively correlated to Theoretical Base. This would mean that an antisubject-Centered Curriculum would be associated with a Conventional Social Orientation and a Personalized Teaching Style. Also, Procedures and Planning was significantly correlated to Theoretical Base. This would mean that Personalized Teaching would be associated with an Acceptance of Total Responsibility. Null Hypotheses 8-13 were not rejected with the exception of Null Hypothesis 10 which was rejected at the .05 level of significance. A significant relationship was found to exist between the Teaching Style subscale and the Essential Elements of Instruction Training Assessment. This indicates that those subjects taking the Essential Elements tended to be focused on Social-group learning as a teaching style. In contrast to the findings of Research Hypothesis I, the demographic variable relating to administrative experience was found to be significantly ($P < .05$) negatively correlated to the Essential Elements Assessment, which means that subjects low in administrative experience were high on the Essential Elements.

Further inspection of Table 21 revealed inconsistent findings with respect to the intercorrelations of the MAPE variables identified from Table 20. Classroom Climate was found to be significantly correlated ($P < .05$) to Teaching Style which meant that antisubject-Centered Curriculum was associated with Social-group Learning but not to the

previously identified subscales of Individual Differences and Theoretical Base. Individual Differences was significantly correlated to Learning Emphasis and Teaching Style to Procedures and Planning ($P < .05$). This means that a commitment to Individual Differences was associated with Detailed Planning and Social-group Learning was associated with Acceptance of Total Responsibility. Consistent with the earlier findings, Procedures and Planning was significantly correlated ($P < .05$) to Theoretical Base. The intercorrelations among the MAPE subscales are not really very important to the study. They simply indicate that the subscales are not independent one from another. That is to say, several of the MAPE subscales are measuring the same thing . . . general philosophy of education. Null Hypothesis 7 was not rejected at the .05 level of significance. Inspection of Table 23 indicates that no significant prediction of scores on the Teacher Expectations and Student Achievement Training was possible using either singly or in combination with the six MAPE subscales in conjunction with the four demographic variables. The results of the stepwise multiple regression analysis reported in Table 23 indicate that only twenty-nine percent of the variance of the Teacher Expectations and Student Achievement Training Assessment could be accounted for when all possible variables were used.

Null Hypothesis 14 was rejected at the .05 level of significance. Inspection of Table 24 indicates that a significant prediction of scores on the Essential Elements was possible ($P < .01$). The variable entered on the first step of the stepwise multiple regression analysis was Administrative Experience. Subjects low in Administrative Experience

Table 23. Stepwise multiple regression for the dependent variable: Teacher Expectation of Student Achievement Training Assessment (MAPE variables included) (N=31)

Step	Predictor variable	F level	df	Significance	R	R ² cumulative	R ² change
1	Theoretical base	1.89	1, 21	P > .05	.28	.08	.08
2	Procedures and planning	2.67	2, 20	P > .05	.45	.21	.13
3	Administrative experience	2.10	3, 19	P > .05	.49	.25	.04
4	Teaching experience	1.71	4, 18	P > .05	.52	.27	.02
5	Education	1.41	5, 17	P > .05	.54	.29	.02
6	Sex	1.12	6, 16	P > .05	.54	.29	.00
7	Teaching style	0.90	7, 15	P > .05	.54	.29	.00
8	Classroom climate	0.74	8, 14	P > .05	.54	.29	.00

Table 24. Stepwise multiple regression for the dependent variable: Essential Elements of Instruction Training Assessment (MAPE variables included) (N=21)

Step	Predictor variable	F level	df	Significance	R	R ² cumulative	R ² change
1	Administrative experience	13.39	1, 17	P < .01	.66	.44	.44
2	Teaching style	8.41	2, 16	P < .01	.72	.51	.07
3	Classroom climate	8.34	3, 15	P < .01	.79	.62	.11
4	Procedures and planning	6.51	4, 14	P < .01	.80	.65	.03
5	Learning emphasis	5.01	5, 13	P < .01	.81	.66	.01
6	Individual differences	4.10	6, 12	P < .05	.82	.67	.01
7	Education	3.30	7, 11	P < .05	.82	.67	.00
8	Theoretical base	2.69	8, 10	P > .05	.83	.68	.01
9	Sex	2.16	9, 9	P > .05	.83	.68	.00

tended to have higher scores on the Essential Elements. This variable was significant at the .01 level and accounted for forty-four percent of the variance of the Essential Elements. This finding was inconsistent with that reported under Research Hypothesis I. This may be due to either the sample being too small, thus capitalizing on chance errors, or that the self-selection of subjects into this phase of the study contributed to the significant finding. Several additional variables continued to enter the stepwise regression analysis with the overall equation remaining significant; however, the increase in the variance accounted for was not significant.

Tables 25 and 26 report the resulting multiple regression equation for TESA and Essential Elements derived from the analysis. The terms in the equations have again been reported for both raw (B) and standardized (Beta) values of the variables.

Table 25. Multiple regression data for the Teacher Expectations and Student Achievement Training Assessment (N=31)

Variable	B	Beta
Theoretical base	-.29	-.58
Procedures and planning	.19	.37
Administrative experience	3.07	.35
Teaching experience	1.40	.27
Education	-.73	-.14
Sex	.75	.06
Teaching style	-.02	-.04
Classroom climate	.03	.04
(Constant)	15.48	

Table 26. Multiple regression data for the prediction of Essential Elements of Instruction Training Assessment (N=21)

Variable	B	Beta
Administrative experience	-3.63	-.52
Teaching style	.23	.50
Classroom climate	-.22	-.35
Procedures and planning	-.12	-.19
Learning emphasis	.14	.19
Individual differences	.16	.23
Education	-.81	-.11
Theoretical base	.08	.13
Sex	.66	.04
(Constant)	10.44	

CHAPTER V. SUMMARY, CONCLUSIONS, LIMITATIONS
DISCUSSION, RECOMMENDATIONS

Summary

The problem

It was the purpose of this investigation to develop and field test diagnostic-prescriptive staff development instruments for the assessment of participant-attained knowledge in selected inservice intervention programs and subsequently to determine if specific inservice entry level knowledge is a function of the participant's sex, experience, education level or philosophy of education.

Operationally, the following two research hypotheses were posed:

1. Intervention scores can be predicted through a combination of the following variables.
 - a. sex
 - b. level of education
 - c. experience (quadratic)
2. Intervention scores can be predicted through a combination of the following variables:
 - a. sex
 - b. level of education
 - c. experience (quadratic)

With the Multiphasic Assessment of Philosophy of Education (MAPE) variables of:

- d. Classroom Climate

- e. Individual Differences
- f. Teaching Style
- g. Learning Emphasis
- h. Procedures and Planning
- i. Theoretical Base

serving as intervening variables.

Procedure

The initial development of the preliminary versions of the two assessment instruments used in this study was based on the reported goals and objectives of the selected interventions, The Essential Elements of Instruction and Teacher Expectation and Student Achievement. Based on a table of specifications relating intervention objectives to the cognitive skills of knowledge, comprehension, and application, trainees assigned to each intervention were requested to submit a pool of test items. This pool was subsequently reviewed by a panel of testing experts prior to an items inclusion in an initial test form. Based on the first field test, items were either revised or replaced as indicated by a comprehensive analysis of the examinees response patterns. A second field test was conducted to ensure that all items were functioning as desired. Data designed to determine the tenability of the research hypotheses were obtained from the administration of the final version to 127 participants in the Essential Elements of Instruction Intervention and 186 participants in the Teacher Expectation and Student Achievement. The relevant demographic data were also obtained during

this administration. Participants were also requested to respond to the Multiphasic Assessment of Philosophy of Education. A total of 21 and 19 volunteers responded in the Essential Elements of Instruction and Teacher Expectation and Student Achievement groups, respectively. The resulting data from the instruments were subjected to step-wise regression analysis in order to test the developed null hypotheses.

Results--research hypothesis I

Correlations involving intervention scores on the Teacher Expectation Student Achievement Assessment or the Essential Elements of Instruction Assessment and the participant's sex, level of education, teaching experience, and administrative experience were not significantly different from zero with the exception of the Essential Elements of Instruction Assessment and the participant's teaching experience. In this case, teachers with less experience achieved higher test scores. Null hypotheses 1-4, 5, 6, and 8 were not rejected whereas null hypothesis 7 was rejected.

The results of the stepwise multiple regression analysis applied to the prediction of the Teacher Expectation Student Achievement Assessment were not significant. Variables of sex, level of education, teacher experience and administrative experience either singly or in combination were not significant predictors of entry-level performance. Null hypothesis 9 was not rejected.

Significant prediction was, however, possible when this same statistical technique was applied to the prediction of the Essential Elements of Instruction Assessment. The amount of the participant's

teaching experience was found to be a significant predictor of entry performance and account for seven percent of the observed variance. No other variables contributed significantly to the prediction equation. Null hypothesis 10 was rejected.

Research hypothesis II

Correlations involving intervention scores on the Teacher Expectation Student Achievement Assessment or the Essential Elements of Instruction Assessment and the Multiphasic Assessment of Philosophy of Education (MAPE) subscales of Teaching Style, Classroom Climate, Procedures and Planning, Learning Emphasis, Individual Differences, and Theoretical Base were not significantly different from zero with the exception of Teaching Style and the Essential Elements of Instruction Assessment. In this case, teachers emphasizing social group learning as a teaching style achieved higher intervention scores than those who had a more impersonal teaching style. Null hypotheses 1-6 and 8, 9, 11-13 were not rejected. Null hypothesis 10 was rejected.

The results of the stepwise multiple regression analysis applied to the prediction of Teacher Expectation Student Achievement Assessment were not significant when all MAPE subscales were allowed to enter the regression equation. This result was consistent with that reported earlier when only the demographic variables were allowed to enter the regression equation. Null hypothesis 7 was not rejected.

In the case of the Essential Elements of Instruction step-wise multiple-regression analysis, the results differed slightly from those

previously reported. Although experience still entered significantly on the first step, it was administrative experience not teaching experience that accounted for a significant proportion of the variance. The two MAPE variables of Teaching Style and Classroom Climate also entered significantly on the second and third step and accounted for 7 and 11 percent of the variance, respectively. In combination, the three significant variables accounted for 62 percent of the variance in the Essential Elements of Instruction Assessment. Null hypothesis 14 was rejected.

Conclusions

Considering the data collected and the analyses made in this investigation, the following conclusions appear warranted.

1. The intervention assessment instruments were effective in measuring participants' knowledge.
2. Entry-level knowledge of teacher inservice programs is normally distributed.
3. Entry-level knowledge of teacher inservice programs is not a function of the participants' sex, teaching experience, administrative experience, or attained education.
4. Entry-level knowledge of teacher inservice programs is unrelated to the participants' philosophy of education.

Limitations

Due to the design of this study, certain limitations must be noted.

1. Although five intervention programs were initially part of the study, only two survived to completion.
2. The number of participants involved in analyzing the Multiphasic's Assessment of Philosophy of Education and its relationship to the two interventions only allow for tentative conclusions.
3. Participants were required to take part in this investigation, a condition which resulted in a hostile attitude toward the assessment.

Discussion

The first area of investigation in this study sought to identify through the School Improvement Model viable inservice interventions. The principle criterion for selection being that the staff development program was research based. Secondary criteria related to the amount of time needed for instruction, a philosophical orientation acceptable to all concerned parties, and a cost consideration. Factors characterizing these initially selected programs with but one exception related to activities directly within the teacher's control, the one exception being the program characterized as relating to the leadership of the principal. When it came time to make the final program selection, the original five involved agencies all selected programs characterized by teacher factors. This is not surprising in light of research reported

in the review section relating to the teacher as a decision maker, the effect that the philosophy held by the teacher has on student outcomes and work related to identified teaching strategies.

Subsequent to the final selection and prior to the completion of all phases of the field test, three schools changed their initial selection of intervention program. This resulted in only two different interventions being used in this study. Reasons given for the change related to either a lack of interest or a lack of support by the school staffs. The dropped interventions, Classroom Management/Time-on-Task, Suggestive, Accelerative Learning and Teaching, and Cooperative Learning, appear to have little in common with each other. Perhaps the content was too extreme for staff who felt pressured or forced into taking part in the intervention. The two remaining interventions, Teacher Expectation Student Achievement and the Essential Elements of Instruction appear to be somewhat dichotomous. The deciding factor of which intervention to use appeared to be based on how reluctant the teachers were expected to be to take part in either form of training. Those who expected their teachers to be willing chose the Essential Elements; those who anticipated a great deal of reluctance and perhaps hostility selected Teacher Expectation Student Achievement. It would appear that intervention programs having a heavy cognitive component are perceived as more threatening than those which are more affective in orientation.

The second area of research in this investigation centered upon the construction of the intervention assessments and their relationship to the participants' teaching and administrative experience, their level

of education and their sex. As predicted, intervention scores were normally distributed among the sample of participants but contrary to expectation, basically unrelated to the demographic variables. The single exception was the teaching experience of the participants and their scores on the Essential Elements of Instruction Assessment. This correlation was negative and explainable in terms of the recency of college education related to instructional techniques and the content of the intervention. Support for this hypothesis may be found in the positive but nonsignificant correlation with administrative experience. Administrators could be expected to be somewhat more knowledgeable than long-time teachers regarding instructional techniques due to both advanced college training in this area and more opportunity to observe a wide variety of teaching behavior.

The addition of philosophical measures derived from the administration of the Multiphasic Assessment of Philosophy of Education did not prove to enhance predictive power. It had been hypothesized that knowledge of the two interventions prior to training would vary with the teacher's educational philosophy. This was not found to occur. A possible explanation may be found in an examination of the subscales of the MAPE. All are bipolar, however, a teacher may be idealistic or pragmatic and still not have knowledge of either intervention. The same may be true of the learning emphasis subscale and the Classroom Climate subscale.

The results reported when the MAPE subscales were added to the regression equation must be interpreted with extreme caution. Although

significant prediction was possible, these results contradicted those reported earlier. These findings may be attributed to the small number of subjects employed in this phase of the investigation, and thus capitalizing on chance or error. When the number of variables approaches the number of subjects employed in a regression analysis, the proportion of variance that can be accounted for increases up to 100 percent where both are equal.

Recommendations for Practice

This study was an effort to construct intervention assessment instruments and to determine possible correlates. As such, the following recommendations are made:

1. Data should continue to be gathered on the two instruments in order to develop normative information.
2. The intervention assessment instruments should be used as a measure of achievement in the two programs.
3. Selection of participants for interventions should not be based on demographic data or their unique philosophies of education.

Recommendations for Further Research

1. It is recommended that this study be replicated using the developed instruments as posttests to measure achievement with two groups only one of which takes a pretest.
2. It is recommended that further research be conducted on the relationship between philosophies of education and intervention programs.

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APPENDIX A: SELECTED SAMPLES OF CORRESPONDENCES TO PARTICIPANTS



Dick Manatt
Director

Shirley Stow
Co-Director

June 11, 1982

Libby Bilyeu
Program Assistant

Dr. Ray Smyth
Edina Public Schools
5555 W. 70th St.
Edina, Minnesota 55422

Dear Dr. Smyth:

Just a few lines to thank you for taking the time to share Edina's design for implementation of its interventions. I enjoyed our conversation and am looking forward to meeting you in person.

Progress is being made towards creating the diagnostic inventories, we discussed, that will accompany the interventions. I will be keeping in touch as further progress is made.

Sincerely,

A handwritten signature in cursive script that reads "Nancy".

Nancy Kinn Schycker

cc: Richard P. Manatt



Dick Manatt
Director

Shirley Stow
Co-Director

Libby Bilyeu
Program Assistant

June 7, 1982

Dr. Madeline Hunter, Principal
University Elementary School
405 Hilgard Avenue
UCLA
Los Angeles, California 90024

Ms. Joan Maxwell
700 Hampton Road
Burbank, California 91504

Dear Madeline and Joan:

This is to confirm our recent telephone conversations. I have enclosed the staff development agenda for the Spirit Lake Community Schools for which Joan is doing a complete "Essentials of Good Teaching" agenda during the school years 1981-83. Joan also has been requested by the Breck School in Golden Valley, Minnesota (near Minneapolis), and I assume that she will follow basically the same format. A third district in our consortium (Northfield, Minnesota) is having the same training from Ernie.

I am requesting that Joan carry the major burden of creating the test items that will divulge the teachers' knowledge of research and skills relevant to the principles that you are teaching. As I explained, these will be used as a paper and pencil pre- and posttest measure taking no longer than one-half hour to administer. Multiple choice is the intended format.

As per our agreement, Madeline will help as is possible, and I have agreed to pay each of you at the rate of \$150.00 per day for in-study time (not to exceed three days). Knowing how efficient both of you are, I am sure that it will take less time than that! Because it will be necessary to compile items from all of the interventions scheduled within the school organizations and have them ready by late-August, time is of the essence! We are hoping to get all of the test development done in June.

The second enclosure is the specification sheet for what we want you to create. We have agreed that upon completion of these testing materials we will do the reliability analysis and make

Madeline Hunter
Joan Maxwell

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-2-

June 7, 1982

these tests available to you for your purposes in subsequent training. Thank you for agreeing to help us in this important step in the School Improvement Model project. If there are any questions, please feel free to call Nancy Schycker who is the research associate working with me on this project at Office: 515/294-5450 or Home: 515/292-9363, or you may call me at Office: 515/294-5521 or Home: 515/232-0202.

Very truly yours,

Richard P. Manatt

RPM:jw
Enclosures

cc: Nancy Schycker

P.S. Answers to your questions of May 28, 1982! I would expect the test to take one hour at the outside and 20 minutes at the least. We can reduce items after we do our pilot run in late-August or early September. Please write some application questions, but put major emphasis on comprehension and understanding of generalizations. We probably will go "split-halves" on your pool of items to create a pre- and posttest and will want to use more application items in the second test.



Dick Maratt
Director

Shirley Saw
Co-Director

July 29, 1982

Loby Bitveu
Program Assistant

Ms. Joan Maxwell
700 Hampton Road
Burbank, California 91504

Dear Joan:

We have received the test items for The Essential Elements of Instruction Training Assessment and are appreciative of your prompt response. I'm well aware that the construction of such an instrument is no easy endeavor; however, after receiving your materials I'm assured we are well on the way to attaining our goal. We administered the instrument, this summer session, to two university graduate classes comprised of primarily elementary teachers with little or no previous knowledge of the program. Upon completion, they assisted us in critiquing the instrument. Subsequently, we ran a Kuder-Richardson #20 to ascertain the reliability, as well as an item analysis. With the assistance of staff familiar with the program, we then proceeded to match items with objectives (enclosed).

Based on our findings, I am requesting that the following modifications be explored:

1. Items 6 - 18

Reword directions as follows:

"The following are three main categories of teacher decision making:

- a) content
- b) behavior of learner
- c) behavior of teacher

Determine the appropriate categories and mark each of the items 6 - 18."

