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Training school administrators in the writing of quality professional improvement commitments

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TRAINING SCHOOL ADMINISTRATORS IN THE WRITING OF QUALITY
PROFESSIONAL IMPROVEMENT COMMITMENTS

Iowa State University

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Training school administrators in the writing of quality
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Steven R. Nance

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CHAPTER I. INTRODUCTION

Nothing has brought more attention to the condition of education in this country in the past several years as has "A Nation at Risk: The Imperative for Educational Reform." This report, developed by the National Commission on Excellence, contains practical information and recommendations for improving education in this country. The report criticizes our present system of education in many areas and states: "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war. As it stands, we have allowed this to happen to ourselves" (85). Among the findings of the commission are those that deal with teaching. They report problems with recruitment of qualified candidates, problems with the professional working life of teachers, and a shortage of teachers in several fields. Recommendations deal with changing content, raising standards and expectations, using time more efficiently, providing the necessary fiscal support, and improving the process of teaching.

In the fall of 1985, the Seventeenth Annual Gallup Poll of the Public's Attitudes towards the Public Schools was released (30). This poll reaffirmed the public's concern with developing the best educational system in the world. Although the public rated the schools higher than they did in 1984, the majority of the respondents continue to have some serious concerns. Among the concerns was the belief that the quality of teaching could be improved.

When considering the teaching behaviors that have positive effects on student achievement, one must look at broad constructs rather than single, discrete, specific actions of teachers. The Beginning Teacher Evaluation Study, conducted for California's Commission for Teacher Preparation and Licensing, found that differences in patterns of teaching performances contribute to learning, rather than single teaching variables (12). This approach is consistent with the views held by Brophy and Evertson:

Effective teaching requires the ability to implement a very large number of diagnostic, instructional, managerial, and therapeutic skills, tailoring behavior in specific contexts and situations to the specific needs of the moment. Effective teachers must not only be able to do a large number of things; they must also be able to recognize which of the many things they know how to do applies at a given moment and be able to follow through by performing the behavior effectively (7).

Evaluating teachers' performance and helping them improve is a key element in improving the overall educational process and improving student achievement. The most commonly used method of evaluating teachers is the in-class observation. These observations, however, are only one part of a broader process of setting goals with improvement of instruction in mind. Redfern (96) states, "When the purpose of evaluation becomes the improvement of performance instead of merely the rating of it, results are more productive."

The use of Professional Improvement Commitments (PIC's) with teachers is one way of attempting to improve their performance rather than just describe it.

The present study will examine the ability of school administrators to write quality professional improvement commitments with their teachers

before and after receiving training in the area. Four distinct training methods will be examined in this study. The following questions will be addressed:

1. Does the use of a learning packet increase trainees' skills in writing professional improvement commitments?
2. Does participation in a training module increase trainees' skills in writing professional improvement commitments?
3. Does a combination of learning packet and training module increase trainees' skills in writing professional improvement commitments?
4. Does the use of a pretest prior to using the learning packet and/or the training module aid in increasing trainees' skills in writing professional improvement commitments?
5. Is one method more effective than another at providing training in writing professional improvement commitments?
6. Does the quality of professional improvement commitments vary according to the trainee's position (teacher, principal, superintendent/central office)?
7. Does the quality of professional improvement commitments vary according to the level of employment (elementary, secondary, K-12)?
8. Does the quality of professional improvement commitments vary according to the learning style of the trainee?

Statement of the Problem

Several studies have shown the need for wider acceptance and use of the professional improvement commitment approach. Tomhave (114) looked at Iowa school districts and found that 31 percent of the 324 teachers

surveyed had not been supervised in a formal manner. Twenty-one percent had been observed only once during the school year, and, of those visits, 51 percent were for one-half hour or less. While studying documentation procedures used in evaluation, Gosling (35) found that 54 percent of the records and reports of observations he reviewed were dated in either May or June. This leads one to believe that evaluation has become an end-of-the-year activity. Hodel (50), in classifying approaches to the evaluation of elementary teachers, found a majority of 34 percent participated in a "joint assessment" in which the principal and teacher talk over the extent to which goals were met. The second most frequent style of evaluation used was one in which the principal observes, holds a conference with the teacher, and makes unilateral ratings of the performance. Other researchers have found that in a majority of cases, principals are the persons responsible for evaluating teachers, and usually they are using rating scales or checklists completed following an observation in the classroom.

An assumption can be made that by encouraging the use of the PIC approach to teacher evaluation, the commitment of professional educators to improvement of instruction can be raised. In order for this to happen, both the evaluator and the evaluatee should have an investment in the outcome of these efforts. Fournies (28) lists five steps to follow to improve the performance of workers. These steps closely parallel the PIC approach:

1. Getting agreement that a problem exists.
2. Mutually discuss the alternative solutions.
3. Mutually agree upon action to be taken to solve problem.