Eliminate:

The following "popped out" of the data as being too easy:

<u>item #</u>	<u>% answered correctly</u>
11	95%
6	90%
14	85%
17	85%
13	70%

Create new items:

Based on the above being eliminated, please review the objectives under Goal 1 and supply us with an additional two items, presumably under content, to make a total of 10 questions under Goal 1.

- 2. Item # 31 . . . 90% answered correctly, thus too easy. Please restate as the answer (a) stands out as the only specific, while b, c, d are general.
- 3. Set up the content in items 25 and 26 in the same format as items 6 - 18. Choices to describe five samples of varied diagnoses could be a) informal b) formal c) inferential.
- 4. Item # 42 . . . 70% answered correctly and b) was the only distractor chosen.

Please create new distractors. It could be argued that a and b are similar. a) is asking that a "specific" definition be parroted, but one could argue that b) was also true generally.

5. Distractors chosen:

<u>item #</u>	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>omitted</u>
32	75%	5%	15%	5%*	
33	20%	20%	30%	25%*	5%

The answers to both questions are debatable. Let's eliminate and add an additional two questions under Goal III.

- 6. Item # 39 35% 25% 20% 15%*
Please revise. d) "association" can have many meanings, some of which can be associated with retention; otherwise, distractors are well balanced.
- 7. Item # 30 15% 10% 40% 35%*
Distractors are evenly chosen; however, verbage in stem is difficult to follow. Please restate.

Hopefully the above information will be sufficient for any necessary adjustments. Please feel free to contact me at home: 515/292-9363 or at work: 515/294-5521, if you have any further questions. We are aiming for a maximum of a two-week turn around time.

Sincerely,

Nancy K. Schycker

NS:jw

* Correct answers



Dick Manatt
Director

September 2, 1982

Shirley Stow
Co-Director

Libby Biiyeu
Program Assistant

TO: Field Coordinators in SIM
FROM: Richard P. Manatt *RPM*

Enclosed you will find "advanced notice" copies of the pre-training tests we will use for Elements of Instruction, TESA, and Classroom Management. Perhaps you will want to share these with your trainers to help them anticipate the objectives we will be measuring in the posttest. As you know some of our team members will be on-site for the first day of each training period to administer this test and to give the 4th and 8th grade teachers a philosophy of education test called MAPE (Multidimensional Assessment of Philosophy of Education).

RPM:jw
Enclosures



Dick Manatt
Director

Shirley Stow
Co-Director

September 10, 1982

Libby Bilyeu
Program Assistant

Anna Graeber
Research for Better Schools, Inc.
444 North Third St.
Philadelphia, PA 19123

Dear Anna:

Enclosed, for your approval, is the Classroom Management/
Time-on-Task Training Assessment as it "stands" today.
Our extensive phone conferences, as you can see, have been
most effective. If, as a result of our further modifica-
tions, the original intent of any of the items has been
obliterated, please let me know as soon as possible!

Thank you also for forwarding the graphs. I am still in
need, however, of an enlargement of the one enclosed. I
would appreciate it if you could send me one.

It's been a pleasure working with you, and I'm looking forward
to our meeting during the administering of the assessments.

Sincerely,

A handwritten signature in cursive script that reads "Nancy".

Nancy K. Schycker

NKS;jw
Enclosure



Dick Manatt
Director

Shirley Stow
Co-Director

November 3, 1982

Libby Bilyeu
Program Assistant

Ms. Mary Lillesve
Northfield Public Schools
301 Union Street
Northfield, Minnesota 55057

Hello Mary!

Enclosed is the printout of the item analysis and KR-20 reliability estimate for the TESA Training Assessment administered in Northfield on November 1. Your intent to use the results as a diagnostic tool for future training should prove to be most beneficial.

The organization and enthusiasm evident in your initial training session leads me to believe that your target group is going to encounter a successful experience.

It was especially nice to have the opportunity to meet you in person. Hopefully, the future will afford us the opportunity to visit at great length.

Sincerely,

Nancy Kinn Schycker

NKS:jw
Enclosure

P.S. Thank you for organizing the collection of the MAPE, as it is vital to our study. I will look forward to receiving them shortly after November 8.

All of the items on this assessment are based on effective teaching research, some of which you are more than likely acting upon presently in your classrooms without being aware of the specific "labels".

Therefore, even though your knowledge of the TESA Training Program may be limited, you conceivably may be much more attuned to the correct responses than you might think.

Some of the items, however, are more program specific in their terminology than others. Please attempt an a through d response when at all possible, but feel free to use the e option when an item draws a complete blank.

Inside your assessment booklet (which you are NOT TO WRITE ON) is an answer sheet. Please proceed as follows: . . . (show transparency on overhead projector).

1. write your name across the top, but do not bubble in. In the SIM office numbers will be assigned you and forwarded to you for all future identification.
2. Do write and bubble in both your sex and birthday.

pencils
tests (3)
3 x 5 cards

Make O.H. Inside your assessment booklet (which you are NOT
to write on) is an answer sheet and a list of SIM I.D.
numbers.

Locate your I.D. number.

Record it on 3 x 5 card. (need later)

Use O.H. ——— Record on answer sheet:

(don't forget to "bubble in" or computer
won't pick up)

1. I.D.
2. birth date
3. sex

If you don't have I.D. write in your name and one
will be assigned at a later date.

All at same time

Collect:

- 1) put I.D. list and answer sheets inside booklets.
- 2) pass down.
- 3) keep 3 x 5 cards for reference.
- 4) pass pencil boxes down rows.

MODIFIED INFORMED CONSENT FOR HUMAN SUBJECTS

After completing the inventories, they will be collected by the investigator for future tabulation and analysis. Upon completion, feedback will be given you. Eventually, your responses will be included in a study that will provide profiles of skills indigenous to selected, currently effective staff development programs in the field of education. Your responses will be encoded, thus no individual will be identified or singled out in the publication of this research. If you do not choose to participate, simply keep your responses when they are completed. Thank you for your cooperation in this important undertaking.

Nancy Schycker

APPENDIX B: TABLES OF SPECIFICATIONS FOR EACH TRAINING ASSESSMENT

SPECIFICATIONS: THE ESSENTIAL ELEMENTS OF INSTRUCTION
TRAINING ASSESSMENT

GOAL I: The participants will become familiar with teacher decision making as an organizer.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge, as evidenced by a paper and pencil inventory, of the following:

- decisions about content to be taught.
- decisions about what the student will do to learn.
- decisions about what the teacher will do to facilitate and accelerate learning.

GOAL II: The participants will become familiar with the following list of Principles of Effective Learning: motivation, practice, reinforcement, retention, and transfer.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge, as evidenced by a paper and pencil inventory, of the following:

- Labeling the Principles of Effective Learning
- Generalizations for the Principles of Effective Learning
- Planning for effective instruction, including:
 - .Instructional design
 - .Principles of practice
 - .Long and short range objectives
 - .Relevant behaviors of students and teacher
 - .Input and output modalities
 - .Teaching to both halves of the brain
 - .Retention
 - .Motivation
 - .Transfer of learning
 - .Reinforcement

GOAL III: The participants will become familiar with analyzing academic and behavioral content.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge, as evidenced by a paper and pencil inventory, of the following:

- Analysis of content in terms of level of difficulty, including:
 - .Task analysis
 - .Diagnostic activities
 - .Grouping for instruction

- .Prescriptive teaching
- .Individualizing in the group

REQUEST: Five multiple choice test items per objective, including stems and four choices.

- 40% knowledge
- 40% comprehension
- 20% application

SPECIFICATIONS: CLASSROOM MANAGEMENT/TIME-ON-TASK TRAINING ASSESSMENT

GOAL I: The participants will become familiar with procedures for information collection on time and engagement rate in classrooms.

OBJECTIVES: At the termination of four to seven hours of inservice training, the participants will demonstrate knowledge of the following, as evidenced by a pencil and paper inventory assessment:

- an overview of the instructional improvement cycle as it pertains to time.
- a rationale for focusing on time, particularly student engaged time.
- definitions for the following terms:
 - .allocated time
 - .engaged time
 - .student engaged time
- engaged behaviors in contrast to unengaged behaviors.
- collection information on engagement rates.
- skills to collect information on allocated time.
- mastery of the Engagement Rate Form.
- scheduling of classroom observations.

GOAL II: The participants will become familiar with procedures for comparison and identification of the data collected.

OBJECTIVES: At the termination of two hours of inservice training, the participants will demonstrate knowledge of the following, as evidenced by a pencil and paper inventory assessment:

- a rationale for and overview of the activities associated with the Comparison and Identification Phase of the instructional improvement cycle.
- reading and interpreting graphs.
- background on process-product research findings on time.
- decision making in changing student engaged time.
- criteria for setting tentative goals, and revising.

GOAL III: The participants will become familiar with procedures for selection and preparation of appropriate strategies for reaching the student engaged time goal.

OBJECTIVES: At the termination of two to three hours of inservice training, the participants will demonstrate knowledge of the following, as evidenced by a pencil and paper inventory assessment:

- a rationale for and overview of the activities in the

Selection and Preparation Phase of the instructional improvement cycle.

- an overview of the research on managing students and instruction, as it relates to engagement rate.
- selection of appropriate strategy to be implemented.
- analyzing the effects of pullouts on student engaged time.
- selection procedures for a strategy to minimize the above effects.
- implementation of plans.
- monitoring plans.

GOAL IV: The participants will become familiar with procedures for implementation and recycling of selected strategies.

OBJECTIVES: At the termination of fifty to seventy minutes of inservice training, the participants will demonstrate knowledge of the following, as evidenced by a pencil and paper inventory assessment:

- a rationale for an overview of the activities associated with implementation of selected strategies and with re-examining student engaged time.
- criteria to review what happened in their classrooms as a result of implementing their strategies.
- the rationale for systematic and repetitive observations.
- skill in scheduling future rounds of observations on student engaged time.
- skill of setting up specific times for the next round.

REQUEST: Five multiple choice test items per objective including stems and four choices.

40% knowledge
40% comprehension
20% application

**SPECIFICATIONS: TEACHER EXPECTATIONS AND STUDENT ACHIEVEMENT (TESA)
TRAINING ASSESSMENT**

GOAL: The participants will become familiar with the Interaction Model.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge of the following, as evidenced by a paper and pencil inventory assessment:

- an operational definition of Model.
- an overview of relevant research.
- components of Model, including:

Strands:

- A. Response
- B. Feedback
- C. Personal Regard

Units:

- 1 -Equitable Distribution of Response of Response Opportunities
 - Affirm or Correct Students' Performance
 - Proximity
- 2 -Individual Helping
 - Praise of Learning Performance
 - Courtesy
- 3 -Latency
 - Reasons for Praise
 - Personal Interest Compliments
- 4 -Delving
 - Listening
 - Touching
- 5 -High Level Questioning
 - Accepting Feelings
 - Desisting

-a rationale for overview of the activities in the selection procedures used.

-organization of the program, including:

- skills necessary/appropriate for implementation.
- applicable monitoring techniques
- evaluation methodology.

REQUEST: Five multiple choice test items per objective, including stems and four choices.

40% knowledge
40% comprehension
20% application

SPECIFICATIONS: COOPERATIVE LEARNING

GOAL I: The participants will become familiar with cooperation as a goal structure.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge of the following, as evidenced by a paper and pencil inventory assessment:

- definition of cooperation as a goal structure.
- an overview of the research on cooperation.
- myths pertaining to cooperation.
- a rationale for and overview of the activities in the selection procedures used for cooperation as a goal structure.
- selection procedures for cooperation as a goal structure.
- implementation practices for cooperation.
- skills necessary/appropriate for cooperation.
- monitoring techniques applicable to cooperation.
- evaluation methodology.

GOAL II: The participants will become familiar with competition as a goal structure.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge of the following as they pertain to competition as a goal structure, as evidenced by a paper and pencil inventory assessment:

- definition.
- an overview of the research.
- myths pertaining to.
- a rationale for and overview of the activities in the selection procedures used.
- selection procedures that are appropriate.
- implementation practices.
- skills necessary/appropriate.
- applicable monitoring techniques.
- evaluation methodology.

GOAL III: The participants will become familiar with individualization as a goal structure.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge of individualization as a goal structure, evidenced by a paper and pencil inventory assessment of:

- a definition.
- an overview of the research.
- myths pertaining to.
- a rationale for and overview of the activities in the selection procedures used.
- implementation practices.
- skills necessary/appropriate.
- application of monitoring techniques.
- evaluation methodology.

REQUEST: Five multiple choice test items per objective, including stems and four choices.

40% knowledge
40% comprehension
20% application

SPECIFICATION: SUGGESTIVE-ACCELERATIVE LEARNING AND TEACHING
(SALT) TRAINING ASSESSMENT

GOAL I: The participants will become familiar with the scope of SALT.

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge, as evidenced by a paper and pencil inventory, of the following:

- Terminology
- Subjects taught
- Grade Range
- Lesson sequencing
- Additional major benefits

GOAL II: The participants will become familiar with the aspects of SALT

OBJECTIVES: At the termination of the inservice training the participants will demonstrate knowledge as evidenced by a paper and pencil inventory, of the following:

- Methods
- Activities
- Motivation
- Practice
- Imagery
- Relaxing
- Types of music
- Environment
 - physical
 - psychological
- Teacher responses to negative verbalizations by students
- Indirect suggestion
- Correction of mistakes
- Desirable personality characteristics for the teacher
- Engaging both halves of the brain

GOAL III: The participants will become familiar with the results of SALT

OBJECTIVES: At the termination of the inservice training, the participants will demonstrate knowledge, as evidenced by a paper and pencil inventory, of the following:

- The major theoretical factors responsible for increased learning
- Beliefs or convictions which limit a student's ability to learn
- The success ratio

REQUEST: Five multiple choice test items per objective, including stems and four choices.

40% knowledge
40% comprehension
20% application

APPENDIX C: SCHEDULES OF STAFF TRAINING

Workshops Conducted by Joan Maxwell for the
Spirit Lake Community Schools

April 17, 1982

There is considerable overlap in the following categories because principles of successful teaching are pervasive. The number of hours in parenthesis after topics indicates the approximate time necessary to develop beginning understanding and identification of these professional skills in the classroom. Indepth work and sophisticated, artistic application in the classroom will require more time.

I Teacher Decision Making

An introduction to teacher decision making as the organizer for all the following content:

1. Decisions about content to be taught.
2. Decisions about what the student will do to learn.
3. Decisions about what the teacher will do to facilitate and accelerate that learning.

II Principles of Learning that are Useful to Teachers

Use of principles of learning for groups and individuals in the classroom

1. Motivation (increase students' intent to learn).
2. Practice (get more learning with less practice).

III. Teaching Strategies

1. Planning for effective instruction.
 - a. Principles of practice.
 - b. Instructional design.

In-Service August 23, 1982

I Principles of Learning that are Useful to Teachers

1. Reinforcement (increase students' productive behavior and minimize discipline).

II Teaching Strategies

1. Planning for effective instruction.
 - a. Long and short range objectives.
 - b. Relevant behaviors of students and teacher.
 - c. Input and output modalities.
2. Special techniques.
 - a. Teaching to both halves of the brain.

in-service days

- 8-23-82 One-half day elementary
One-half day secondary
- 9-21-82 2 hours - total staff - 2-4 hours for "walk
through" observations at the Elementary,
Jr. High and High School
- 10-12-82 Full day - total staff
- 11-16-82 2 hours - total staff
- 12-07-82 2 hours - total staff

Participants will have an opportunity to hear input
on the topics outlined on the accompanying sheet.

In large and small group discussions, participants will:

- define and explain the labels and generalizations
- generate classroom examples of the labels and generalizations
- identify effective teaching strategies in live and filmed lessons
- plan effective teaching strategies for their own classrooms

In-Service Spetember 21, 1982

I Principles of Learning that are Useful to Teachers

Use of principles of learning for groups and individuals in the classroom

1. Retention (increase the memory of what is learned).
2. Transfer (increase speed of learning and use of that learning in new situations where it is appropriate. Promote problem solving skills and creativity).

In-Service October 12, 1982

I Academic or Behavioral Content

1. Analysis of content in terms of level of difficulty.
 - a. Task analysis
 - b. Diagnostic activities.
 - c. Grouping for instruction.
 - d. Prescriptive teaching.
 - e. Individualizing in a group.
2. Analysis of content in terms of degree of intellectual complexity.
 - a. Bloom's taxonomy (extending student' thinking).
 - b. Individualizing in a group in terms of cognitive complexity.

II Teaching Strategies

1. Special techniques.
 - a. Sponge activities (make waiting time learning time).

In-Service November 16, 1982

I Enhancing Students' Self-Concept.

1. Evidence of a positive and valid self-concept.
2. Teaching for a positive self-concept.
3. Teaching decision making so students are more in charge of what happens to them.
4. Teaching students to diagnose and prescribe for themselves.
5. Developing independence in learning.

In-Service December 7, 1982

I Classroom Management

- i. Helping students become independent learners.
 - a. Student skills to be taught.
 - b. Teaching skills needed.
 - c. Teaching sequence and practice of skills.
 - d. Diagnostic and prescriptive teaching for independence.
 - e. Records.

ELEMENTS OF INSTRUCTION WORKSHOPSSession INovember 30, 1982, Board Room, District Office

<u>A.M.</u>	<u>P.M.</u>		
8:00-8:30	12:45-1:15	Pretest	
8:30-9:00	1:15-1:45	Overview of the workshop Criteria for a profession Critical questions about instruction Responsibilities of teacher Critical behaviors of the teacher Principles of Learning	Ken Dragseth
9:00-9:15	1:45-2:00	Break	
9:15-10:15	2:00-3:00	Teach to an objective Teach to correct level of difficulty	Ann Kuster Ann Kuster
10:15-10:45	3:00-3:30	Monitor and adjust	Kay Shima
10:45-11:00	3:30-3:45	Organize groups Practice: Analyze a lesson you taught or observed in light of the first three critical behaviors of the teacher.	

Session IIDecember 8, 1982, Board Room, District Office

<u>A.M.</u>	<u>P.M.</u>		
8:00 - 8:30	12:45-1:15	Discuss practice with critical behaviors	Small groups
8:30 - 9:15	1:15-2:00	"Appraisal of Teaching I" -- Film discussion	Ken Dragseth
9:15 - 9:30	2:00-2:15	Break	
9:30 - 10:15	2:15-3:00	Motivation	Ann Kuster
10:15 - 10:45	3:00-3:30	Retention	Kay Shima
10:45 - 11:00	3:30-3:45	Practice: Analyze a lesson you taught or observed in light of these two principles of learning -- motivation and retention.	