4. Follow up to ensure that agreed upon action has taken place.
5. Recognize any achievement.

Are administrators able to write quality professional improvement commitments? According to the results of an Iowa State University study done by Rauhauser (93), "The quality of job improvement targets written today is low, and does not vary by school size, teacher's grade level or subject matter, or by the degree of participation by the teacher and administrator in developing the target." It was also found that a cooperative effort in establishing PIC's should take place. Those PIC's seen by teachers as being dictated by the administrator were perceived as least helpful in improving their effectiveness.

Administrator training has made a difference in several state mandated systems, including the Georgia Assessment Project and the Florida Performance Measurement System (120). The American Association of School Administrators (AASA) and the Association for Supervision and Curriculum Development (ASCD) have made efforts at developing videotapes and software packages designed for administrator training sessions. Intermediate and local educational agencies across the nation have used materials designed by Madeline Hunter. Faast (25) was successful at increasing the appraising and conferencing skills of administrators in the Des Moines Public Schools.

The problem for this study will be to develop a training session which will improve the abilities of school administrators to write quality professional improvement commitments, assess the usefulness of a PIC learning packet, and look at the effect pretests have on the training

session and the learning packet. The learning packet will be developed to meet the needs of districts and independent schools with teacher performance evaluation systems already in place. A training module will be developed and can be used in districts and independent schools as part of the implementation sequence for establishing a new teacher performance system. This study will test four distinct methods and will examine the quality of professional improvement commitments written by trainees of differing positions, levels, and learning styles.

Need for the Study

Research has shown the need for the upgrading of performance appraisal systems in this country. Systems which aid in the improvement of teacher performance will undoubtedly raise student achievement and increase levels of learning. Such performance appraisal systems must be more than simply the rating of a teacher's classroom behavior. They must include provisions for improving performance. During the 1980-83 school years, the Rand Corporation of Santa Monica, California assigned Milbrey McLaughlin, Arthur Wise, and Linda Darling-Hammond to a nationwide project to investigate effective teacher evaluation practices. The study concluded that "the written agreement between the teacher and the evaluator for improved performance in the future was the most powerful component of teacher appraisal systems" (10, 80).

The use of professional improvement commitments is one method which can lead to improved performance of teachers. Working cooperatively, the administrator and teacher can jointly come up with a plan of action designed to meet the teacher's specific individual needs. The time has

come to move beyond the report card type of performance appraisal. If the purpose of evaluation is to improve instruction for students, the systems of evaluation now being used should be closely examined.

George Redfern has been working on the establishment of evaluation systems using job improvement targets since the 1950s. Recently, this plan of jointly setting goals for the purpose of improving performance has been studied by a number of researchers in business as well as education. The work of Professor Shirley Stow at Iowa State University is especially noteworthy in this regard (109). This study will attempt to synthesize the available research in the area of the use of professional improvement commitments and train school administrators to use them with their teachers. Several different types of training will be examined in attempting to find an optimum method. The study will look at the results of each method in order to find a plan of action which can be used with teacher evaluators in districts and independent schools attempting to improve student achievement through the development of a successful system of teacher performance appraisal.

Operational Hypotheses

The questions which define this study suggest the following possible operational hypotheses:

Does the use of a learning packet increase trainees' skills in writing professional improvement commitments?

1. Hypothesis - There is no significant difference in the pretest and posttest scores of trainees after using the learning packet.

Does participation in a training module increase trainees' skills in writing professional improvement commitments?

2. Hypothesis - There is no significant difference in the pretest and posttest scores of trainees after participating in the training module.

Does a combination of learning packet and training module increase trainees' skills in writing professional improvement commitments?

3. Hypothesis - There is no significant difference in the pretest and posttest scores of trainees after using the learning packet and participating in the training module.

Does the use of a pretest prior to using the learning packet and/or participating in the training module aid in increasing trainees' skills in writing professional improvement commitments?

4. Hypothesis - There is no significant difference in the posttest scores of trainees who have received a pretest prior to the learning packet and trainees who have not received a pretest prior to the learning packet.
5. Hypothesis - There is no significant difference in the posttest scores of trainees who have received a pretest prior to the training module and trainees who have not received a pretest prior to the training module.

Is one method more effective than another at providing training in writing professional improvement commitments?

6. Hypothesis - There is no significant difference in the posttest scores between all experimental groups of trainees.

Does the quality of professional improvement commitments vary according to the trainee's position?

7. Hypothesis - The quality of professional improvement commitments does not vary according to the trainee's position (teacher, principal, central office/superintendent).

Does the quality of professional improvement commitments vary according to the trainee's level of employment?

8. Hypothesis - The quality of professional improvement commitments does not vary according to the trainee's level of employment (elementary, secondary, K-12).

Does the quality of professional improvement commitments vary according to the trainee's learning style?

9. Hypothesis - The quality of professional improvement commitments does not vary according to the trainee's learning style.

Definition of Terms

1. Evaluatee: An individual undergoing the process of having his/her performance appraised.
2. Evaluator: An individual charged with making an appraisal of a subordinate's performance.
3. Performance criteria: Major areas of responsibility associated with teaching. These areas, generally determined by the administration and board of education with input from teachers, enable those being evaluated to know what is expected of them.
4. Professional improvement commitments (PIC's): A written statement which consists of an objective, actions and activities to

achieve the objective, a timetable of accomplishments, the nature and scope of assistance to be provided, a monitoring plan, and a method of determining if the objective has been met. Professional improvement commitments may also be referred to as performance improvement commitments or job improvement targets.

5. Professional improvement commitment quality: The degree to which the professional improvement commitment is stated in terms of a specific, measurable behavior; includes procedures which are complete and clear; includes a timeline and target date; and has an appraisal method that is complete and clear.

6. Teacher effectiveness: The degree to which actual teacher behaviors accomplish a desired result. The desired results are stated in terms of the individual district's established performance criteria.

7. Teacher performance evaluation: An appraisal based upon progress made toward the accomplishment of objectives related to the improvement of instruction. A comprehensive teacher performance evaluation system includes: (1) established performance criteria; (2) refined observation and data gathering techniques; (3) written improvement commitments determined jointly by administrators and teachers; (4) scheduled conferences; (5) due process; and (6) clinical supervision.

Sources of the Data

The information used in this study came from an experiment which took place during a workshop on evaluation and improving teacher performance held in Ann Arbor, Michigan in June, 1986. The participants in the study were building level administrators, teachers, central office

administrators, and intermediate unit personnel from the states of Illinois, Indiana, and Michigan who had gathered to learn more about teacher evaluation and improvement of teaching performance. All participants were volunteers who in no way were required to take part in the research.

Delimitations of the Study

Prior to attending the workshop, the participants had received minimal, if any, training in the area of evaluation. A survey found that none of the trainees had previously received instruction in the use of clinical supervision of any kind. To set the scene for writing professional improvement commitments, the trainees were shown videotaped teaching vignettes, making it necessary for the training to fit the simulated materials being used.

The quality of the written professional improvement commitments being used was judged by a panel of three individuals who had received training in teacher evaluation and the improvement of instruction. This method, however, does limit the measure of quality of the PIC's to the perceptions of the panel members who scored them.

The "Style Delineator" developed by Anthony Gregorc (42) was administered to each participant to determine his/her particular learning style. This learning style, along with descriptions of the trainee's specific position title and level, were recorded. It is assumed that all reported information was truthful and accurate. The participants were assured that all information used would in no way be reported in a method that would be personally identifiable.

CHAPTER II. REVIEW OF LITERATURE

Teacher effectiveness has been studied widely in the past and continues to be the central issue of today's efforts at improving performance in the classroom. In 1974, Dunkin and Biddle (13) reviewed the studies on teacher effectiveness that have been conducted for many years. They found that most of the more than 10,000 studies in the field had produced negligible or contradictory results and concluded that one is unable to precisely define or measure teacher effectiveness. An important shortcoming of the earlier studies was that they failed to focus on the actual teaching process in the classroom.

Donald Medley (82) looked at research on teacher effectiveness during the twentieth century. He found four general periods. The earliest studies looked at teacher effectiveness as being a result of personality traits or characteristics of the teacher. Later, teaching methods were examined. The results of this research tended to be rather inconclusive. Following the belief that teacher effectiveness depended on the methods used, researchers began to examine the climate the teacher created and maintained in the classroom. The most recent research efforts have focused on identifying generic teaching behaviors.

In 1960, David Ryans (102) conducted what possibly was the largest and most sophisticated study in the area of teacher effectiveness. This research, which included 6,179 teachers in 1,747 schools, found there were three major patterns of teacher behaviors that relate to effectiveness: (1) warm, understanding, and friendly behaviors versus aloof, egocentric, and restricted behaviors; (2) responsible, businesslike, and systematic

behaviors versus evading, unplanned, and slipshod behaviors; and (3) stimulating and imaginative behaviors versus dull and routine classroom behaviors.

Purposes of Evaluation

The purpose of evaluation has been defined by Bolton (6) as being "to safeguard and improve the quality of instruction received by students."

In examining this purpose of evaluation, the following six specific functions are offered:

1. To improve teaching through the identification of ways to change teaching systems, teaching environments, or teaching behaviors.
2. To supply information that will lead to the modification of assignments, such as placements in other positions, promotions, and terminations.
3. To protect students from incompetence, and teachers from unprofessional administrators.
4. To reward superior performance.
5. To validate the school system's teacher selection process.
6. To provide a basis for teachers' career planning and professional development.

When considering teacher evaluation procedures, one must make the distinction between summative and formative evaluation. Summative evaluation can be defined as making an overall judgment of the teacher's effectiveness. Effects of summative evaluation would be termination, reassignment, promotion, or special recognition. Formative evaluation is evaluation that contributes to the improvement of teaching by identifying strengths and weaknesses. In formative evaluation, supervisors and teachers sit down together and discuss information concerning improvements that might need to be made. Overall judgments are avoided.

Methods of Evaluation

Assessing teacher competence, performance, or effectiveness is dependent upon perceptions of how effective teacher behaviors relate to one another, how they can be measured, and how decisions are made based upon these measurements (10). The teacher appraisal interview and in-class observation once represented nearly all of the evaluation processes used. Once the evaluator observed the teacher's performance in the classroom, a conference was held to discuss the evaluation results.