ELEMENTS OF INSTRUCTION WORKSHOPSSession IIIDecember 14, 1982, Board Room, District Office

<u>A.M.</u>	<u>P.M.</u>		
8:00-8:30	12:45-1:15	Small groups Discuss practice with motivation and retention	
8:30-9:15	1:15-2:00	Transfer	Kay Shima
9:15-9:30	2:00-2:15	Break	
9:30-10:15	2:15-3:00	Rate and degree/reinforcement	Ken Dragseth
10:15-10:45	3:00-3:30	"Appraisal of Teaching II" -- Film discussion	Ann Kuster
10:45-11:00	3:30-3:45	Practice: Analyze a lesson you taught or observed in light of these principles of learning -- transfer, rate and degree.	

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Session IV

January 6, 1983, Board Room, District Office

<u>A.M.</u>	<u>P.M.</u>		
8:00-8:30	12:45-1:15	Small Groups Discuss practice with transfer and rate and degree	
8:30-9:00	1:15-1:45	Decision Making	Ann Kuster
9:00-9:30	1:45-2:15	Diagnostic Teaching	Kay Shima
9:30-9:45	2:15-2:30	Break	
9:45-10:45	2:30-3:30	Seven elements of lesson design and sponge activities	Ken Dragseth
10:45-11:00	3:30-3:45	Practice: Analyze a lesson you taught or observed in light of the seven elements of lesson design	

Session V

January 12, 1983, Board Room, District Office

<u>A.M.</u>	<u>P.M.</u>		
8:00-8:30	12:45-1:15	Small groups Discuss practice with the seven elements of lesson design	
8:30-8:45	1:15-1:30	Introduction to demonstrations - script taping and conferences	Ann Kuster
8:45-9:15	1:30-2:00	Mini-lesson, script taping and conferencing	Teacher - Kay Shima Recorder - Ken Dragseth
9:15-9:30	2:00-2:15	Break	
9:30-10:00	2:15-2:45	Mini-lesson, script taping and conferencing	Teacher - Ken Dragseth Recorder - Ann Kuster
10:00-10:30	2:45-3:15	Mini-lesson, script taping and conferencing	Teacher - Ann Kuster Recorder - Kay Shima
10:30-11:00	3:15-3:45	Practice: At the next session you will teach a mini-lesson to the others in your group. Your lesson will not exceed fifteen minutes	

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Session VI

January 27, 1983, Board Room, District Office

<u>A.M.</u>			
8:00-10:15	12:45-3:00	Mini-lessons, script taping and conferencing (Schedule your own break)	Groups
10:15-10:45	3:00-3:30	Post Test	
10:45-11:00	3:30-3:45	Implementation of elements of instruction	

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Session VI

January 27, 1983, Board Room, District Office

<u>A.M.</u>			Groups
8:00-10:15	12:45-3:00	Mini-lessons, script taping and conferencing (Schedule your own break)	
10:15-10:45	3:00-3:30	Post Test	
10:45-11:00	3:30-3:45	Implementation of elements of instruction	

WORKSHOPS ON EFFECTIVE INSTRUCTION

This two day workshop will:

- . Examine the essential ingredients of effective teaching
- . Provide steps participants can take to increase their competencies in teaching
- . Focus on models and strategies for helping improve the skills of teachers
- . Stabilize the professional vocabulary as it relates to SIM

Day 1

8:00 - 9:00 a.m.	Overview
9:15 - 10:15 a.m.	5 Critical behaviors
10:30 - 11:30 a.m.	Motivation
12:45 - 1:45 p.m.	Rate and degree
2:00 - 2:45 p.m.	Retention
2:45 - 3:30 p.m.	Transfer

Day 2

8:00 - 8:30 a.m.	Overview
8:30 - 9:00 a.m.	Anticipatory set
9:15 - 9:45 a.m.	Objectives
9:45 - 10:15 a.m.	Input
10:15 - 11:00 a.m.	Model
11:00 - 11:30 a.m.	Checking for understanding
12:45 - 1:15 p.m.	Guided practice
1:15 - 1:45 p.m.	Independent practice
2:00 - 3:00 p.m.	Demonstration and script taping
3:00 - 3:30 p.m.	Summary

LOGISTICS

2 consecutive days Late November or early December

Maximum - 20 teachers

Cost - \$46 x 20 x 2 = \$1,840

Teacher - Trainer 1 day = \$46 or extra service contract

Day: 8:00 a.m. - 3:30 p.m.

Place: Classroom

BURNSVILLE-EAGAN-SAVAGE PUBLIC SCHOOLS
INDEPENDENT SCHOOL DISTRICT #191

INSTRUCTIONAL STAFF DEVELOPMENT WORKSHOP

November 15, 1982

9:00 a.m. - 9:15 a.m.	Registration
9:15 a.m. - 9:30 a.m.	Welcome
9:30 a.m. - 10:15 a.m.	Professional Theory
10:15 a.m. - 10:45 a.m.	Announcements/Break
10:45 a.m. - 12:00 noon	Critical Behaviors of the Teacher
12:00 noon - 1:15 p.m.	Lunch
1:15 p.m. - 2:00 p.m.	Critical Behaviors of the Teacher
2:00 p.m. - 2:45 p.m.	Film: "Appraisal of Teaching - Part II"
2:45 p.m. - 3:10 p.m.	Break
3:10 p.m. - 4:00 p.m.	Principles of Learning

November 16, 1982

8:30 a.m. - 9:00 a.m.	Coffee
9:00 a.m. - 9:25 a.m.	Review
9:30 a.m. - 10:25	Principles of Learning
10:25 a.m. - 10:45 a.m.	Break
10:45 a.m. - 11:30 a.m.	Principles of Learning
11:30 a.m. - 12:45 p.m.	Lunch
12:45 p.m. - 1:40 p.m.	Principles of Learning
2:30 p.m. - 2:50 p.m.	Break
2:50 p.m. - 4:00 p.m.	Activity: Analysis of Teaching

November 17, 1982

8:30 a.m. - 9:00 a.m.	Coffee
9:00 a.m. - 9:15 a.m.	Review
9:15 a.m. - 10:15 a.m.	Lesson Design
10:15 a.m. - 10:40 a.m.	Break
10:40 a.m. - 11:45 a.m.	Activity: Analysis of a Lesson
11:45 a.m. - 1:00 p.m.	Lunch
1:00 p.m. - 1:45 p.m.	Self Concept/Decision Making
1:45 p.m. - 2:10 p.m.	Break
2:10 p.m. - 3:00 p.m.	(repeat) Self Concept/Decision Making
3:30 p.m. - 4:00 p.m.	Open Session: Questions

<u>TOPIC</u>	<u>OBJECTIVES</u>
Overview	Participants who: <ul style="list-style-type: none">- have an awareness of the criteria for a profession;- have an awareness of the seven classroom responsibilities of a teacher.
Appraisal of Teaching	Participants who can: <ul style="list-style-type: none">- explain the five critical behaviors of teaching that will increase successful learning;- list the factors within the classroom that affect learning.
Elements of Instruction	Participants who: <ul style="list-style-type: none">- have an awareness of the elements of instruction;- can list the elements of instruction;- can explain the elements of instruction.
Teaching to an Objective	Participants who can: <ul style="list-style-type: none">- explain the term "objective";- explain the concept of "relevance" as it applies to student behavior and teacher behaviors;- state the classification of teacher behaviors usually seen when teaching to an objective - information, questions, responses to the efforts of the learners, activities.
Formulating an Objective	Participants who can: <ul style="list-style-type: none">- list the two parts of an objective;- explain the meaning of the two parts of an objective;- explain the relationship between learning and the behavior in an objective;- write an instructional objective.
Task Analysis	Participants who can: <ul style="list-style-type: none">- define task analysis;- list the steps for writing a task analysis;- explain the steps for writing a task analysis;- write a task analysis.
Retention	Participants who can: <ul style="list-style-type: none">- name the variables of retention;- explain the variables of retention;- give an example of each of the variables of retention.
Transfer	Participants who can: <ul style="list-style-type: none">- explain the term "transfer";- state the kinds of transfer;- state the four factors that generate transfer;- state the advantages and disadvantages of transfer.

<u>TOPIC</u>	<u>OBJECTIVES</u>
Motivation	Participants who can: - list the variables of motivation; - explain the variables of motivation.
Anticipatory Set	Participants who can: - explain the learning principle of set; - list the critical elements of an anticipatory set; - give examples of an anticipatory set.
Active Participation	Participants who can: - define the learning principle of active participation; - explain each principle (covert behavior and overt behavior); - generate examples of techniques which will get overt behavior and covert behavior from learners.
Practice	Participants who can: - state the three teacher decisions relative to effective practice; - explain the generalizations of practice theory.
Reinforcement	Participants who can: - list each of the reinforcers, positive, negative and extinction; - define each of the reinforcers, positive, negative and extinction; - explain the effect of each of the reinforcers.
Schedule of Reinforcement	Participants who can: - list the steps in a schedule of reinforcement; - explain the steps in a schedule of reinforcement; - plan a schedule of reinforcement.
Closure	Participants who can: - explain the learning principle of closure; - explain the critical elements of closure; - give examples of closure.

A PROPOSAL FOR TESA

Instruction in

the Edina Public Schools

Submitted by:

Kathy Jones

Don Johnson

Eugene D. Davis

TESA

Contents

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Teacher Expectation and Student AchievementIntroduction

The inservice training program TESA (Teacher Expectation and Student Achievement) is for teachers in grades K through 12. The program identifies research showing that teacher interactions with students perceived as "low achievers" is less supportive and less motivating than those interactions with students perceived as "high achievers." Teachers are trained in an interaction model which results in their practicing the supportive and motivating techniques with all students in an undiscriminating manner, thus resulting in the accelerated academic growth of the "perceived lows." Workshops will be held with teachers in which these interactions, sometimes called strategies, are taught. The teacher will then practice the strategy in his/her classroom.

The workshop will consume a half-day per month for five consecutive months. In addition, a half-day per month for each of these five months will be used for observation. This gives the teacher the opportunity to observe colleagues using the strategy and provides feedback for the teacher on the one being observed. All observations and observer schedules are worked out by the participants, with only the teacher concerned, receiving the observation reports. It is the hope of the TESA facilitators (Jones, Johnson, and Davis) that there will be at least 25 teachers in each training class of the program. Each teacher would need 1 day per month ($\frac{1}{2}$ day workshop - $\frac{1}{2}$ day observation) for 5 months or a total 5 days of release time.

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The cost of this time might be reviewed as follows.

25 teachers x 5 days each = 125 total release time days

125 days x \$46.00 = \$5,750 cost of release time

The effectiveness of this training will be demonstrated by the teachers who participate in the TESA program as well as the SIM Project.

Workshops

The facilitators feel that the workshops should be a "team effort."

The major responsibility for the presentations would rest with Jones and Johnson while the administration of the program to include meeting schedules, release time, notification, schedules, substitutes, and budget would be Davis' responsibility.

The first approach that is made to the teachers is an extremely important step. We believe that we should spend some time (couple of hours) with Sam Kerman before his presentation on October 1st. The very next week we should have a more detailed orientation meeting where teachers will be able to sign up for the program. The teachers interested in attending this meeting should be excused from work at 2:30 p.m. to attend from 3:00 p.m. to 4:30 p.m. Also, at this meeting, the teacher would be instructed to come to the first workshop with a list of five students whom they perceive to be low achievers and five students whom they perceive to be high achievers.

The TESA Workshops will commence in the month of November and will proceed as follows:

(3 strategies taught at each workshop)

Workshop I - November 1982

1. Equitable distribution of response opportunities

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2. Affirmation of Correctness
3. Proximity

Workshop II - December, 1982 or January, 1983

1. Individual Helping
2. Praise of Learning Performance
3. Courtesy

Workshop III - February, 1983

1. Latency
2. Reasons for Praise
3. Personal Interest/Compliments

Workshop IV - March, 1983

1. Delving, Rephrasing, Giving Clues
2. Listening
3. Touching

Workshop V - April, 1983

1. High Level Questioning
2. Accepting Feelings
3. Desisting

The workshops should be three hours in length. If it happens to be in the morning it should be:

7:30 a.m. (continuous to) 10:30 a.m.

If it is in the afternoon it should be:

12:30 p.m. (continuous to) 3:30 p.m.

The workshop should be held at the Edina Community Center preferably in the old library. Here it is possible to comfortably station 25 to 35 people at tables of 5 each where there is a screen and a podium.

Materials

It will not be necessary to purchase coordinator manuals as each of

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the facilitators received one at the training seminar. Each teacher participant will, however, need a training manual at a cost of \$20 each. It will also be necessary to purchase packets of coding forms for the prescribed amount of observations. Sam Kerman suggested that we also purchase a few additional practice coding sheets for our training. We would also like to have available 5 copies of each resource listed below:

"Looking Into the Classroom"
"Classroom Questions, What Kinds?"
by Norris M. Sanders

These additions will increase the amount of materials by \$5 per participant. Total material cost would be:

\$25.00 x 25 participants - \$625.00 to material cost

Costs of Program

Teachers Release Days

125 days x \$46.00 = \$5,750

Release Days for Don Johnson

5 days (workshops) x \$46.00 = \$230
5 days (prep for workshop) x \$46.00 = \$230

Premium to Don Johnson and Cathy Jones

5 workshops x \$150.00/workshop
for Don \$750
5 workshops x \$150.00/workshop
for Kathy \$750

Background

As both Kathy and Don occupy positions that do not encompass teacher training, and further, the conduct of these workshops place on them an additional burden of preparation, it is our feeling that this compensation would be totally appropriate.

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Material Costs

\$25.00 x 25 participants = \$625.00

Refreshment Costs

\$10.00/workshop x 5 workshops = 50.00

Total Cost of
a workshop for 25 \$8,385.00

\$335.40 per participant

Questions
(still to be officially answered)

1. "What happens to the secondary teacher who changes classes at the semester break and has a new set of students?"

Our suggestion

The participating teacher will merely identify new groups of high and low achievers and continue with the application of strategies.

2. We hear of the possibility of exchanging workshops with Breck, Minneapolis, Northfield, and Spirit Lake: What, if anything is in the works?

Our suggestion

Exchange our workshop presentations with these school districts. It would add life, vitality, and enthusiasm to the program.

3. There will be a great deal of data collected from these observations that will need to be analyzed. Will SIM keep our data for us?

Our suggestion

We have discussed this with Shirley Stow. She mentioned she would pursue it with Iowa State.

4. Will the TESA Program be a voluntary program?

Our suggestion

It would be difficult to describe the great enthusiasm that the facilitators have for this program. We see this as much more than just another gimmick. It is a strategy where one can see a difference in a real short period of time. It is a teacher's opportunity to "work smarter" and "not harder" with absolutely no threatening effects. It's a program one doesn't have to use to be a good teacher but one that will help the teacher refine his/her skills. It's certainly an opportunity to judge one's self rather than a program. Because of these feelings, the facilitator realizes all teachers should be a part of this training but do equally realize this is not possible.

Our recommendation would be to include all 19 faculty members from the math and reading areas of grades 4 and 8, and then allow other faculty members to join giving first priority to those who are being evaluated, second priority to those who have been evaluated during 1981-82. If there is an excess of volunteers a second class could be arranged.

ORIENTATION MEETING**TESA****AGENDA**

- 4:00 PM
1. Overview of agenda items
 2. Training process in workshops and classrooms
 3. Commitment by teachers and district office
 4. Dates, times, places for workshops
 5. Training materials (handbook: survey & questionnaire)
 6. Selection of observation classes (rotating schedule)
 7. Collection of questionnaires
 8. Questions and answers
 9. Additional items as desired
- 5:30 PM
10. Adjournment

TRAINER'S NOTES:**Dinner workshops Plan:**

Attending workshops	= 20 hours (5 months × 4 hours including dinner hour)
Pre-, post-meetings	= 03 hours (1½ hours + 1½ hours)
Observed classtime	= 10 hours (5 months × 4 observations × ½ hour)
Observing time	= 10 hours (5 months × 4 observations × ½ hour)
Reading & discussing	= 02 hours (15-20 minutes per month)
TOTAL	= 45 hours

***NOTE ON DUAL PAGE NUMBERS**

To correlate identical material on pages of this manual and the Teacher Handbook during actual workshops, some pages in Section C have a *dual* page number—the one in parentheses corresponds to the identical page in the Teacher Handbook.

AGENDA — WORKSHOP #1**TESA****MATERIALS CHECKLIST:**

1. Extra handbooks
2. Name tags
3. Transparencies & grease pencil (optional)
4. Overhead projector, screen, cord
5. Chalkboard, chalk, eraser

**RECOMMENDED
TIME PERIODS**

- | | |
|------------|--|
| 15 minutes | 1. Introductions |
| 25 | 2. Small group discussion, characteristics of perceived “low” and “high” achievers |
| 10 | 3. Reports from small group discussions |
| 10 | 4. Handbook review: background, objectives, findings |
| 30 | 5. Unit 1 of the Interaction Model
Strand A: Equitable Distribution of Response Opportunities
Strand B: Affirm or Correct
Strand C: Proximity |
| 15 | BREAK |
| 20 | 6. Observing and coding procedures |
| 30 | 7. Role playing and coding practice |
| 15 | 8. Observation Schedule review/revision |
| 05 | 9. Data collection |
| 05 | 10. Workshop evaluation and wrap-up |

180 minutes

AGENDA — WORKSHOP #2**TESA****MATERIALS CHECKLIST:**

1. Unit 2 interactions & cue cards
2. Name tags
3. Data cards & special pencils (optional)
4. Film copy ("Cipher in the Snow")
5. Transparenciēs & grease pencil (optional)
6. Projectors: overhead, 16mm
7. Screen, cord
8. Chalkboard, chalk, eraser

**RECOMMENDED
TIME PERIODS**

- | | |
|------------|--|
| 25 minutes | 1. Film |
| 25 | 2. Small group discussions:
What happened in the classrooms while practicing the Unit 1 interactions? |
| 10 | 3. Reports from small group discussions |
| 15 | 4. Collection of observation coding forms |
| 15 | BREAK |
| 30 | 5. Unit 2 of the Interaction Model
Strand A: Individual Helping
Strand B: Praise of Learning Performance
Strand C: Courtesy |
| 40 | 6. Role playing and coding practice |
| 15 | 7. Student survey ("How I See Myself") |
| 05 | 8. Workshop evaluation and wrap-up |

180 minutes

AGENDA — WORKSHOP #3**TESA****MATERIALS CHECKLIST:**

1. Unit 3 interactions & cue cards
2. Name tags
3. Data cards & special pencils (optional)
4. Data analysis reports for Unit 1
5. Chalkboard, chalk, eraser

**RECOMMENDED
TIME PERIODS**

- | | |
|------------|--|
| 30 minutes | 1. Small group discussions:
What happened in the classrooms while practicing the Unit 2 interactions? |
| 10 | 2. Reports from small group discussions |
| 20 | 3. Review of Unit 1 data analysis |
| 15 | 4. Collection of observation coding forms |
| 15 | BREAK |
| 40 | 5. Unit 3 of the Interaction Model
Strand A: Latency
Strand B: Reasons for Praise
Strand C: Personal Interest and Compliments |
| 45 | 6. Role playing and coding practice |
| 05 | 7. Workshop evaluation and wrap-up |