A number of different methods are currently being used to assess teacher performance and competence. These methods include competency tests, student ratings, teachers' self-evaluations, peer evaluation, the use of student achievement results, parent evaluation, and classroom visits by the evaluator.

Competency tests, based upon the belief that teachers should be able to demonstrate cognitive competence, are being used for initial certification and hiring. There is also a belief that such tests could be used in recertification and termination procedures (48, 65). The National Teacher Examination is the most widely used competency test. It is estimated that 75,000 teacher candidates in 24 states and 311 school districts take the exam each year (48). This trend is on the increase, based partly on the public's suspicion about the quality of teacher education and training.

Rating the performance of teachers from the students' point of view has been discussed widely in the literature. Supporters of student ratings as another form of classroom observation believe that: (1) the

student knows when he has been motivated; (2) it is the student whose behavior is to be changed; (3) student rating is feedback to the teacher; and (4) student recognition may motivate good teaching (10). As long as student ratings are used for formative evaluation, Walberg (117) believes that "Collecting information from students is an exceptionally powerful source of data about classrooms." Peterson and Kauchak (90) report a high degree of reliability--usually in the .8 to .9 and above range--in the use of this method.

Self-evaluation by teachers can be a useful component of a complete evaluation process. A teacher can use a variety of data from student ratings, peer ratings, measures of student achievement, or personal introspection to assess his or her own strengths or weaknesses. Using a combination of self-evaluating and personal goal setting may promote positive growth and change. McGreal (79) points out that "Like all sources of data, self-evaluation data are most effective when they are shared and discussed with someone else."

In peer evaluation, a committee of peers makes an evaluation of a teacher through the use of in-class observations and examination of such documents as lesson plans, graded papers, and exams. Kowalski (59) found that peer evaluation was being used in 3.2 percent of the elementary schools, 3 percent of the junior highs, and 3 percent of the high schools he examined. This method has not been widely accepted as a method of teacher performance evaluation. While a three-year experiment using peer evaluation was well received in one district, another district found that teachers lacked respect for evaluation done by their peers, and staff

tension increased (65). Lieberman (66), in examining this specific issue, found that "Faculty see peer evaluation as a popularity contest."

Evaluating teacher effectiveness through the use of student achievement results has been criticized in the literature (10, 32, 105). Much of the criticism is focused on how the data are collected and used. Studies consistently show that the use of this method is not reliable.

The evaluation of teachers by parents is a controversial issue that was examined in Berkeley, California (2). Parents in this district were invited to observe in the classroom, but only after completing a course in how to observe teaching. Only 64 out of 15,000 parents did observe. The feedback they offered pointed out nothing that the school administrators didn't already know. The most significant aspect of the program was its positive public relations effect.

By far the most widely used method of evaluating teachers is the classroom observation coupled with the post-observation conference (24). Occasionally, a pre-observation conference is held prior to the visit by the evaluator. This method involves direct observation of the teacher at work in the classroom. This observation can result in a measurement of performance in as much as it captures what the teacher does in interaction with a class of students. Reliability and validity of this method can be threatened by observer bias, insufficient samples of performance, poor observation techniques, and weak measurement instruments. Classroom observation is only a part of the broader process of comprehensive evaluation. Darling-Hammond (10) describes two of the most widely discussed models, Manatt's "Mutual Benefit Evaluation," and Redfern's

"Management by Objectives Evaluation." The two models are characterized by a system of setting goals, involvement of the teachers in the evaluation process, and the determination of centralized teaching standards and criteria.

Effective Evaluation

Awareness of what constitutes effective instruction is crucial. An evaluator must know what to look for in the classroom. Perhaps the best known model of the elements of effective instruction is the one developed by Madeline Hunter (53). The basic idea is that the student should be able to do something at the end of the lesson that he could not do at the beginning. The seven steps in the lesson design that evaluators should look for are: (1) anticipatory set; (2) objectives; (3) input; (4) modeling; (5) checking for understanding; (6) guided practice; and (7) independent practice.

The evaluator is called upon to judge the effectiveness of what happens in the classroom. Data are captured to be analyzed and discussed with the evaluatee at the post-observation conference. Commenting on capturing data in the classroom, Manatt advises, "It didn't happen if you didn't see it and you didn't see it if you didn't write it down" (69).

Improvement of performance is the major goal of evaluation.

According to Redfern (96):

The types and kinds of evaluation procedures developed often make the attainment of this goal very difficult. For whatever reasons, many evaluation programs stress post-performance ratings that depend largely upon assessments of a superior-subordinate nature....If improved performance and professional development are to be

the principal goals, the elements of the program must be compatible with and contribute to those goals.