180 minutes

AGENDA — WORKSHOP #4**TESA****MATERIALS CHECKLIST:**

1. Unit 4 interactions & cue cards
2. Name tags
3. Data cards & special pencils (optional)
4. Data analysis reports for Unit 2
5. Packets for Listening Exercise

**RECOMMENDED
TIME PERIODS**

- 25 minutes 1. Small group discussions:
 What happened in the classrooms while practicing the Unit 3 interactions?
- 10 2. Reports from small group discussions
- 05 3. Complete mid-project survey
- 15 4. Collection of observation coding forms
- 15 **BREAK**
- 25 5. Listening/Communication Exercise
- 55 6. Unit 4 of the Interaction Model
 Strand A: Delving
 Strand B: Listening
 Strand C: Touching
- 25 7. Role playing and coding practice
- 05 8. Workshop evaluation and wrap-up

180 minutes

AGENDA — WORKSHOP #5**TESA****MATERIALS CHECKLIST:**

1. Unit 5 interactions & cue cards
2. Name tags
3. Data cards & special pencils (optional)
4. Data analysis reports for Unit 3
5. Survey results from Workshop #4

**RECOMMENDED
TIME PERIODS**

- | | |
|------------|---|
| 35 minutes | 1. Small group discussions:
What happened in the classrooms while practicing Unit 4 interactions? |
| 15 | 2. Reports from small group discussions |
| 20 | 3. Review of findings of Workshop #4
Survey of Teacher-Participants |
| 15 | 4. Collection of observation coding forms |
| 15 | BREAK |
| 70 | 5. Unit 5 of the Interaction Model
Strand A: Higher Level Questioning
Strand B: Accepting Feelings
Strand C: Desisting |
| 10 | 6. Workshop evaluation and wrap-up |

180 minutes

AGENDA — EVALUATION MEETING**TESA****MATERIALS CHECKLIST:**

1. Data cards & special pencils (optional)
2. Data analysis reports for Unit 4
3. Two envelopes or labels per trainee

**RECOMMENDED
TIME PERIODS**

- | | |
|------------|--|
| 25 minutes | 1. Small group discussions:
What happened in the classrooms while practicing Unit 5 interactions? |
| 10 | 2. Reports from small group discussions |
| 05 | 3. Summary remarks |
| 25 | 4. Collection of data for Unit 5 and Student Information Survey |
| 05 | 5. Filling out self-addressed envelopes |
| 10 | 6. Completion of Program Evaluation Survey |

80 minutes

APPENDIX D: ASSESSMENT INSTRUMENTS

Essential Elements of Instruction
Training Assessment

by
Madeline Hunter
Joan Maxwell

Nancy Kinn Schycker, editor



School Improvement Model (a Northwest Area Foundation Project)

College of Education | Iowa State University

DIRECTIONS:

First, record your birth date, sex, and SIM Identification Number in the spaces provided on the left hand side of the accompanying answer sheet by blackening the appropriate circles in each column with a #2 pencil.

Items 1-40 are designed to measure your knowledge of The Essential Elements of Instruction and/or related classroom behaviors. For each item, choose the one most appropriate response. In each case, option "e" may be used. However, only choose this option if you are totally unfamiliar with the material.

1. The descriptor that is most critical to the knowledge of results is
 - a. vivid.
 - b. positive.
 - c. specific.
 - d. general
 - e. not familiar with terminology/material

2. Which of the following is not considered a variable of retention?
 - a. meaning.
 - b. schedule of practice
 - c. level of aspiration
 - d. degree of original learning
 - e. not familiar with terminology/material

3. Reinforcement for correct responses and direction for incorrect responses are provided through
 - a. orientation.
 - b. massed practice.
 - c. knowledge of results.
 - d. reward.
 - e. not familiar with terminology/material

4. Teachers are individualizing in a group when they select a student to answer on the basis of
 - a. ensuring a correct answer.
 - b. the order in which hands are raised.
 - c. who has had a turn.
 - d. the question being asked.
 - e. not familiar with terminology/material

5. A teacher is having students describe themselves with fictitious names to see if others can guess who they are. The teacher is primarily using the motivation variable of
 - a. interest.
 - b. success.
 - c. feeling tone.
 - d. level of concern.
 - e. not familiar with terminology/material

6. The teacher gives an in-class assignment and then announces plans to grade students on how well they listen to directions. The motivation concept most likely being used by the teacher is
 - a. level of concern.
 - b. knowledge of results.
 - c. success.
 - d. interest.
 - e. not familiar with terminology/material

7. John makes an inappropriate remark and the teacher bawls him out. He soon makes another inappropriate remark. This could best be described as an example of
- a. extinction.
 - b. punishment.
 - c. negative reinforcement.
 - d. positive reinforcement.
 - e. not familiar with terminology/material
8. To ensure rapid learning and long retention, the teacher will introduce 23×64 by
- a. assigning a page of 20 similar problems.
 - b. giving many examples related to the students' experiences.
 - c. having students discover what to do when multiplying by 10's.
 - d. having students study the introductory page in the math book.
 - e. not familiar with terminology/material
9. Which of the following is probably least likely to raise a student's level of concern?
- a. putting workbooks in his/her desk when finished
 - b. sitting next to the teacher in the reading group
 - c. knowing that papers are due at the end of the period
 - d. showing with thumbs up if the statement is true; thumbs down, if false
 - e. not familiar with terminology/material
10. The role negative examples play in transferring learning from one situation to another is that they
- a. eliminate the undesired behavior.
 - b. help identify when not to transfer the learning.
 - c. are an efficient method of transferring learning.
 - d. all of the above
 - e. not familiar with terminology/material
11. Which of the following is not appropriate for a practice "HOW"? activity?
- a. Have practice periods that are short and intense.
 - b. Have students practice small, meaningful "chunks".
 - c. Have students practice with a partner at the beginning of learning.
 - d. Have students initially get feedback and correction, if needed, from teacher.
 - e. not familiar with terminology/material
12. In teaching the students to decide when to regroup (borrow) in subtraction, it would be relevant to have students
- a. practice a page of 25 problems requiring regrouping.
 - b. locate the pages in the math book where regrouping is taught.
 - c. circle the problems requiring regrouping on a page of problems.
 - d. make up word problems to go with a page of problems requiring regrouping.
 - e. not familiar with terminology/material

13. Which of the following examples best illustrates the definition of reinforcement?
- As the teacher sees students checking their work with the answer key, he/she says, "It's good you've remembered to refer to the key."
 - The teacher reminds students, "If you don't finish, you'll have homework."
 - The teacher writes the names of students, who are not working quietly, on the board.
 - As long as students are quiet and productive when they finish their assignment, the teacher doesn't interrupt them.
 - not familiar with terminology/material
14. Which of the following skills is not an essential component of the task of outlining?
- ordering main ideas
 - taking notes while reading material to be outlined
 - separating the main idea from subordinate information
 - paraphrasing main ideas and subordinate information
 - not familiar with terminology/material
15. If the long range objective is: "The learner will tell time to the nearest five minutes", which of the following is an essential component?
- write time to the hour
 - shown a clock, state the time to the half hour
 - state the number of minutes in one hour
 - on a model clock, show the time to a half hour
 - not familiar with terminology/material
16. If teachers choose to use the first four components of lesson design in sequence, they would plan as follows:
- anticipatory set, objective, input, modeling
 - anticipatory set, objective, input, guided practices
 - anticipatory set, input, checking for understanding, guided practice
 - not familiar with terminology/material
17. Transfer theory is used most effectively by teachers when they
- keep the new learning separate from past learnings.
 - connect the present learning with anything that is similar.
 - ask students, "Does this remind you of something you already know?"
 - use an example in the student's past experience which illustrates the same principle as the new learning.
 - not familiar with terminology/material
18. When prescribing a learning situation for a student, the least critical teacher consideration is whether the student
- works best with his friends.
 - receives ample help from home.
 - needs close supervision and monitoring by the teacher.
 - needs to work on content that is easy enough for him/her to learn quickly and with few errors.
 - not familiar with terminology/material

19. Which of the following lesson objectives is not stated behaviorally?
The learner will
- have complete understanding of the colonial period in U.S. history.
 - read orally the paragraph describing the landing of the Mayflower.
 - write the dates of the founding of each of the original thirteen colonies.
 - describe, after having read the Social Studies chapter, how the clothing worn by the New England colonists differed from that worn by the Southern colonists.
 - not familiar with terminology/material
20. On which behavior is extinction likely to be most effective? A student
- hits other children.
 - continues calling out.
 - calls out an answer for the first time.
 - behaves in a way the teacher considers inappropriate.
 - not familiar with terminology/material
21. It is important to provide guided practice because
- it is a component included in every lesson.
 - initial practice should be done correctly.
 - students feel more comfortable with the teacher helping.
 - the teacher wants to let students know they are making progress.
 - not familiar with terminology/material
22. Teachers individualize in a group when they
- use the students' names in examples.
 - let students make up examples about each other.
 - use classroom examples so they are familiar to each student.
 - use examples and the name of a student to enhance that student's self-concept.
 - not familiar with terminology/material
23. Students can be grouped most appropriately for instruction, if the grouping is based upon the students'
- need for the skill or content in the next grade.
 - expression of an interest in the content.
 - previous exposure to the skill or content.
 - prerequisite skills for the task to be taught.
 - not familiar with terminology/material
24. Teachers, when teaching, are demonstrating professional decision making when they
- consider that lesson design restricts creativity.
 - follow every part of lesson design in each lesson.
 - consider the elements of lesson design and include those they deem appropriate.
 - include all elements of lesson design, but do not initiate independent practice unless the students are ready.
 - not familiar with terminology/material

25. The concept of negative transfer states that, "What a student has previously learned can interfere with what the student is asked to learn at present." Which of the following is least likely to be explained by negative transfer?
- A student writes $6 \times 7 = 41$.
 - A pre-schooler says, "He goed away."
 - A student writes, "The dog wagged it's tail."
 - A student regroups in a subtraction of common fractions problems when it is not needed.
 - not familiar with terminology/material

THREE MAIN CATEGORIES OF TEACHER DECISION MAKING ARE:

- Content
- Behavior of learner
- Behavior of teacher

Indicate on your answer sheet which type of teacher decision making best describes items 26 through 35.

The teacher is deciding to

- have students describe the clothing worn by the New England colonists or describe the differences in dress between the New England and the Southern colonists.
- stand by a student to increase that student's concern or move to the other side of the room to lower concern.
- tell students they need not worry if things are not clear, that everyone has trouble at first.
- have students write a paper or take a test to demonstrate their understanding.
- have students validate their comprehension by making a diorama or a time line.
- have students learn to locate research sources in the library or learn how to take notes on the information found in resource sources.
- have students read the chapter or view a film.
- teach by using examples in the book or to create original examples.
- have students learn from discussing or experimenting.
- teach the critical attributes of assumptions and conclusions.

DIAGNOSTIC ACTIVITIES CAN BE DESCRIBED AS:

- a. Formal
- b. Informal
- c. Inferential

Indicate on your answer sheet which type of diagnostic activity best describes items 36 through 40.

The teacher has students

- 36. solve the first problem on their papers and show it to the teacher.
- 37. look at this sentence on the board: "Mary went to the grocery store." As the teacher points to each word in the sentence, students hold up one finger if the word pointed to is a noun, two fingers if a verb, and five fingers if neither.
- 38. take a 20 item multiplication test. The test begins with two problems like 4×3 , and ends with two problems like 65×498 .
- 39. begin a unit on paragraph writing because fifth graders usually have trouble writing paragraphs.
- 40. put their thumbs up each time the teacher states a characteristic of mammals.

BACKGROUND INFORMATION

- 41. My most advanced degree is
 - a. B.A./B.S.
 - b. B.A./B.S. plus 15 semester hours
 - c. B.A./B.S. plus 30 semester hours
 - d. M.A./M.S.
 - e. Ph.D./Ed.D.
- 42. My present position is
 - a. Teacher
 - b. Administrator
 - d. Teacher and Administrator
 - e. Other
- 43. Years of teaching experience
 - a. 1-4
 - b. 5-8
 - c. 9-15
 - d. 16-25
 - e. over 25
- 44. Years in educational administration
 - a. none
 - b. 1-4
 - c. 5-10
 - d. 11-20
 - e. over 20

T.E.S.A.

Teacher Expectations and Student Achievement Training Assessment

by
Sam Kerman

Nancy Kinn Schycker, editor



School Improvement Model (a Northwest Area Foundation Project)

College of Education | Iowa State University

DIRECTIONS:

First, record your birth date, sex, and SIM Identification Number in the spaces provided on the left hand side of the accompanying answer sheet by blackening the appropriate circles in each column with a #2 pencil.

Items 1-40 are designed to measure your knowledge of TESA and/or related classroom behaviors. For each item, choose the one most appropriate response. In each case, option "e" may be used. However, only choose this option if you are totally unfamiliar with the material.

1. The major objective of the TESA Program is to
 - a. reduce teacher stress.
 - b. improve student attendance.
 - c. increase academic gain of "low" achievers.
 - d. improve teacher attitudes towards "low" achievers.
 - e. not familiar with terminology/material

2. TESA research indicates that the level at which a student performs academically is best determined by
 - a. the teacher.
 - b. I.Q. scores.
 - c. grades from the previous year.
 - d. standardized test scores of basic skills.
 - e. not familiar with terminology/material

3. It is strongly recommended that building principals
 - a. be involved in the observation-coding process.
 - b. attend the monthly workshops with their teachers.
 - c. be provided copies of the teachers' monthly observation reports.
 - d. all of the above
 - e. not familiar with terminology/material

4. The person who is identified and trained as the TESA Coordinator in a district should be
 - a. recruited from the teacher ranks.
 - b. a school level administrator or supervisor.
 - c. a district level administrator or supervisor.
 - d. any of the above
 - e. not familiar with terminology/material

5. Courtesy is coded as a positive interaction, if
 - a. a pleasant manner, without the use of specific words or phrases, is demonstrated.
 - b. specific phrases are used (i.e., please, excuse me, thank you, etc.).
 - c. a pleasant manner, accompanied with "teasing" (if rapport has been established between teacher and student) is demonstrated.
 - d. all of the above
 - e. not familiar with terminology/material

6. In the case of the interaction listening, a positive is coded if the teacher
 - a. writes the student's response.
 - b. repeats the student's response.
 - c. maintains eye contact with the student during his/her response.
 - d. all of the above
 - e. not familiar with terminology/material

7. When a teacher displays anger towards a situation, rather than an individual,
 - a. nothing is coded.
 - b. the coding will vary depending on the situation.
 - c. a negative code will result.
 - d. a positive is coded.
 - e. not familiar with terminology/material

8. In order for a student to receive a positive code for proximity,
 - a. the teacher must pass within arms reach of the student.
 - b. the student must face the teacher and be within arms reach.
 - c. the student must be consciously aware of the teacher's presence.
 - d. the teacher must be within arms reach of the student and standing in place.
 - e. not familiar with terminology/material

9. TESA teacher trainees select their target students on the basis of
 - a. records in students cumulative files.
 - b. classroom test scores and attendance records.
 - c. utilization of any criteria they deem appropriate.
 - d. high and low achievement scores on standardized tests.
 - e. not familiar with terminology/material

10. In the TESA Program, it is strongly recommended that
 - a. monthly workshops be conducted at a school site.
 - b. monthly workshops be conducted immediately after school.
 - c. the workshop site and time be determined by popular vote.
 - d. monthly workshops be conducted as dinner workshops as opposed to immediately after school.
 - e. not familiar with terminology/material

11. Implementation of the TESA Program in classrooms has proven to be
 - a. more successful when the classrooms are grouped heterogeneously.
 - b. more successful when the classrooms are grouped homogeneously with low achievers.
 - c. more successful when the classrooms are grouped homogeneously with high achievers.
 - d. equally effective with any of the above groupings.
 - e. not familiar with terminology/material

12. Teachers are most sensitive to the feelings of
- a. boys.
 - b. girls
 - c. low achievers.
 - d. high achievers.
 - e. not familiar with terminology/material
13. If a student is called upon as a control technique (i.e., to get his/her attention), it is considered to be a response opportunity
- a. almost never.
 - b. almost always.
 - c. if the student responds correctly.
 - d. if a student responds.
 - e. not familiar with terminology/material
14. Providing reasons with praise appears to be most effective with
- a. college students.
 - b. secondary students.
 - c. primary or elementary students.
 - d. all of the above
 - e. not familiar with terminology/material
15. With the interaction, reasons for praise, if praise is given without a reason
- a. nothing is coded.
 - b. a negative is coded.
 - c. a partial positive is coded.
 - d. none of the above
 - e. not familiar with terminology/material
16. Touching is coded as a positive interaction, if it is
- a. initiated by the student.
 - b. initiated by the teacher.
 - c. used for "control" purposes.
 - d. all of the above
 - e. not familiar with terminology/material
17. Where students sit in a classroom affects the degree of student participation has been identified by
- a. Good & Brophy
 - b. Adams & Biddle
 - c. Rubovitis & Maehr
 - d. Rosenthal & Jacobson
 - e. not familiar with terminology/material
18. Administrators, implementing the TESA Program, select teachers to be trained on the basis of who
- a. needs the most help.
 - b. can serve as models for others.
 - c. has the least teaching experience.
 - d. volunteers.
 - e. not familiar with terminology/material
19. In the TESA Program, if a student does not respond to a question, it is considered reasonable for the teacher to wait approximately
- a. 5 seconds.
 - b. 10 seconds.
 - c. 15 seconds.
 - d. 20 seconds.
 - e. not familiar with terminology/material

20. When students perform well, they are more apt to receive praise if they are
- a. girls.
 - b. low achievers.
 - c. high achievers.
 - d. average achievers.
 - e. not familiar with terminology/material
21. Research indicates the average length of time a teacher will wait for a student to respond to a question is approximately
- a. 1 second.
 - b. 3 seconds.
 - c. 5 seconds .
 - d. 10 seconds .
 - e. not familiar with terminology/material
22. The "Pygmalion in the Classroom" study was originally conducted by
- a. Good & Brophy
 - b. Adams & Biddle
 - c. Rubovitis & Maehr
 - d. Rosenthal & Jacobson
 - e. not familiar with terminology/material
23. Which of the items below would be considered a higher level question?
- a. asking students to assess facts
 - b. asking students to give an opinion
 - c. asking students to generalize
 - d. all of the above
 - e. not familiar with terminology/material
24. Teachers frequently are most aware of the personal activities of
- a. boys.
 - b. girls.
 - c. low achievers.
 - d. high achievers.
 - e. not familiar with terminology/material
25. Teachers most frequently place themselves in closer proximity (within arms reach) to students who are
- a. low achievers.
 - b. high achievers.
 - c. apt to create problems.
 - d. physically attractive.
 - e. not familiar with terminology/material
26. Feedback on a student's performance may be coded as a positive interaction if the feedback is
- a. verbal.
 - b. verbal or non-verbal.
 - c. directed to another student.
 - d. all of the above
 - e. not familiar with terminology/material
27. In the TESA Program, individual help is recorded when provided by the
- a. teacher.
 - b. classroom volunteer.
 - c. teacher or another student.
 - d. all of the above
 - e. not familiar with terminology/material