The role of the administrator in the evaluation process must be carefully examined. Edmonds (22) lists "the principal's leadership and attention to the quality of instruction" as one of five characteristics of an effective school. In reviewing the research on effective leadership, Sweeney (111) reports:

The evidence clearly indicates that principals do make a difference, for leadership was positively associated with school outcomes in each of eight studies. Of equal importance was the emergence of specific leadership behaviors consistently associated with effective schools....Clearly, implications are that school effectiveness is enhanced by principals who emphasize achievement, set instructional strategies, provide an orderly school atmosphere, and frequently evaluate pupil progress....Taken as a whole, these results strongly suggest that principals who emphasize instruction, are assertive, results-oriented, and able to develop and maintain an atmosphere conducive to learning make a difference.

Effective administrator leadership can enhance a teacher evaluation system. Redfern (95) states, "Evaluation often generates negative feelings among those being evaluated and those doing the evaluating." Cooperation and communication are essential elements in the process. In addition to examining strong leadership qualities of principals, researchers at Iowa State University have studied other factors that relate to the way administrators affect teacher effectiveness. Faast (25) was successful at training teacher appraisers to be better evaluators. Frudden (29) found that an analysis of preinstructional materials by evaluators did not associate with better evaluation of teacher performance. Pinckney (91) found that principals who are effective at

human resources management have teachers that are goal-oriented, work better together, and are more satisfied in their work. Rauhauser (93) examined job improvement targets written for teachers and found that administrators needed to improve their skills in this aspect of teacher evaluation. Schycker (103) examined inservice programs devoted to effective teaching practices and motivational techniques. Walker (118) found principal-delivered inservice training on motivational techniques to be effective.

The Iowa State studies also include a profile of the marginal teacher developed by Mitchell (84). She found marginal teachers to be characterized by a "lack of classroom management skills; questioning techniques that have little or no value to the lesson; inappropriate criticism/praise; and the absence of appropriate expectations for student learning." It was discovered that the average proportion of marginal teachers within a building was 11 percent. These marginal teachers failed to: effectively motivate students, appropriately teach to an objective, and convey appropriate expectations to students. The greatest percentage of these marginal teachers were characterized by low pupil achievement, high incidence of complaints from parents and students, and a failure to carry out instructions or directions.

Improving Teacher Evaluation

In the age of accountability, teacher evaluation has become one of the paramount issues in education. Many purposes are served by teacher evaluation, but central to all of these is the improvement of instruction (76, 95).

How can teacher evaluation be improved? One answer appears to be the use of diagnosis of teacher performance followed by the development of a written plan for improvement. Business and industry have popularized the use of Management by Objectives (MBO). Ordiorne (88) offers a general description of MBO:

It is a process whereby the supervisor and subordinate managers of an organization jointly identify its common goals, define each individual's major areas of responsibility in terms of the results expected of them, and use these guides for operating the unit and assessing the contribution of each of its members.

The process of MBO has found its way into the field of education through Job Improvement Targets (JIT's), as described by Redfern (95), the Practical Goal Setting Approach (PGSA), as described by McGreal (79), and Professional Improvement Commitments (PIC's), as explained by Stow (109) and Manatt (72). In his research on the use of MBO in the field of education, Marsh (76) lists five specific purposes:

1. Provide each faculty member with an appraisal of his or her strengths and weaknesses.
2. Provide information that encourages faculty members to improve performance.
3. Provide an information basis on which a number of administrative decisions can be made.
4. Determine inservice and professional growth activities for faculty members to overcome identified deficiencies.
5. Provide open communications to strengthen staff morale.

Redfern (98) began the first major push for the use of goal setting in teacher evaluation in the early 1960s. His model has since been updated and refined. The JIT approach, if conducted effectively, will

produce a number of desired results. According to Redfern, the results will include:

1. Clearer perceptions of performance expectations.
2. Use of feedback to refine performance strategies and procedures.
3. Availability of more valid performance data.
4. Reinforced practitioner-supervisor relationships.
5. Greater sensitivity to needs of clients.
6. Stronger emphasis upon improvement.
7. More adequate documentation of extent of incompetency.
8. Skill in evaluation receives higher priority.

McGreal (79), in his Practical Goal Setting Approach (PGSA), emphasizes a more practical and less structured approach to teacher evaluation. PGSA attempts to focus on improving the quality of time spent between the supervisor and the teacher rather than the amount. McGreal states, "The most effective evaluation systems allow the supervisor and teacher maximum flexibility in determining the most appropriate goals for each situation" (79). He lists four categories of goals that teachers and supervisors set: (1) organizational or administrative goals; (2) program goals; (3) learner goals; and (4) teacher goals. In PGSA, not all goal setting needs to be remedial. Goals may be in an area of interest a teacher might have that would be interesting, challenging, or useful to teachers or to the school. Goals do not need to be measurable in the behaviorable sense in this model. "Measurability," according to PGSA, means that the supervisor and the teacher will work out together methods for collecting data and determining the success of the goals. In comparing his model to other models, McGreal states:

If the decision makers in a district feel that the supervisors, teachers, or the community are not

ready for the kind of individualization of evaluation that emerges in PGSA, then they should look toward the tighter approaches exemplified by Management by Objectives and the Performance Objectives Approach.

The Professional Improvement Commitment approach, as explained by Stow (109) and Manatt (72), begins with formally establishing performance criteria by the administration and board of education. Teachers must know what is expected of them. The principal's attitudes and abilities contribute a great deal to whether or not the program will be a success (1). The evaluator must be a good communicator, be knowledgeable about effective teaching practices, and be able to carry out the steps in the PIC plan. Three simple questions must be kept in mind when approaching performance evaluation through the use of PIC's: (1) What are we trying to accomplish? (2) How well are we doing? and (3) How can we do better?

The Professional Improvement Commitment Approach

In the professional improvement commitment approach, evaluatees must know what is expected of them. Therefore, criteria, describing major areas of responsibility, must be formulated. These criteria are generally determined by the administration and board of education, but should include input from the teaching personnel. Suggestions as to the areas the criteria should cover are found throughout the available research (3, 10, 46, 70, 72, 95). They include positive teaching techniques, interpersonal relationships, classroom management, intellectual stimulation, and out-of-class behavior.

Once performance criteria are in place, the status of current performance of the evaluatee must be determined. This is usually done

through direct observation in the classroom. The observation, utilizing effective data capturing techniques, should be preceded by an analysis of lesson plans and a pre-observation conference, and followed by an analysis of the visitation and a post-observation conference with the evaluatee. Other information, such as a self-evaluation completed by the evaluatee, previous summative evaluations, and client evaluations may also be used.

Positive and effective communication is a key element in the process. Fournies (28) has pointed out that managers must do everything in their power to help their subordinates succeed. The administrator, in this case, only succeeds when his employees succeed. Ouchi (89) and Talbert (112) agree that increased organizational effectiveness will occur when high levels of personalized interaction and convergence in accepting goals and means for performance take place. Frequent communication and shared understanding between administrators and teachers are of utmost importance in successful evaluations (86).

When an evaluation of current performance has been made, the initial conference in the PIC process is held. Redfern (95) lists the following suggestions to help ensure a successful conference:

1. Think about the conference; don't approach it without sufficient preparation.
2. Choose a meeting place that will be conducive to the free interchange of ideas.
3. Strive for a non-threatening atmosphere.
4. Ensure that the purpose of the conference is clearly understood.
5. Be willing to offer suggestions for strengthening improvement commitments.
6. Assist, when necessary, in drafting well-constructed improvement commitments.
7. Put agreements in writing to confirm plans.

The establishment and writing of the PIC's should be a joint effort between the evaluator and the evaluatee. Rauhauser (93) found that teachers' perceptions of the PIC's ability to help them become more effective is directly associated with the amount of teacher input allowed in the setting of the commitment and the amount of administrator interest and guidance provided. The emphasis, when setting the improvement commitments, should be on priority needs, appropriate to the evaluatee's job responsibilities, and be limited in number, usually 3-5 (10, 95).

What determines a quality professional improvement commitment?

According to Redfern (97), each PIC should include:

1. The person responsible.
2. A plan of action with a time frame.
3. The desired outcome.
4. A method of documentation of achievement.
5. A monitoring system.
6. A commitment on the part of the evaluator.
7. The allocation of resources needed.

Shirley Stow (109) of Iowa State University reiterates many of

Redfern's suggestions as she says a quality PIC is:

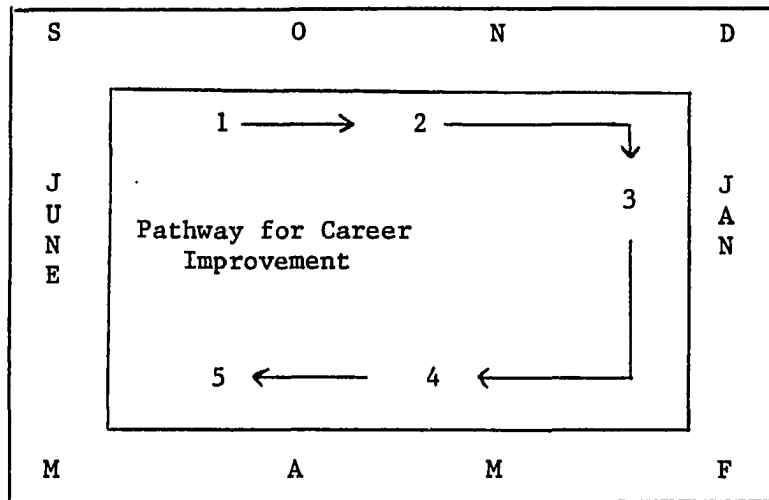
1. Written clearly and concisely.
2. Should state the results which are expected to occur, along with a statement of how the commitment will be measured.
3. Monitored for the specific purpose of documentation.
4. Includes a starting date and completion date as well as planned status reports.
5. Assigned priority of importance as compared with others in the overall plan.