28. Delving and rephrasing questions appear to be
- more effective with college students.
 - more effective with secondary students.
 - more effective with elementary students.
 - equally effective for all groups of students.
 - not familiar with terminology/material
29. The TESA Program holds that
- teachers emotional displays are acceptable if they have an intended effect.
 - there is no excuse for teachers to lose their "cool."
 - there will be occasions when a teacher may display genuine anger or displeasure.
 - it is more appropriate to lose your "cool" with groups of students than with individual students.
 - not familiar with terminology/material
30. Dr. Horn, of Columbia University, has discovered in his research studies that students in the
- highest academic quartile are given considerably more response opportunities than those in the lowest quartile.
 - lowest academic quartile are shown more empathy than high quartile students.
 - average academic quartiles are given more response opportunities as they advance in grade level.
 - all of the above
 - not familiar with terminology/material
31. Research studies have demonstrated that
- praise, as reinforcement, increases academic achievement.
 - praise should be attempted even if the student's performance is unacceptable.
 - praise is as effective as being informed of the correctness of the performance.
 - all of the above
 - not familiar with terminology/material
32. Several research studies indicate that
- informing students that their answers are incorrect correlates positively with student gain.
 - informing students that their answers are incorrect correlates negatively with student gain.
 - praising students, regardless of the correctness of their response, correlates positively with student gain.
 - no significant correlations have been identified on any of the above.
 - not familiar with terminology/material

33. A frequent rationale for not giving low achievers response opportunities is
- that they don't volunteer to respond.
 - that the teacher doesn't want to embarrass them.
 - that the teacher feels it may be a waste of time.
 - all of the above
 - not familiar with terminology/material
34. Successful implementation of the TESA Program suggests that
- special adjustments be made in preparation of teacher lesson plans.
 - special adjustments be made in classroom assignments to accommodate observations.
 - teachers be provided $\frac{1}{2}$ day, once a month, of release time for observing and coding.
 - teachers be provided four $\frac{1}{2}$ days, each month, of release time for observing and coding.
 - not familiar with terminology/material
35. The most valid method of evaluating successful implementation of the TESA Program is to
- measure academic gain of target students.
 - conduct a pre-post attitude survey of target students.
 - conduct a pre-post attitude survey of participating teachers.
 - examine the observation codings to determine equitable distribution of desired behaviors.
 - not familiar with terminology/material
36. Internalization, a core element of the TESA Program, means that
- the program will be institutionalized in the school or district where implemented.
 - low achievers will be expected to attain minimum standards of academic performance.
 - teachers will progressively learn and practice non-discriminating behaviors with all students.
 - all of the above
 - not familiar with terminology/material
37. Peer observation, a core element of the TESA Program, entails
- teacher participatns observing and coding each other on a voluntary basis.
 - observers providing evaluations and recommendations following observations.
 - participants being observed and coded a minimum of four 30-minute observations following each of the five monthly workshops.
 - both teacher participants and non-participants in the TESA Program having the opportunity to observe and code each other.
 - not familiar with terminology/material

38. The TESA teacher-observation process has proven to be most successful when the teams are formed by
- a. a predetermined TESA prescription.
 - b. teachers of similar subject disciplines.
 - c. the coordinator, and the teachers determine the schedule.
 - d. the teachers, and the administrator determines the schedule.
 - e. not familiar with terminology/material
39. If students are having difficulty responding to a question, clues are provided
- a. more frequently to low achievers.
 - b. more frequently to high achievers.
 - c. more frequently to average achievers.
 - d. equally to all levels of achievers.
 - e. not familiar with terminology/material
40. A positive interaction is coded for the interaction personal interest when the teacher
- a. asks students what their hobbies are.
 - b. asks students if they have any brothers or sisters.
 - c. communicates to students knowledge about their hobbies or interests.
 - d. all of the above
 - e. not familiar with terminology/material

BACKGROUND INFORMATION

41. My most advanced degree is
- a. B.A./B.S.
 - b. B.A./B.S. plus 15 semester hours
 - c. B.A./B.S. plus 30 semester hours
 - d. M.A./M.S.
 - e. Ph.D./Ed.D.
42. My present position is
- a. Teacher
 - b. Administrator
 - c. Teacher and Administrator
 - d. Other
43. Years of teaching experience
- a. 1-4
 - b. 5-8
 - c. 9-15
 - d. 16-25
 - e. over 25
44. Years in educational administration
- a. none
 - b. 1-4
 - c. 5-10
 - d. 11-20
 - e. over 20

Classroom Management/Time-on-Task
Training Assessment

by
Anna Graeber

Nancy Kinn Schycker, editor



School Improvement Model (a Northwest Area Foundation Project)

College of Education | Iowa State University

DIRECTIONS:

First, record your birth date, sex, and SIM Identification Number in the spaces provided on the left-hand side of the accompanying answer sheet by blackening the appropriate circles in each column with a #2 pencil.

Items 1-40 are designed to measure your knowledge of Classroom Management/Time-on-Task and/or related classroom behavior. For each item, choose the one most appropriate response. In each case, option "e" may be used. However, only choose this option if you are totally unfamiliar with the material.

1. The Four-Phase Improvement Cycle can best be described as a system for
 - a. planning effective lessons.
 - b. instructional problem solving.
 - c. prescribing standard treatments.
 - d. rating teacher effectiveness.
 - e. not familiar with terminology/material

2. Phase-One of the Improvement Cycle (information-collection), when applied to time, necessitates the collection of data on
 - a. teacher's plans.
 - b. students' behavior.
 - c. teacher's behavior.
 - d. students' scores.
 - e. not familiar with terminology/material

3. The percent of assigned students who are actively working in a subject area at a given time can be defined as
 - a. allocated time.
 - b. engagement rate.
 - c. student engaged time.
 - d. proportional assignment.
 - e. not familiar with terminology/material

4. The recommended number of scans to be made in one observation of a class of 25 students is about
 - a. 5
 - b. 15
 - c. 30
 - d. 50
 - e. not familiar with terminology/material

5. Research studies indicate that if teachers' engagement rates are average in both math and reading/language arts,
 - a. average allocated times are usually sufficient to achieve optimal student engaged time.
 - b. average allocated times are usually not sufficient to achieve optimal student engaged time.
 - c. allocated time need not be considered.
 - d. allocation of sufficient time to attain better than expected achievement in both reading/language arts and math in most cases is easily accomplished.
 - e. not familiar with terminology/material

6. One of the most important considerations in selecting an improvement strategy is
 - a. its logical relationship to the goal.
 - b. the ease with which it can be monitored.
 - c. the number of people needed to be involved.
 - d. the source of the research support for the strategy.
 - e. not familiar with terminology/material.

7. The assertion that time is important in influencing students' opportunity to learn and hence their achievement is
 - a. a matter of common sense and logic.
 - b. fairly well established by research.
 - c. contained in several theories of learning.
 - d. all of the above
 - e. not familiar with terminology/material.

8. The "Total Time" entry on the Allocated Time Log used to represent allocated time for a subject on a given day is the
 - a. average allocated time for the class as a whole.
 - b. maximum allocated time for any one student in the class.
 - c. actual allocated time for one particular student in the class.
 - d. none of the above
 - e. not familiar with terminology/material

9. Monitoring of a strategy should begin
 - a. one week after the teacher has initiated the strategy.
 - b. eight weeks after the teacher has initiated the strategy.
 - c. when the teacher believes that the strategy is in place.
 - d. after the second round of data collection on student engaged time.
 - e. not familiar with terminology/material

10. Phase-Four activities, implementation and recycling, are conducted
 - a. prior to implementation of the improvement strategy.
 - b. after student engaged time has shown some improvement.
 - c. after implementation and monitoring plans are developed.
 - d. after the second round of data collection on student engaged time.
 - e. not familiar with terminology/material

11. Allocated time in a subject is the amount of time
 - a. the teacher, school, or district schedules for the subject.
 - b. students spend actually working on (engaged in) that subject.
 - c. the teacher actually spends directing instruction in that subject.
 - d. the teacher actually provides for students to work in that subject.
 - e. not familiar with terminology/material

12. If a strategy has been in place for several months and there is no improvement in student engaged time, the teacher should probably
 - a. select and implement a new strategy.
 - b. review the implementation, with the idea of revising it.
 - c. request more frequent observations on student engaged time.
 - d. all of the above
 - e. not familiar with terminology/material

13. During what phase do teachers decide whether or not a change in student engaged time is advisable?
 - a. information collection
 - b. selection and preparation
 - c. implementation and recycling
 - d. comparison and identification
 - e. not familiar with terminology/material

14. The least controversial way to increase allocated time in basic skills, is to
 - a. assign homework as additional practice.
 - b. reduce scheduled time for art or music.
 - c. provide additional basic skills instruction in pullout programs.
 - d. none of the above
 - e. not familiar with terminology/material

15. If data from the teacher's monitoring of the plan indicate that all aspects of the strategy are not in place, the teacher should
 - a. redirect to select a new strategy.
 - b. develop a new monitoring plan for the strategy.
 - c. review the implementation, with the idea of making revisions.
 - d. all of the above
 - e. not familiar with terminology/material

16. Selection of strategies for a teacher
 - a. is always a group process.
 - b. may need to involve building or district leadership.
 - c. should not be done until data have been collected for four months.
 - d. all of the above
 - e. not familiar with terminology/material

17. A monitoring plan will include all of the following except
 - a. what information is to be collected and when.
 - b. how and by whom the information will be collected.
 - c. what the relationship of the strategy is to the goal.
 - d. what standards should be used to decide if the strategy is in place.
 - e. not familiar with terminology/material

18. Data on students involved in pullout programs
 - a. can be ignored if less than one-fifth of the class is involved.
 - b. may lead teachers to track individual students.
 - c. do not influence data on student engaged time.
 - d. can usually be disregarded.
 - e. not familiar with terminology/material

19. Most of the strategies from research suggested for improving engagement rates
 - a. require extensive teacher training in order to implement.
 - b. are likely to impact only one kind of unengaged behavior.
 - c. are compatible with common sense about classroom practices.
 - d. all of the above
 - e. not familiar with terminology/material

20. According to data from research studies, an increase in student engaged time is always associated with increases in achievement
 - a. in all grades for reading/language arts.
 - b. in all grades for math.
 - c. in both of the above.
 - d. none of the above
 - e. not familiar with terminology/material

21. Allocating more time to a subject will
 - a. increase student engaged time if the engagement rate is changed.
 - b. increase student engaged time if the engagement rate is maintained.
 - c. automatically increase student engaged time if more time is scheduled for the subject.
 - d. all of the above
 - e. not familiar with terminology/material

22. The second round of data collection gives some indication of if the
 - a. monitoring plan is working.
 - b. strategy is having the desired impact.
 - c. teacher's allocated time log is correct.
 - d. all of the above
 - e. not familiar with terminology/material

23. Data which suggest a strategy is in place come from the
 - a. monitoring plans.
 - b. implementation plans.
 - c. teacher's appraisal of the implementation experience.
 - d. second and later rounds of data collection on student engaged time.
 - e. not familiar with terminology/material

24. Teachers in self-contained classrooms can reasonably expect to establish goals for student engaged time
- for reading and math independent of each other.
 - without considering how other subjects are scheduled.
 - only by considering the entire schedule of all subjects.
 - only by considering the schedule of basic skills subjects.
 - not familiar with terminology/material
25. Research findings on classroom management indicate that engagement rate is enhanced by
- assuming all students know, and expecting them to adhere to, classroom rules.
 - providing feedback on a student's misbehavior to the class.
 - providing time, e.g., seatwork, when students' activities are not monitored by the teacher.
 - establishing and teaching classroom rules early in the school year.
 - not familiar with terminology/material
26. Factors taken into account in establishing goals for a specific class include all of the following except the
- achievement level of the class.
 - possibility that the goal is achievable.
 - strategy selected to improve student engaged time.
 - similarity of the class to classes in the research studies.
 - not familiar with terminology/material
27. If a teacher has achieved an optimal amount of student engaged time, and observations over a three month period indicate that it has been maintained, the teacher can reasonably
- cancel future scheduled observations.
 - maintain a once every 4-6 week observation.
 - continue to collect data only on allocated time.
 - continue to collect data only on engagement rate.
 - not familiar with terminology/material
28. Teachers keep a log of actual allocated time on each observation day
- because allocated time is an indicator of engagement rate.
 - because allocated time is needed to calculate student engaged time.
 - to monitor discrepancies between allocated time and engagement time.
 - all of the above
 - not familiar with terminology/material
29. Scanning the classroom and coding each student will take _____ per scan.
- | | |
|------------------|---|
| a. 1-10 seconds | d. 4-5 minutes |
| b. 30-60 seconds | e. not familiar with terminology/material |
| c. 2-3 minutes | |

199.

30. In Phase-Three, teachers select strategies for impacting engagement rate that may influence the teacher's
 - a. management of students.
 - b. instruction of students.
 - c. instruction or management of students.
 - d. none of the above
 - e. not familiar with terminology/material

31. In scheduling the length and frequency of observations, the overall rationale is to
 - a. let the teacher choose the optimum time.
 - b. obtain enough data to make reliable statements about the entire school year prior to sharing data with the teacher.
 - c. obtain a maximum of representative data in an amount of time that is practical for normal school conditions.
 - d. choose days that do not disrupt the normal flow of instruction.
 - e. not familiar with terminology/material

32. Prior to entering the classroom, the observer may find it helpful to have
 - a. an idea of the teacher's plans and objectives.
 - b. seen the teacher's completed allocated time log.
 - c. acquired a list of the students that will be observed.
 - d. reviewed previous engagement rate forms for the class.
 - e. not familiar with terminology/material

33. Strategies for achieving student engaged time goals
 - a. may interact with the context to give unwanted changes.
 - b. include highly specified directions for implementation.
 - c. are designed to work for teachers regardless of context.
 - d. will be similar for teachers working at the same grade level.
 - e. not familiar with terminology/material

34. Immediately after a goal for student engaged time is established
 - a. corresponding goals for engagement rate and allocated time are set.
 - b. a strategy for increasing or decreasing allocated time is selected.
 - c. a strategy for increasing or decreasing engagement rate is selected.
 - d. ways and means of attaining the goal are accomplished through brainstorming.
 - e. not familiar with terminology/material

REFER TO THE ILLUSTRATIONS ON PAGE 8 TO ANSWER ITEMS 35-38.

35. On the Engagement Rate Form, the tally marks entered in each column represent students observed
- a. engaged in one scan.
 - b. unengaged in one scan.
 - c. engaged within a 3 minute period.
 - d. unengaged within a 3 minute period.
 - e. not familiar with terminology/material
36. The principal's time for observations is limited. After reviewing the Summary Sheets, which are from average achieving classes of two third grade teachers, and the Student Engaged Time Graph for third grade reading/language arts, which strategy seems reasonable for the principal to adopt?
- a. Observe Carlson only; eliminate Thompson from the observation schedule.
 - b. Observe Carlson and Thompson equally.
 - c. Observe Carlson more often than Thompson.
 - d. Observe Thompson more often than Carlson.
 - e. not familiar with terminology/material.
37. The Reading and Language Graph indicates that optimal student engaged time for grade 3 reading/language arts achievement is probably in the range of
- a. 50-85 minutes.
 - b. 85-110 minutes.
 - c. 110-165 minutes.
 - d. 165-200 minutes.
 - e. not familiar with terminology/material
38. Third grade students with an average student engaged time in reading/language arts between 85 and 110 minutes are likely to score
- a. as expected based on past achievement.
 - b. below expectations based on past achievement.
 - c. above expectations based on past achievement.
 - d. far below expectations based on past achievement.
 - e. not familiar with terminology/material

State _____
 District _____
 School _____
 Teacher Thompson

COMPLETED SUMMARY SHEET FOR TIME

State # _____ School # _____
 District _____ Teacher _____ Year _____

Date	Code #	Part of Period	Engagement Rate	Allocated Time	Student Engaged Time	Average Student Engaged Time
9/26	007	Beg.	63	120	76	76
9/27	007	M	62	125	77	76
9/30	007	End	65	110	72	75
10/30	007	End	77	125	90	79
10/30	007	Beg.	75	130	98	81
11/2	007	Beg.	80	125	100	86
11/30	007	M	82	130	107	88

State _____
 District _____
 School _____
 Teacher Carlson

COMPLETED SUMMARY SHEET FOR TIME

State # _____ School # _____
 District _____ Teacher _____ Year _____

Date	Code #	Part of Period	Engagement Rate	Allocated Time	Student Engaged Time	Average Student Engaged Time
9/27	007	End	63	120	76	76
9/30	007	Beg.	62	120	74	75
10/1	007	M	65	110	72	74
10/21	007	M	75	125	94	79
10/31	007	End	60	120	72	78
11/11	007	Beg.	76	115	87	79
11/29	007	End	58	120	70	78

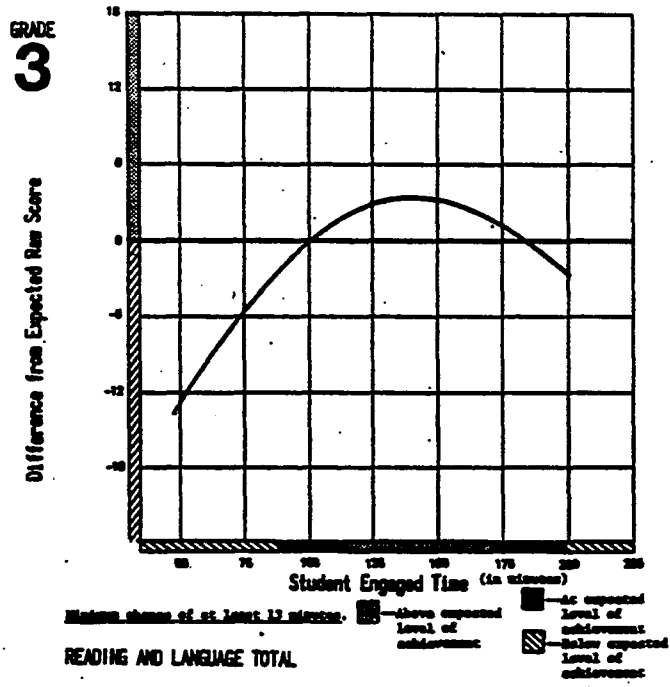
ENGAGEMENT RATE FORM

STATE IA DISTRICT 10 SCHOOL 1000 TEACHER Thompson CODE # _____
 STATE # _____ SCHOOL # _____ DISTRICT # _____ TEACHER # _____ CODE # _____

GRADE 2 PART OF CLASS OBSERVED 100%

TIME	1	2	3	4	5	6	7	8	9	TOTAL
9:20	9:23	9:26	9:29	9:32	9:35	9:38	9:41	9:44	9:47	
ANGAGED	25	25	25	25	23	23	23	23	23	215
TRANSITION/	1		0				1	1	1	15
SOCIALIZING	0	0					0	0	0	0
DISCIPLINE			0	0						0
UNOCCUPIED/OBSERVING	0	0	1		0	0		0	0	22
OUT OF ROOM		0					0	1		5
TOTAL UNENGAGED	6	6	10	3	3	4	13	6	7	63
ENGAGED	19	19	15	22	15	19	10	17	16	152
OTHER ANGED										
PULL OUT ANGED					2	2	2	2	2	
NO. OF STUDENTS PRESENT										

GRADE
3



ACCORDING TO THE IMPROVEMENT CYCLE, HOW SHOULD EACH OF THE STUDENT BEHAVIORS BE CODED IN THE SCENARIOS (39 & 40) BELOW?