Checkpoints must be established after the initial observation and conferences are held. Those doing unsatisfactory work will be identified, and those accomplishing their goals can be reinforced. During the checkpoint conference, modifications of the commitments might have to be

made. Some personnel who are having difficulty may require a more intensive plan of action in improving their performances. During the checkpoint conference, keep in focus the tasks that lie ahead in the accomplishment of the goals. For those evaluatees who are uncooperative or who are making unsatisfactory progress towards completing their objectives, legal steps required for nonrenewal or termination may have to be followed.

The PIC process requires that a conference be held at the conclusion of the cycle. During this conference, accomplishments are reviewed and progress made towards meeting the individual goals is assessed. A careful analysis of all data collected during the cycle must be made by both the evaluator and evaluatee. A written report is completed at this time. In the written report should be a review of past accomplishments including strengths and weaknesses of the evaluatee, criteria listing what is expected of all teachers in the district, and general program problems and instructional concerns relating to the situation (95). This written report should be signed by both the evaluator and the evaluatee with copies kept on file. During this final conference, new commitments for the following year should be discussed as well as any personal concerns the evaluatee or evaluator might have. It is important to remember to use good conferencing techniques and keep communication at an optimum level.

A model of the sequential steps that need to be taken is proposed by Redfern (99) in the form of a timetable (Figure 1).



1. Review status of current performance; determine needs.
2. Establish (a) plans to promote career improvement or (b) plans to correct performance deficiencies.
3. Hold midpoint checkup to determine if plans are "on target" or need to be modified.
4. Assess results.
5. Confer about results and plan for the next improvement cycle.

Figure 1. Sequential steps in the professional improvement commitment process

Rauhauser (93) has developed a diagram as an attempt to illustrate the PIC process and combine terminologies developed by various authors (Figure 2).

Administrator Training

A need exists for training school administrators in the professional improvement commitment process. Rauhauser (93) studied the quality of PIC's written by administrators, the process used by them in the development of the goals, and the teachers' commitments to them. He found PIC's to be poorly written. Also, equal participation by evaluator and evaluatee in the development of the PIC's is needed in order for them to be perceived as being effective. Training of administrators in the area of teacher evaluation practices is becoming more and more widespread. Statewide evaluation plans have been put into use in several states, and administrators have gone through a series of training experiences (31, 117). Numerous videotapes and software packages have been created to train evaluators.

Faast (25) studied the effectiveness of training teacher evaluators in the Des Moines Public Schools. Each evaluator was given training in planning for evaluation, lesson analysis, classroom observation, conferencing, writing professional improvement commitments, and writing summative evaluation reports. It was found that the trainees analyzed lesson plans more effectively, captured data more accurately, and conducted better conferences after the training. Also, teachers perceived the trained evaluators as being more effective in the post-observation conference.

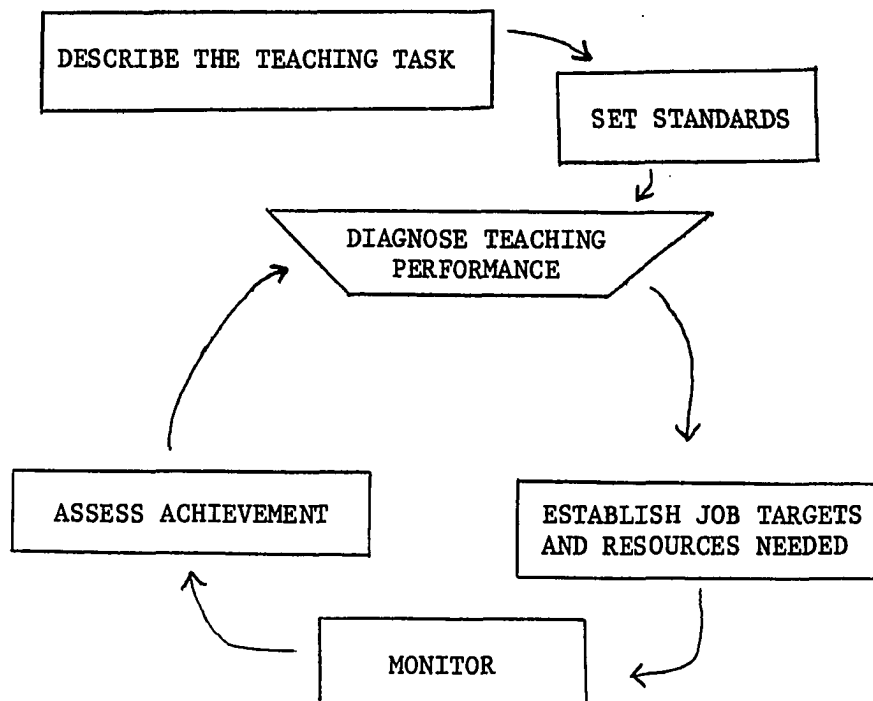


Figure 2. Teacher evaluation via professional improvement commitments

The School Improvement Model (71), a consortium of school districts and Iowa State University's College of Education which have combined efforts at improving teacher and administrator performance, has created a total systems approach. Comprehensive training of evaluators is accomplished through the use of inservice workshops and on-the-job training.