39. Situation: Student assigned to reading/language arts
Teacher: Listening to member of small reading group read aloud
Student being observed: Waiting at desk, hand raised to have workbook checked
- a. Engaged
 - b. Inquiring
 - c. Management/transition
 - d. Unoccupied/observing
 - e. not familiar with terminology/material

40. Situation: Student assigned to reading/language arts
Teacher: Discussing story with reading group
Student being observed: Giving answer to the teacher's question about the story
- a. Engaged
 - b. Inquiring
 - c. Management/transition
 - d. Allocated
 - e. not familiar with terminology/material

BACKGROUND INFORMATION

41. My most advanced degree is
- a. B.A./B.S.
 - b. B.A./B.S. plus 15 semester hours
 - c. B.A./B.S. plus 30 semester hours
 - d. M.A./M.S.
 - e. Ph.D./Ed.D.
42. My present position is
- a. Teacher
 - b. Administrator
 - c. Teacher and Administrator
 - d. Other
43. Years of teaching experience
- a. 1-4
 - b. 5-8
 - c. 9-15
 - d. 16-25
 - e. over 25
44. Years in educational administration
- a. none
 - b. 1-4
 - c. 5-10
 - d. 11-20
 - e. over 20

PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

Pages 203-224 (Suggestive-Accelerative Learning and Teaching,

SALT, Training Assessment)

Concepts Test

M.A.P.E.

General Purpose, NCS, Answer Sheet

Pages 226-227 (Workshop on Suggestive-Accelerative Learning
and Teaching, SALT)

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**APPENDIX E: MISCELLANEOUS INFORMATION RELATIVE TO
INVESTIGATION**

THE MULTIDIMENSIONAL ASSESSMENT OF PHILOSOPHY OF EDUCATION
(MAPE)

OVERVIEW:

MAPE measures your value system as it pertains to the field of education. It specifically examines six areas:

1. Classroom Climate
2. Individual Differences
3. Learning Emphasis
4. Procedures and Planning
5. Teaching Style
6. Theoretical Base

The instrument utilizes a "forced-choice" format. This means that the choices you are given, within any one set of items, are of equal preference values, and therefore often difficult to select. In fact, it is not uncommon for subjects to express frustration while taking the assessment. You may conceivably contend that you "don't agree with any of the items" in a low preference quadrant. This is normal and not to be regarded as a short-coming of either the instrument or yourself. It may be helpful to remind yourself that the selections "agree with most" and "agree with least" call for comparative judgments NOT absolute ones.

An earnest effort on your part will be most rewarding. You will personally receive both a graphic profile and a comprehensive, highly-individualized, computer-generated narrative describing your philosophy as measured.

INSTRUCTIONS:

1. Record your birth date, sex, and SIM Identification Number in the spaces provided on the left-hand side of the accompanying answer sheet by blackening the appropriate circles in each column with a #2 pencil.
2. DO NOT WRITE IN THE TEST BOOKLETS!
3. Mark a response for each question.
4. Work quickly (don't engage in soul-searching).
5. Return test and answer sheet in sealed envelope to Jane Sjotvedt in Fred Sheridan's office, 807 N.E. Broadway, no later than November 22, 1982.
6. Make sure the secretary has checked your name off.

Thank you for your cooperation.

Nancy Kinn Schycker
Intervention Assessment Coordinator
School Improvement Model



Dick Manatt
Director

Shirley Stow
Co-Director

Libby Bilyeu
Program Assistant

November 3, 1982

Dr. Ray Smyth
Edina Public Schools
5555 W. 70th
Edina, Minnesota 55435

Dear Ray:

Enclosed you will find the letter we discussed to explain to each SIM teacher the use of MAPE. In the event that you are administering the MAPE, simply give the teacher this letter as well as the MAPE packet. If our people are conducting the pre-testing for you, they will have an adequate supply. I hope this makes the process more palatable--we really aren't intending to give teachers a bad time, only to make SIM a complete research design. Thanks for your help.

Very truly yours,

Richard P. Manatt

Richard P. Manatt

9w

RPM:jw
Enclosure



Dick Manatt
Director

Shirley Stow
Co-Director

November 3, 1982

Libby Bilyeu
Program Assistant

Dr. Fred Sheridan
Minneapolis Public Schools
807 N.E. Broadway
Minneapolis, Minnesota 55413

Dear Fred:

Enclosed you will find the letter we discussed to explain to each SIM teacher the use of MAPE. In the event that you are administering the MAPE, simply give the teacher the letter as well as the MAPE packet. If our people are conducting the pre-testing for you, they will have an adequate supply. I hope this makes the process more palatable--we really aren't intending to give teachers a bad time, only to make SIM a complete research design. Thanks for your help.

Very truly yours,

Richard P. Manatt
9w

Richard P. Manatt

RPM:jw
Enclosure



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School Improvement Model (a Northwest Area Foundation Project)

College of Education | Iowa State University | E005 Quad | Ames, Iowa 50011 | Telephone 515-294-5521 or 294-5529

Dick Manatt
Director

Shirley Stow
Co-Director

November 3, 1982

Libby Bilyeu
Program Assistant

Dr. Neal Nickerson
Breck School
123 Ottawa Avenue
Minneapolis, Minnesota 55422

Dear Neal:

Enclosed you will find the letter we discussed to explain to each SIM teacher the use of MAPE. In the event that you are administering the MAPE, simply give the teacher this letter as well as the MAPE packet. If our people are conducting the pre-testing for you, they will have an adequate supply. I hope this makes the process more palatable--we really aren't intending to give teachers a bad time, only to make SIM a complete research design. Thanks for your help.

Very truly yours,

Richard P. Manatt

Richard P. Manatt

JW

RPM:jw
Enclosure

P.S. Here is a copy of the Rauhauser study that you approved.



Dick Manatt
Director

Shirley Stow
Co-Director

November 3, 1982

Libby Bilyeu
Program Assistant

Dear School Improvement Model Participant:

As you know, SIM ultimately must answer the question "What are the characteristics of teachers who are effective in obtaining high student achievement gains?" We have a number of measures and identifying variables such as how you taught before this year's staff development activities, how well you learned the interventions (e.g., TESA, Elements of Effective Instruction, etc.) your age, sex, and formal education. Each of these will be associated with how well your students learn.

Further, it seems reasonable to expect that a teacher's philosophy of education may influence how students learn. For this reason we are asking each fourth and eighth grade teacher to take the MAPE (Multidimensional Assessment of Philosophy of Education) to provide data to complete our research equation. If you are taking the training with fourth and eighth grade teachers, we would be pleased to give you the same service.

Completing the MAPE provides you with the opportunity to systematically explore some of the values and attitudes toward education that you bring to your classroom. Only when the teachers are aware of themselves will it be possible to create an atmosphere that encourages learning. Based on the assumption that the teacher is the dominant influence in the classroom, teacher self-awareness becomes a potent force in facilitating a quality climate. Incongruence between one's behavior and philosophic beliefs often results in frustration and less effective teaching.

We recognize that in school improvement efforts, ways must be designed for dealing with the attitudes, values, and beliefs that teachers bring to the decision making arena. The administration of the Multidimensional Assessment of Philosophy of Education (MAPE) is intended to be a step in helping teachers cultivate this awareness and to establish subsequent dialogue. It is definitely not an evaluative instrument. The MAPE specifically examines

six areas:

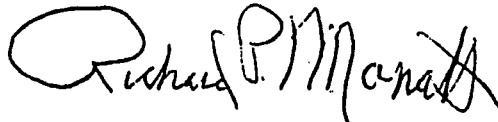
1. Classroom Climate
2. Individual Differences
3. Learning Emphasis
4. Procedures and Planning
5. Teaching Style
6. Theoretical Base

Upon completion and analysis of your MAPE, you will personally receive both a graphic profile and a comprehensive, highly-individualized, computer-generated, narrative describing your philosophy as surveyed. This report will be returned directly to you. No one in your school organization will read the report or see the results. Our researchers, working only with blind I.D. numbers, will combine MAPE information with your students' results.

Of course, taking the MAPE is voluntary. We hope you will, however, because it will strengthen the contribution SIM will make to instructional improvement throughout the United States. The side benefit to you is a truly fascinating set of personal insights.

Thanks for your help.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Richard P. Manatt". The signature is fluid and cursive, with a large initial "R" and "M".

Richard P. Manatt
Co-Director

MULTIDIMENSIONAL ASSESSMENT OF PHILOSOPHY OF EDUCATION (MAPLE). NEWS USED ARE--IOWA GENERAL TEACHERS
 BY WILSON H. JOHNSON, JOHN F. LITCHEL, WILLIAM G. HEDGES, AND JOHN T. WILSON

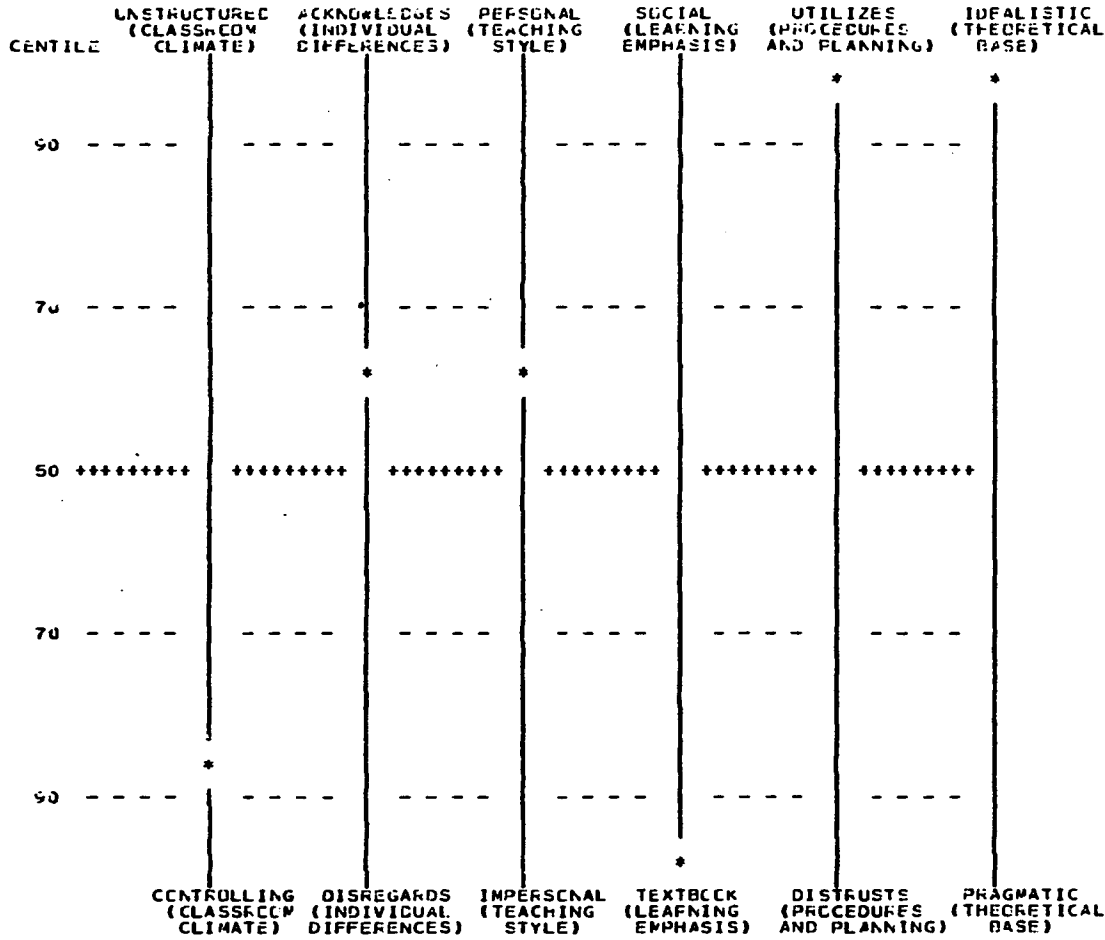
SUBJECT = 4J

VALIDITY IS GOOD

DATE RUN = 01/18/83

THE SUBSCALE LABELS AT THE TOP OF THE PROFILE
 INDICATE TEACHING CHARACTERISTICS ARE IN THE--

SITUATION-BASED DIRECTION (SCALES 1 TO 4)
 UNCITICAL ACCEPTING (SCALES 5 - 6)



CONTROLLING (CLASSROOM CLIMATE) DISREGARDS (INDIVIDUAL DIFFERENCES) IMPERSONAL (TEACHING STYLE) TEXTBOOK (LEARNING EMPHASIS) DISTRUSTS (PROCEDURES AND PLANNING) PRAGMATIC (THEORETICAL BASE)

THE SUBSCALE LABELS AT THE BOTTOM OF PROFILE
 INDICATE TEACHING CHARACTERISTICS ARE IN THE--

RULE-BASED DIRECTION (SCALES 1 TO 4)
 CRITICAL REJECTING (SCALES 5 - 6)

THESE ARE THE T-SCORES THAT CORRESPOND TO THE CENTILE
 SCORES PLOTTED ABOVE AS ASTERISKS--

39.59 52.66 53.45 32.18 73.35 71.51

NAME NCT SPECIFIED
 IDENTIFICATION 43
 DATE RUN 01/18/83
 VALIDITY IS GCCC

MULTIDIMENSIONAL ASSESSMENT OF PHILOSOPHY OF EDUCATION
 WILSON H. GUEFFIN, JOHN H. LITCHER,
 WILLIAM D. HEDGES, AND JOHN T. WILSON
 FROM AN COPYRIGHTED 1973 AND 1975 BY AUTHORS
 IOWA GENERAL TEACHERS NCRMS WERE USED

-- NARRATIVE

YOUR RESPONSES HAVE BEEN SCORED BY THE COMPUTER FOR THE SIX SCALES OF THE MAPE. THE STANDARD SCORE VALUES (T-SCORES) SHOULD BE USED IN STATISTICAL ANALYSES OF GROUP DATA BUT CENTILES (PERCENTILES) ARE USED FOR PLOTTING YOUR PROFILE. YOU WILL GET A CLEARER PICTURE OF THE PROFILE IF YOU CONNECT UP THE ADJACENT ASTERISKS WITH STRAIGHT LINES.

NOTE THAT THE NATURE OF THE NCRM GROUP USED IN CALCULATING THESE SCORES IS GIVEN ABOVE. IF YOU ARE NCT A TEACHER THEN COMPARISON WITH A GROUP OF PRACTICING TEACHERS, WHILE USEFUL, WOULD NOT BE WHOLLY APPROPRIATE. ALSO KEEP IN MIND THAT MUCH OF YOUR RESPONDING WAS TO CLASSROOM SITUATIONS YOU HAD TO IMAGINE RATHER THAN EXPERIENCE. COMPARISON WITH THE NORM GROUP MAY BE EVEN HARDER TO INTERPRET IF YOU ARE A MALE. IF THE NCRM GROUP IS COMPOSED ALMOST ENTIRELY OF WOMEN, AS ANY GENERAL TEACHER GROUP WOULD BE, YOUR LARGE PERCENTILE SCORES MAY SIMPLY REFLECT HOW MEN DIFFER FROM WOMEN TEACHERS. ALSO KEEP YOUR TEACHING AREA IN MIND WHILE YOU ARE COMPARING YOURSELF WITH THE TEACHERS IN THE NCRM GROUP. FOR EXAMPLE, WE KNOW THAT AS A GROUP ELEMENTARY SCHOOL TEACHERS ARE MORE PERSONAL IN THEIR TEACHING THAN SECONDARY MATHEMATICS TEACHERS.

YOUR RESPONSE PATTERN HAS BEEN INSPECTED BY THE COMPUTER TO BE SURE THAT YOU RESPONDED IN ACCORDANCE WITH THE INSTRUCTIONS. YOUR RECORD WAS SUFFICIENTLY FREE OF THE FOLLOWING FIVE FAULTS TO BE USABLE--- 1) OMISSIONS, 2) IMPOSSIBLE CHOICE NUMBERS, 3) IDENTICAL MOST-LEAST CHOICES, 4) SPATIAL PATTERNS, 5) INCONSISTENT RESPONDING. THE VALIDITY INDEX INDICATES THAT YOUR CONSISTENCY IN RESPONDING TO DUPLICATED QUESTIONS WAS GOOD. 98 PERCENT OF THE NCRM GROUP WERE LESS CONSISTENT THAN YOU WERE.

NARRATIVE DESCRIPTIONS AT THE APPROPRIATE LEVEL ON EACH OF THE SIX SCALES ARE PRINTED OUT BELOW. THIS IS A HIGHLY INDIVIDUALIZED REPORT. THE PROBABILITY OF TWO PEOPLE HAVING IDENTICAL NARRATIVES IS LESS THAN ONE CHANCE IN A HUNDRED THOUSAND. EACH SCALE DESCRIBES YOUR CHARACTERISTICS, WHAT YOU THINK AND WHAT YOU BELIEVE, ACCORDING TO THE PREFERENCES YOU INDICATED BY YOUR RESPONSES.

THE ASSERTIONS OF BELIEF OF PHILOSOPHY THAT FOLLOW ARE THE ONES YOU WOULD MAKE OR AFFIRM IN VIEW OF YOUR SCORES. THE DESCRIPTIONS OF HOW YOU TEACH APPLY DIRECTLY TO YOU IF YOU ARE A TEACHER. IN AN ACTUAL TEACHING SITUATION THERE ARE MANY PRACTICAL CONSIDERATIONS THAT COULD PREVENT YOU FROM CARRYING YOUR EXPRESSED IDEALS INTO PRACTICE SUCH AS TIME AVAILABLE FOR WORK, OUTSIDE INTERESTS AND RESPONSIBILITIES, LOCAL AND ADMINISTRATIVE ATTITUDES, AND SUBJECT MATTER CONSTRAINTS. THUS, YOUR EXTREME SCORES REPRESENT YOUR PHILOSOPHICAL POSITION AND ACTUAL BEHAVIOR ATTRIBUTED TO YOU MAY BE OVERSTATED. IF YOU ARE A STUDENT, VIEW THE DESCRIPTIONS OF YOUR TEACHING PRACTICES AS FRESPECTIVE.

THIS NARRATIVE IS ORGANIZED ACCORDING TO A CONCEPTUAL SCHEME. THE SIX SCALES ARE GROUPED AND LISTED ACCORDING TO THIS CONCEPTUALIZATION. EACH OF THE SCALE SCORES CAN BE THOUGHT OF AS ILLUSTRATING A SEPARATE FACET OF YOUR PHILOSOPHY OF EDUCATION. HOWEVER, SINCE THE SCORES ON THE FIRST FOUR SCALES TEND TO BE CORRELATED, IT WILL BE MEANINGFUL TO LOOK FIRST AT YOUR GENERAL ORIENTATION. IF YOUR FIRST FOUR CENTILE SCORES (ASTERISKS PLOTTED ON THE PROFILE) ARE PREDOMINANTLY BELOW THE 50TH CENTILE LINE ON YOUR PROFILE, YOUR GENERAL ORIENTATION IS RULE-BASED. A PREDOMINANCE OF SCORES ABOVE THE 50TH CENTILE LINE INDICATES A SITUATION-BASED GENERAL ORIENTATION. THE MORE OF YOUR FOUR SCORES THAT ARE EXTREME IN ONE DIRECTION, THE STRONGER YOUR ADHERENCE TO THAT ORIENTATION. CONSERVATIVE, CONVENTIONAL PEOPLE WILL SCORE IN THE RULE-BASED DIRECTION. THEY TEND TO RESPOND CONSISTENTLY ACCORDING TO PRE-ESTABLISHED BASES, THAT IS, THEY EMPLOY RULES. LIBERAL, UNCONVENTIONAL PEOPLE WILL SCORE IN THE SITUATION-BASED DIRECTION. THIS MEANS THAT THEY RESPOND FLEXIBLY DEPENDING UPON THE CIRCUMSTANCES (INDIVIDUAL, SURROUNDINGS, PARTICULAR TIME, ETC.).

THE SCORES ON THE FIFTH AND SIXTH SCALES PROVIDE AN INDICATION OF YOUR GENERAL ORIENTATION WITH RESPECT TO BEING CRITICAL AND REJECTING, ON THE ONE HAND, WITH BEING

REPORT --

UNCRITICAL AND ACCEPTING ON THE OTHER. THIS CRITICALNESS ORIENTATION IS UNRELATED TO THE SITUATION VS. RULE ORIENTATION. THIS CRITICALNESS DIMENSION SHOWS THE DEGREE TO WHICH YOU ACCEPT AS USEFUL THE IDEAS AND EFFORTS OF OTHERS IN THE EDUCATIONAL ENTERPRISE.

NOW GO AHEAD AND READ THE DETAILED DESCRIPTION OF YOUR YOUR ATTITUDES, PRACTICES, AND BELIEFS.

CLASSROOM CLIMATE
 YOUR SCORE ON THIS SCALE IS MORE EXTREME THAN THAT OBTAINED BY (26) PERCENT OF THE TEACHERS IN THE NCRM GROUP. THIS MEANS THAT YOU TEND TO BE CONTROLLING AND STRICT IN MANAGING THE CLASSROOM. YOUR VIEWS ON DISCIPLINE ARE CONSERVATIVE. INSTEAD OF TAKING INTO CONSIDERATION ALL OF THE PREVAILING CIRCUMSTANCES AND RESPONDING FLEXIBLY, YOU ENFORCE THE RULES AS DEMANDED BY YOUR COMMITMENT TO A RULE-BASED ORIENTATION.

YOU ARE DEDICATED TO PROMOTING A LAWFULLY REGULATED SOCIETY IN SCHOOL, IN THE STREETS, IN THE HOME, OF IN GOVERNMENT. YOU HOLD HIGH STANDARDS OF CONDUCT FOR ALL PEOPLE, BUT ESPECIALLY FOR YOURSELF. OF COURSE, OTHERS DISAPPOINT YOU MUCH OF THE TIME. WHEN YOU FAIL TO MEET THESE STANDARDS YOU ARE NO LESS DISAPPOINTED AND FEEL GUILTY. YOU SOMETIMES MAKE UNWISE CHOICES BUT YOU SELDOM DO SOMETHING WRONG INTENTIONALLY. WHEN PEOPLE MANUEVER YOU INTO A POSITION THAT COMPROMISES YOUR STANDARDS YOU BECOME ANNOYED. YOU ARE ANGRY AT THEM FOR VICTIMIZING YOU BUT EVEN ANGRIER AT YOURSELF FOR LETTING THEM.

Above all you try to be just. You tend to regard certain standards as nearly absolute and universal. When rules are violated the offender should expect to be punished. You are on the side of law and order. Exempting people from suffering the natural consequences of their misdeeds usually is a mistake. Belief in God and the practice of your religion may provide you with an integrated code for living. This strict view of social interaction dominates many of your activities. You have good reasons for everything you do. People respect you even though they cannot always agree with your position.

YOU TRY TO SET A GOOD EXAMPLE FOR OTHERS AND FEEL THAT EVERYONE ELSE HAS THIS SAME RESPONSIBILITY. YOU CAN'T HELP BUT NOTICE THAT MANY FAIL TO MEET THEIR RESPONSIBILITIES. IF YOU COMMENT ON THEIR SHORTCOMINGS PEOPLE MISUNDERSTAND AND SEE YOU AS DIFFICULT TO GET ALONG WITH. IT IS YOUR FATE TO TAKE YOUR RESPONSIBILITIES SERIOUSLY AND END UP LOSING SQUARE. THIS MAKES YOU FEEL SOMEWHAT ISOLATED AND UNAPPRECIATED. YOU SOMETIMES FEEL LIKE GIVING UP BUT YOU HAVE THE PATIENCE AND ENDURANCE TO CONTINUE DOING WHAT YOU KNOW IS RIGHT.

YOU INSIST UPON A QUIET AND ORDERLY CLASSROOM. ONE CONCLUSIVE TO STUDY. TEACHERS ARE ENTITLED TO RESPECT. WHEN PUPILS FAIL TO SET A GOOD EXAMPLE, THEY SHOULD BE PUNISHED BOTH FOR THEIR OWN SAKES AND TO KEEP THEM FROM MISLEADING OTHERS.

YOU WILL DO WHATEVER IS REQUIRED TO MEET YOUR RESPONSIBILITY IN DISCIPLINING YOUR STUDENTS. YOU TRY TO SPOT TROUBLEMAKERS AND WISH IT WERE EASIER TO HAVE THEM EXPELLED. CHRONIC TROUBLEMAKERS DO NOT BELONG IN REGULAR CLASSROOMS.

YOUR PUPILS BENEFIT GREATLY FROM THEIR CONTACT WITH YOU BECAUSE YOU PROVIDE A GOOD MODEL OF SOCIAL JUSTICE. SOME DO NOT REALIZE THIS BECAUSE THEY ARE TOO BUSY COMPLAINING ABOUT YOUR STRICTNESS. IT IS DISAPPOINTING THAT YOUR CONTRIBUTION REMAINS UNRECOGNIZED BY THOSE PUPILS WHO HAVE THE MOST TO GAIN.

INDIVIDUAL DIFFERENCES
 YOUR SCORE ON THIS SCALE IS MORE EXTREME THAN THAT OBTAINED BY (62) PERCENT OF THE TEACHERS IN THE NCRM GROUP. THIS MEANS THAT YOU ARE WELL AWARE OF THE NEED TO TAKE INDIVIDUAL DIFFERENCES INTO ACCOUNT IN DEALING WITH PEOPLE, ALTHOUGH YOU CAN ONLY GO SO FAR IN MAKING ALLOWANCES FOR

THEM. THUS, YOU ARE MORE LIBERAL THAN CONSERVATIVE IN THIS AREA. YOU ACCEPT PEOPLE'S LIMITATIONS BUT AT THE SAME TIME TRY TO HOLD TO SOME MINIMUM STANDARDS. THIS TAKING THE INDIVIDUAL INTO ACCOUNT AND FLEXIBILITY IN APPLYING STANDARDS PLACES YOU CLOSER TO THE SITUATION-BASED THAN TO THE RULE-BASED ORIENTATION. YOU PERCEIVE SOCIETY AS AN ORGANIZATION OF PEOPLE HELD TOGETHER BY COMMON EXPECTATIONS OF ONE ANOTHER. PEOPLE SHOULD BE HELD TO MEET THESE BASIC EXPECTANCIES REGARDLESS OF BACKGROUND. AT THE SAME TIME YOU RECOGNIZE THAT INADEQUATE EARLY SOCIALIZATION EXPERIENCES AND UNDERSTIMULATION WILL PREVENT SOME PEOPLE FROM BEING FULLY ADEQUATE. SOCIETY MUST WORK TOWARD HELPING THESE PEOPLE ACCEPT RESPONSIBILITY FOR THEIR OWN FUTURE. BUT A SOUND SOCIETY SHOULD PROVIDE FOR ITS WEAKER MEMBERS BY SUPPLYING AT LEAST A MARGINAL SUPPORT OF LIFE. AN AFFLUENT SOCIETY SHOULD BE ABLE TO PROVIDE ENOUGH SUPPORT TO MAKE ALL LIVES HAPPY ONES. EVERYBODY NEEDS TO EXPERIENCE AT LEAST SOME SUCCESS. WITH ASSISTANCE MOST PEOPLE CAN LEARN TO SUCCEED IN RECOGNIZING WHAT THEIR STRENGTHS ARE SO THEY CAN BUILD ON THEM.

YOU TRY TO AVOID JUDGING OTHERS BUT WE MUST DO SO IN ORDER TO APPORTION SOCIETY'S REWARDS ON THE BASIS OF MERIT. YOU FAVOR OPENING THE UNIVERSITY DOORS TO EVERYONE WHO CAN GET ALONG THERE.

YOU ARE FRIENDLY AND READY TO MEET OTHERS AT LEAST HALF WAY. YOU HAVE SOME PREFERENCES BUT ARE NOT FUSSY IN CHOOSING FRIENDS. IN FACT YOU HAVE A RATHER WIDE VARIETY OF PEOPLE AS FRIENDS BECAUSE OTHERS FIND YOU ARE A FLEXIBLE, UNDERSTANDING PERSON. YOU ARE INFLUENTIAL AND POPULAR WITH YOUR COLLEAGUES.

YOU BELIEVE YOU MUST USE RATHER UNIFORM STANDARDS FOR EVALUATING STUDENTS BECAUSE OTHERWISE THEY WOULD TEND TO TAKE ADVANTAGE OF YOU AND TEND TO STUDY LESS. ALSO, IT WOULD BE UNFAIR TO DEPRIVE BETTER PUPILS OF THEIR EGO REWARDS BY ABANDONING THE EVALUATION PROCESS. TO SOFTEN THE IMPACT OF LOW STANDARDIZED TEST SCORES YOU HELP YOUR PUPILS SET SUBGOALS THAT ARE REALISTIC. IN THIS WAY STUDENTS ARE PROTECTED FROM FAILURE AND ABLE TO MAINTAIN SELF-RESPECT AND INDEPENDENCE. LESS CAPABLE PUPILS SHOULD BE GIVEN ADEQUATE ATTENTION AND ENCOURAGEMENT SO THEY CAN SUCCEED ALSO. BUT TOO FEW SCHOOLS SUPPLY THE RESOURCES TO PERMIT INDIVIDUALIZED INSTRUCTION IN THE REGULAR CLASSROOM. YOU ARE ALL FOR INDIVIDUALIZED INSTRUCTION BUT FIND IT DIFFICULT TO IMPLEMENT. MORE PUPILS WILL FIND SUCCESS IN SCHOOL WHEN ALL THOSE CONCERNED GET TOGETHER AND SUPPLY THE RESOURCES.

YOUR SCORE ON THIS SCALE IS MORE EXTREME THAN THAT OBTAINED BY (62) PERCENT OF THE TEACHERS IN THE NCRW GROUP. THIS MEANS THAT YOU ARE LIBERAL IN THAT YOU VIEW THE PROCESS OF EDUCATION AS BASED UPON PERSONAL INTERACTION YET YOU ACKNOWLEDGE THAT AN IMPORTANT BASIC GOAL OF EDUCATION IS TO CONVEY CONTENT, A CONSERVATIVE VIEW. YOU LET YOURSELF ENTER INTO CLASSROOM TEACHING SUFFICIENTLY TO MAKE IT A DYNAMIC PROCESS BUT NOT TO THE EXTENT OF FAILING TO COVER THE COURSE MATERIAL. THIS VIEW OF EDUCATION AS AN INTERACTIVE LEARNING OF CONTENT PLACES YOU CLOSER TO THE SITUATION-BASED THAN TO THE RULE-BASED ORIENTATION.

YOU ARE A PERSON FIRST AND A TEACHER SECOND. YOU HAVE YOUR NEEDS AND INTERESTS AND YOU ENJOY DOING THINGS WITH OTHERS. TEACHING IS DOING THINGS WITH OTHERS. YOU DO NOT OVEREMPHASIZE THE INTELLECTUAL AT THE EXPENSE OF YOUR INTERPERSONAL RELATIONS. THIS BALANCE MAKES YOU CAPABLE OF MEETING BOTH YOUR SOCIAL AND ACADEMIC NEEDS. YOU VALUE INFORMATION BUT DO NOT WASTE YOUR TIME LOCKING FOR ETERNAL TRUTHS. YOU RESPECT COMPETENCE WHETHER IT IS SOCIAL OR ACADEMIC.

YOU HAVE SUFFICIENT SELF-CONFIDENCE TO BE A PERSON IN YOUR CLASSROOM. THUS, WHILE YOU DO NOT INTERACT WITH PUPILS AS FREELY AS WITH FRIENDS, YOU ARE NOT AFRAID TO HAVE THEM COME TO KNOW YOU. YOU FEEL THAT A TEACHER SHOULD SHOW A LITTLE RESERVE. YOUR PUPILS LIKE YOU AND YOU LIKE THEM. SOME PUPILS LIKE YOU BETTER THAN THE OTHERS DO AND YOU CAN'T HELP HAVING YOUR OWN PREFERENCES TOO. YOU BELIEVE THAT PUPIL-TEACHER INTERACTION SHOULD BE PROMOTED. THIS INTERACTION COMES ABOUT THROUGH A REAL INTEREST IN ONE ANOTHER AND REQUIRES MUTUAL UNDERSTANDING. THE TEACHER SHOULD MAKE AN EFFORT TO KNOW THE PUPILS SO THEY CAN WORK WELL TOGETHER TO MEET THEIR LEARNING OBJECTIVES. YOU CANNOT

BE A GOOD TEACHER IF YOU IGNORE THE INSTRUCTIONAL PROCESS AND SIMPLY DISPENSE FACTS LIKE A FARMER BROADCASTS SEEDS. THE TEACHER ALSO NEEDS VARIETY IN THE CLASSROOM TO KEEP FROM GETTING BORED. WHAT IS GOOD FOR THE PUPILS IS GOOD FOR THE TEACHER.

LEARNING IS A SLOW, DIFFICULT PROCESS, ESPECIALLY FOR SOME. IT IS DIFFICULT TO KEEP THE CLASS INTERESTING AND THE PUPILS MOTIVATED. YOU TRY TO KEEP YOUR CLASSROOM INTERESTING BY INTRODUCING A VARIETY OF CONTENT AND BY INTERACTING WITH THE PUPILS. YOU ARE NEVER SATISFIED AND WISH YOU WERE MORE CREATIVE SO YOU COULD MAINTAIN A HIGH LEVEL OF INTEREST ALL THE TIME. YOU ARE NOT READY TO GO AS FAR AS THOSE TEACHERS WHO ALMOST COMPLETELY IGNORE CONTENT SO THE PUPILS WON'T BE BORED. BUT, YOU WILL TRY MOST ANY AIDIC-VISUAL OR CURRICULUM APPROACH. YOU ARE READY TO ACCEPT HELP FROM ANY QUARTER.

YOU TRY TO BE REALISTIC IN PREPARING YOUR PUPILS TO MEET THE OUTSIDE WORLD BY MAINTAINING MINIMUM STANDARDS FOR ALL AND SETTING HIGHER STANDARDS FOR THE MORE CAPABLE. YOU FEAR THAT THE LONGER YOU TEACH THE MORE YOU WILL DEPEND UPON THE ROLE OF BEING THE TEACHER BECAUSE IT IS LESS OF A STRAIN THAN MAINTAINING A HIGH LEVEL OF INVOLVEMENT WITH THE PUPILS. SIMILARLY, YOU FEAR THAT YOU WILL GRADUALLY ATTRIBUTE MORE OF THE RESPONSIBILITY FOR LEARNING TO THE PUPIL RATHER THAN TO YOURSELF. THESE VIEWS MAY BE JUSTIFIED BUT IT IS NOT CONSTRUCTIVE TO BLAME ONLY THE PUPIL FOR HIS FAILURE TO LEARN. TEACHERS CAN MEET THE NEEDS OF PUPILS WHO ARE FAILING ACADEMICALLY IF THE SCHOOL GIVES THE NEEDED SUPPORT. ADDITIONAL TEACHERS, SMALLER CLASSROOMS, AND BETTER DIAGNOSES CAN MAKE A DIFFERENCE. IN THE MEANTIME, THE FRUSTRATION OF THE FAILING PUPIL MUST BE SHARED BY THE REGULAR CLASSROOM TEACHER.

LEARNING EMPHASIS

YOUR SCORE ON THIS SCALE IS MORE EXTREME THAN THAT OBTAINED BY (58) PERCENT OF THE TEACHERS IN THE NCRW GROUP. THIS MEANS THAT YOU DEPEND ALMOST ENTIRELY UPON TEXTBOOK INFORMATION. THIS IS IN ACCORD WITH YOUR VERY CONSERVATIVE, TRADITIONAL VIEW OF EDUCATION. TO YOU EDUCATION IS SIMPLY THE ACCUMULATION OF AN ENDLESS NUMBER OF FACTS. YOU FEEL THAT CLASS TIME IS TOO VALUABLE TO WASTE HAVING FUN OR PLAYING SOCIAL GAMES. THE STUDENT MUST BE OMBARDED CONSTANTLY WITH FACTS. YOUR REVERENCE FOR THE PRINTED WORD IS COMPLETELY APPROPRIATE FOR SUCH TOTAL ADHERENCE TO A RULE-BASED ORIENTATION.

YOU ARE THOROUGH AND ORDERLY. YOUR CAREFULNESS IS WELL EXPRESSED IN A COMPULSIVE CONCERN OVER DETAILS. YOU MAY SEEM PETTY TO SOME BUT THIS IS YOUR FOCUS IN LIFE. FOCUSING ON DETAILS LEADS YOU TO BE VERY MECHANICAL IN ACQUIRING AND DISPENSING FACTS. YOU ARE BASICALLY A COLLECTOR--A COLLECTOR OF STAMPS OR COINS PERHAPS, BUT SURELY A COLLECTOR OF FACTS. YOUR KNOWLEDGE IS ENCYCLOPEDIAIC.

IT IS A FULL-TIME JOB MANAGING THE LARGE QUANTITY OF INFORMATION THAT POURS IN CONTINUALLY. YOU TRY TO KEEP CURRENT PARTLY BECAUSE OF YOUR INTERESTS AND PARTLY BECAUSE YOU FEEL IT IS AN OBLIGATION. IF YOU DON'T HAVE A LARGE TECHNICAL LIBRARY YOU WOULD LIKE TO HAVE ONE. YOU USE THE LIBRARY FREQUENTLY AS A STUDENT AND DID WELL IN SCHOOL BECAUSE OF YOUR ABILITY TO LEARN AND REMEMBER FACTS.

YOU INSIST THAT YOUR PUPILS CONCENTRATE ON FACTS AND FIGURES, THE FUNDAMENTAL BUILDING BLOCKS OF EDUCATION. YOU ARE NOT OPPOSED TO THE LEARNING OF RELATIONSHIPS EXCEPT WHEN SUCH PURSUITS ARE UNACCOMPANIED BY SUFFICIENT DATA. FANCY THEORIZING IS UNBEARABLE WHEN IT CONSISTS OF EMPTY WORDS. TOO OFTEN THESE VAGUE VERBAL FORMULATIONS ARE THE MASK OF SLOPPY SPECULATION. THERE IS NO SUBSTITUTE FOR HAVING THE FACTS YET YOU SOMETIMES FIND THAT YOU POSSESS SO MANY THAT YOU CANNOT ORGANIZE THEM TO REACH A SOLUTION TO A COMPLEX PROBLEM. IN A SIMILAR VEIN, IT IS OFTEN HARD TO GIVE A SIMPLE ANSWER TO A QUESTION SOMEONE ASKS YOU. YOU NEITHER TRUST NOR RESPECT ADMINISTRATORS WHO MAKE IMPORTANT DECISIONS WITHOUT OBTAINING SUFFICIENT CURRENT INFORMATION. YOU TEND TO TRUST PEOPLE WHO ARE INTELLIGENT AND YOU RESENT HAVING TO BECOME INVOLVED WITH PEOPLE WHO ARE PRIMARILY ACTION-ORIENTED.

YOUR PUPILS WOULD DO WELL TO EMULATE YOU IN YOUR RESPECT FOR AN ACCURATE DATA BASE. STUDENTS JUST AREN'T SERIOUS ENOUGH ABOUT THEIR STUDIES. THEY ARE LAZY. YOU FIND THAT PUPILS ARE TOO IMPULSIVE AND RESTLESS TO USE YOUR SLOW, DELIBERATE APPROACH TO THINGS. YOUR CHERISHED HOPE IS THAT SOME OF YOUR GOOD INFLUENCE WILL RUB OFF ON YOUR STUDENTS

AND HELP THEM BETTER THEIR LIVES AS THEY MATURE. WITH YOUR LIMITED SOCIAL SKILLS AND EVEN LESS SOCIAL INTEREST YOU APPEAR ALONE. ACTUALLY YOUR PUNCHED MANNER AND SCHOLARLY DEDICATION DO MAKE YOU SEEM DISTANT AND UNRESPONSIVE. EVEN THOUGH YOU FEEL ISOLATED YOU HAVE THE CONSOLATION OF BEING TRUE TO YOUR OWN CONVICTIONS. IT IS HARD TO UNDERSTAND FOR OTHERS CAN FILL THEIR LIVES WITH SUCH FRIVOLOUS ACTIVITIES. THERE IS SO MUCH TO LEARN IN OUR INTERESTING WORLD THAT IT IS PAINFUL TO SEE OTHERS WASTE THE OPPORTUNITY TO BECOME KNOWLEDGEABLE.

PROCEDURES AND PLANNING

YOUR SCORE ON THIS SCALE IS MORE EXTREME THAN THAT OBTAINED BY (58) PERCENT OF THE TEACHERS IN THE NORM GROUP. THIS MEANS THAT YOU UTILIZE PLANNING AND SPECIAL PROCEDURES AS MUCH AS POSSIBLE. THIS IS, OF COURSE, IN KEEPING WITH YOUR UNCONDITIONAL SUPPORT OF THE EDUCATIONAL ENTERPRISE. YOU FIRMLY BELIEVE IN THE IMPORTANCE OF CAREFUL PREPARATION OF LESSONS AND IN THE USE OF OBJECTIVE PROCEDURES FOR MANAGING THE EDUCATIONAL PROCESS. YOU SIMPLY CANNOT UNDERSTAND HOW SO MANY TEACHERS SEEM TO BE ABLE TO OPERATE WITHOUT ANY STRUCTURE OR BENCHMARKS. YOUR GENERAL UNCERTAINTY AND READINESS TO ACCEPT OTHERS' CONTRIBUTIONS MAKES IT NATURAL FOR YOU TO UTILIZE ANY FORMAL PROCEDURES THAT BECOME AVAILABLE.

TECHNICAL AND SCIENTIFIC PROCEDURES MUST BE UTILIZED AND IMPROVED. SYMBOLS, ESPECIALLY NUMBERS, OFFER PROMISE OF EXPRESSING INFORMATION MORE PRECISELY THAN DO WORDS. PRECISELY DEFINED TERMS ARE A MAJOR SOURCE OF OUR CONFUSION. YOU SEE THE WEAKNESSES IN TESTING PROGRAMS, GRADING PROCEDURES, AND IN UTILIZING LESSON PLANS YET YOU DO NOT OVER-REACT AND REJECT THEM CATEGORICALLY. IN OUR COMPLEX WORLD WE NEED THESE PROCEDURES FOR ASSESSING CURRENT STATUS OF ADEQUACY OF THE INSTRUCTION AS WELL AS PUPIL ACHIEVEMENT. WE MUST WORK TO IMPROVE PROCEDURES AND BECOME MORE EFFICIENT IN APPLYING THEM. THE TREMENDOUS QUANTITIES OF DATA WE MUST DEVELOP THESE DAYS DICTATES THAT WE MANAGE IT SYSTEMATICALLY AND VERIFY ITS ACQUISITION THROUGH THESE TESTING PROCEDURES.

WITH OUR LIMITED EDUCATIONAL RESOURCES WE NEED TO BECOME AS EFFICIENT AS POSSIBLE AND ACCEPT ALL THE ASSISTANCE WE CAN FIND TO GET THE JOB OF EDUCATING DONE. WE NEED OBJECTIVE PROCEDURES SO WE CAN BE FAIR IN OUR ASSESSMENT OF INSTRUCTIONAL PROGRAMS AND ACHIEVEMENT. TESTING CAN EXPOSE BOTH LEARNING AND TEACHING DEFICIENCIES SO THEY CAN BE CORRECTED. WHEN TEACHER-MADE TESTS ARE ELECTED THE TEACHER MUST TAKE THE RESPONSIBILITY OF SEEING THAT THEY ARE CAREFULLY PREPARED. UNFORTUNATELY STUDENTS DO NOT APPRECIATE THE EFFORT PUT INTO PREPARING INSTRUCTIONAL PLANS AND DEVELOPING EVALUATION TECHNIQUES. STUDENTS PREFER SLOPPY TEACHER-BASED PROCEDURES BECAUSE THEY ARE MORE FUN AND LESS LIKELY TO POINT OUT THEIR WEAKNESSES.

TEACHERS WITH A SO-CALLED HUMANIST ORIENTATION ASSIGN GRADES LIBERALLY AND MAKE THE CONVENTIONAL TEACHERS LOCK EACH BECAUSE THEY ARE LEFT TO MAINTAIN QUALITY STANDARDS. LIBERAL TEACHERS SHOULD BE ABLE TO SEE THAT THEY ARE BEING UNKIND IN ENCOURAGING PUPILS TO ASPIRE BEYOND THEIR CAPABILITIES. BESIDES, IT IS HIGHLY QUESTIONABLE THAT THROWING OUT TESTS WOULD BE REALLY HELPFUL IN THE LONG RUN TO EITHER STUDENTS OR SOCIETY. TESTS PERMIT US TO HELP OUR PUPILS ATTAIN THE PRIVILEGES, SUCH AS SCHOLARSHIPS, TO WHICH THEY ARE ENTITLED. PUPILS SHOULD LEARN TO WELCOME THESE PROCEDURES RATHER THAN FEAR THEM. WE CAN HELP THEM ADJUST TO THESE PROCEDURES BY UTILIZING THEM WHENEVER POSSIBLE. PUPILS WILL LEARN TO USE THE PROCEDURES TO THEIR ADVANTAGE AS THEY MATURE. EXPERIENCED TEACHERS TEND TO BECOME DISILLUSIONED WITH THESE PROCEDURES AND SUBSTITUTE PERSONAL TEACHING SKILLS AS THEY DEVELOP MORE CONFIDENCE.

THEORETICAL BASE

YOUR SCORE ON THIS SCALE IS MORE EXTREME THAN THAT OBTAINED BY (58) PERCENT OF THE TEACHERS IN THE NORM GROUP. THIS MEANS THAT YOU ARE INCREDIBLY UNREALISTIC AND IDEALISTIC. YOU PLACE YOUR EMPHASIS ON ENDS OR GOALS AS CONTRASTED TO OTHERS WHOSE ONLY CONCERN IS GETTING SOMEWHERE BY ANY MEANS POSSIBLE. THIS REPRESENTS AN UNCERITAINLY ACCEPTING APPROACH TO LIFE. YOUR IDEALISTIC PRINCIPLES OFTEN PROVE IMPRACTICAL BUT YOU STICK TO THEM ANYWAY AS MIGHT BE EXPECTED FROM ONE WITH YOUR STRONG GENERAL UNCERTAINTY.

YOU ARE A PHILOSOPHER IN THE SENSE THAT YOU INVEST IDEAS WITH A LOT OF IMPORTANCE. FOR YOU, CERTAIN IDEAS AND VALUES

ARE HELD EVEN THOUGH THEY ARE IMPRACTICAL. IF EVERYBODY REJECTED HARD-TO-MAINTAIN IDEOLOGICAL POSITIONS, THE WORLD WOULD BE A SOCIAL JUNGLE. YOU HAVE TO BE DEDICATED WITH A DESIRE TO SEE YOUR WORLD MADE INTO A BETTER PLACE. TO PERSIST WITH YOUR IMPRACTICAL IDEALS. MANY EDUCATORS HAVE DEVOTED THEIR LIFETIMES TO FORMULATING THEORIES AND PROCEDURES FOR IMPROVING INSTRUCTION. YOU HAVE THE HIGHEST RESPECT FOR THESE EDUCATORS AND IT PAINS YOU TO SEE THEIR CONTRIBUTIONS DISREGARDED BECAUSE THEY MAY BE DIFFICULT TO IMPLEMENT. WORTHWHILE INSTRUCTIONAL IMPROVEMENTS NEVER COME EASILY. TEACHERS AS CONSCIENTIOUS AND AS DEDICATED AS YOU MUST PUT THESE NEEDED IMPROVEMENTS INTO PRACTICE.

YOU LIVE THE MORAL, RESPECTABLE LIFE REQUIRED BY YOUR CODE OF ETHICS. IT IS HARD FOR YOU TO UNDERSTAND THESE WHO DO NOT LIVE BY IDEALS BUT CONDUCT THEMSELVES ACCORDING TO THE REWARDS OF THE MOMENT. WHILE SOME OF YOUR ETHICS MAY BE IMPRACTICAL THEY ARE, AT LEAST, NOT COUNTERPRODUCTIVE FOR SOCIETY. YOU ACCEPT YOUR RESPONSIBILITIES AND EXPECT OTHERS TO DO THE SAME. SINCE PEOPLE OFTEN DISAPPOINT YOU, YOU END UP WITH THEIR BURDENS AS WELL AS YOUR OWN. IT IS NOT SURPRISING THAT YOU ARE FREQUENTLY FRUSTRATED IN DEALING WITH OTHERS.

IN THE CLASSROOM YOU STRIVE TO MAKE CLEAR HOW IMPORTANT IT IS TO EMPLOY IDEALS AND VALUES IN DECISION-MAKING. IT IS EASY FOR YOU TO CONSISTENTLY SET A GOOD EXAMPLE IN THE CLASSROOM BECAUSE YOU ARE HABITUATED TO DOING SO. WHEN YOU ADMINISTER RULES YOU HOPE THAT THE STUDENTS WILL UNDERSTAND THE REASONS. EDUCATION REQUIRES THE COOPERATION AMONG TEACHER, PUPIL, PARENT, AND EVEN THE ADMINISTRATION. THE MORE THESE COMPONENT PEOPLE SHARE COMMON VALUES, THE SMOOTHER THE ACQUISITION OF KNOWLEDGE WILL BE. STILL, EDUCATION REQUIRES CONSIDERABLE EFFORT FROM ALL. NONETHELESS, THE TEACHER IS ULTIMATELY RESPONSIBLE FOR SEEING THAT THE CHILD RECEIVES AN ADEQUATE EDUCATION. THE FAILURE OF OTHERS TO DO THEIR PART IN HELPING THE CHILD MUST BE COMPENSATED FOR BY THE TEACHER PUTTING FORTH GREATER EFFORT.

YOU WORK WELL WITH SCHOOL ADMINISTRATORS. THEY DO THEIR BEST TO SUPPORT YOUR EFFORTS WITHIN THE LIMITS OF THEIR RESOURCES. WHEN DISSENTION ARISES IN THE SCHOOL YOU FEEL THAT IT IS THE TEACHER'S RESPONSIBILITY TO KEEP THE PROBLEM A FAMILY MATTER. NOTHING SHOULD BE DONE TO DISTURB THE EDUCATIONAL ROUTINE OR IMPAIR ITS EFFECTIVENESS. CHRONIC COMPLAINTS ON YOUR FACULTY UPSET YOU; YOU WISH THEY WOULD ACCEPT THEIR OWN RESPONSIBILITIES BETTER AND PUT THEIR WASTED ENERGIES INTO DOING A BETTER JOB. YOU TRY TO PUT THE WELFARE OF YOUR PUPILS AHEAD OF YOUR OWN AND IF OTHERS DID THE SAME OUR EDUCATIONAL PROGRAMS WOULD BE MORE EFFECTIVE.

PARAUNIVERSITY RESOURCES
640 NW 26 DRIVE
GAINESVILLE, FL. 32607

INFORMATION ON THE USE OF HUMAN SUBJECTS IN RESEARCH

IOWA STATE UNIVERSITY

(Please follow the accompanying instructions for completing this form.)

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1. Title of project (please type): Development and Testing of a Diagnostic Tool for Prescriptive Staff Development

2. I agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects are properly protected. Additions to or changes in procedures affecting the subjects after the project has been approved will be submitted to the committee for review.

Nancy Kinn Schycker
Typed Named of Principal Investigator

7/6/82
Date

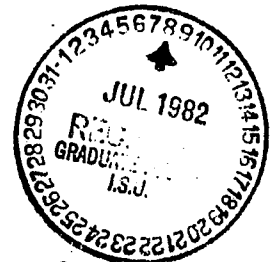
Nancy Kinn Schycker
Signature of Principal Investigator

111 Lynn Ave. Apt. 608 Ames 50010 515/292-9363
Campus Address Campus Telephone

3. Signatures of others (if any) Date Relationship to Principal Investigator
Richard P. Maratt 7-7-82 Major Professor and Co-Director of SIM Project
Shirley B. Stow 7/7/82 Co-Director

4. ATTACH an additional page(s) (A) describing your proposed research and (B) the subjects to be used, (C) indicating any risks or discomforts to the subjects, and (D) covering any topics checked below. CHECK all boxes applicable.

- Medical clearance necessary before subjects can participate
Samples (blood, tissue, etc.) from subjects
Administration of substances (foods, drugs, etc.) to subjects
Physical exercise or conditioning for subjects
Deception of subjects
Subjects under 14 years of age and(or) Subjects 14-17 years of age
Subjects in institutions
Research must be approved by another institution or agency



5. ATTACH an example of the material to be used to obtain informed consent and CHECK which type will be used.

- Signed informed consent will be obtained.
Modified informed consent will be obtained.

6. Anticipated date on which subjects will be first contacted: Month Day Year 7 12 82

Anticipated date for last contact with subjects: 10 1 82

7. If Applicable: Anticipated date on which audio or visual tapes will be erased and(or) identifiers will be removed from completed survey instruments:

Month Day Year

8. Signature of Head or Chairperson Date Department or Administrative Unit
Professional Studies

9. Decision of the University Committee on the Use of Human Subjects in Research:

- Project Approved
Project not approved
No action required

George G. Karas
Name of Committee Chairperson

Date

Signature of Committee Chairperson

4.A. Description of Proposed Research-

Literature substantiates the premise that there is a definite need to match teacher/administrator staff training (interventions) with accurately delineated client needs in the area of inservice education today. Hence, it is the intent of this investigation to develop and test diagnostic instruments* (inventories) that will provide a profile of skills indigenous to currently effective staff development programs in the field of education. The programs identified in this investigation are: Suggestive-Accelerative Learning and Teaching (SALT), Teacher Expectation of Student Achievement (TESA), The Essential Elements of Instruction, Classroom Management/Time-on-Task, and Cooperative Learning.

One or more of these inventories will be administered per subject, in conjunction with an instrument that explores the client's (subject's) teaching beliefs.**

Some global postulates concerning the differential impact of staff development that will be examined are:

- a. People who are predisposed to a particular innovation will be more likely to adopt it, know more about it and value it higher.
- b. Teachers do not adopt new teaching innovations as a unitary act. That is, if they have had more awareness and "test out" opportunities, they will move to full adoption quicker than teachers who have not.
- c. A profile of personal characteristics has been created which will identify likely candidates for early adoption.
- d. There will be an interaction between the philosophy profile and knowledge of the interventions.

Coded inventories will be administered to individuals, in group settings, by either the investigator or designee,

* Instrument #1 for SALT is attached
Instruments #2-#5 to follow

** Instrument #6 The Multidimensional Assessment of Philosophy of Education (MAPE) is attached

completed and collected on location. At which time, they will be placed in a sealed envelope and forwarded to the investigator (if not in attendance). A general purpose NCS answer sheet will be coded and used to capture all data.

4.B. Subjects to be used -

The majority of the subjects will be members of the School Improvement Model (SIM), a school organization involved in a total-systems approach to evaluating and improving K-12 instruction. Selected teachers, principals, and supervisors from the following school systems will participate: Minneapolis Public Schools, Edina Public Schools, Northfield Public Schools, Breck School, (all in Minnesota) Spirit Lake Community Schools(Iowa). In addition, subjects will be selected from designated Iowa State University classes and workshops.

4.C. Risks or discomforts to subjects-

Risks will be minimal since names aren't associated.

4.D. Topics checked- Research must be approved by another institution or agency

The research must be approved by the administration of the participating school districts.

5. Modified Informed Consent-

Form attached