In an effort to aid the administrator in writing PIC's, the research studies at Iowa State have resulted in a project referred to as Computer Assisted Teacher Evaluation/Supervision (CATE/S). Mitchell (84) states the primary objective of the project as the development of a package to be used in teacher performance evaluation that includes:

1. A clearly stated evaluation process.
2. A graphic response mode.
3. Diagnostic/prescriptive indicators of high gain teaching.
4. Research based evidence of effective teaching strategies.
5. Computer generated plan of assistance.

Software for use with the Apple or IBM computer systems has been developed and is now being marketed. CATE/S, utilizing the individual local school organization's evaluative criteria, can provide the teacher evaluator with individual, building, and district evaluation data to be used to develop professional improvement commitments, staff development programs, and a wide range of informative reports.

Learning Style

The concept of learning style has been closely examined over the past 10-15 years; however, elements of learning style were being discussed as

early as 1892 (57). In simple terms, learning style can be explained as an attempt to discover how one learns best.

There are as many definitions of learning style as there are researchers in the area. The following two definitions by Gregorc (39) and Hunt (52) illustrate the meaning.

Learning style consists of distinctive behaviors which serve as indicators of how a person learns from and adapts to his environment. It also gives clues as to how a person's mind operates (39).

Learning style describes a student in terms of those educational conditions under which he is most likely to learn. Learning style describes how a student learns, not what he has learned (52).

The purpose of examining learning style is to understand the process of learning and to match the appropriate experiences to the individual which will cause learning to take place. A number of studies have found that matching teaching style and learning style improves students' achievement (20, 45, 60, 107). Attitudes of students towards learning also improved when they were taught through methods which matched their learning styles (18, 51). Gregorc and Ward state, "If educators are to successfully address the needs of the individual learner, they must understand what the word 'individual' means. They must relate teaching style to individual learning performance" (44).

Tuckman, Steber, and Hyman (115) examined principal's perceptions of teaching style and found significant differences between elementary, intermediate, and senior high school administrators in their perceptions of what constitutes effective teaching in terms of the teacher's style. Barbe and Milone (4) found significant interaction between student

learning style and modality strengths of the teacher. Farr (26) found that students could predict the modality in which they would have superior learning performance. In examining the research in the area, Dunn (16) found numerous reports which show that students who are taught through their preferred learning styles learn more.

Several studies have failed to find conclusive results when attempting to match learning and teaching styles in an effort to increase student achievement. Kuchinskas (61) found that the teacher's style was related to learning, but it was also related to every other aspect of schooling studied. Marcus (75), in an attempt to discover student learning style through direct observation, found it very difficult to assess the learning style of every student. MacNeil (68) studied situations in which students were exposed to different teaching styles and found no significant difference in performance. Dennis Rucker and Larry Harrington had previously examined learning styles of teacher evaluators and their association with ratings of teachers. Both reported inconclusive results (47, 101).

Gregorc Style Delineator

A number of different learning style inventories have been developed. Among the more widely used instruments are the Canfield Learning Approach (8) developed at the University of Michigan, Edmonds' Learning Style Identification Exercise (83), the Hill Model of Cognitive Mapping (119), the Productivity Environmental Preference Survey (14), Dunn's Learning Style Inventory (15), and the Gregorc Style Delineator (44). A number of these inventories are reviewed and analyzed in an article by Lepke (63).

For the purpose of this study, the Gregorc Style Delineator (42) was selected. Along with the Productivity Environmental Preference Survey (14), this instrument was designed specifically for use with adults. It is easily administered and scored and immediate feedback can be provided to the individual who has completed the inventory.

The Style Delineator was developed following a study in 1974. That study involved an in-depth analysis of 40 individuals between the ages of 13 and 65. These participants were demonstrated "successful" learners, showed consistent learning behavior, were able to discern and articulate their feelings about how well they performed certain learning activities, and were willing to be observed and interviewed. Data were gathered in observations, videotapes, audiotaped interviews, written protocols, and documents written by the individuals. Participants were asked to focus on their own actual experiences, specific behaviors, and situational characteristics as they related to the following thematic categories: what living is all about, what time means to them, how thinking takes place, what is truth, what constitutes ethical and moral behavior, what change means, and what environmental and situational conditions are best for them (41).

After intense analysis of the data, certain inferences were drawn regarding patterns of behavior, development of specific mind sets, and the individual's predisposition to time and space. All interviewees showed evidence of the use of all qualities, but almost all revealed strong identification with one type of space, time, processing, and relationship orientation. Thus, an individual may be more concretely oriented than

abstract, or may be more sequential than random in their processing. The following descriptions of the four major learning preference modes are offered by Gregorc and Ward (44).

The Abstract Sequential Learner

The abstract sequential learning preference is characterized by excellent decoding abilities in the area of written, verbal, and image symbols. Such a learner has a wealth of conceptual 'pictures' in his mind against which he matches what he reads, hears, or sees in graphic and pictorial form. He has and likes to use reading skills, listening skills, and visual translation abilities. A symbol or picture is worth a thousand words to this person.

This type of learner prefers a presentation that has substance, is rational, and is sequential in nature. He is able to extract main ideas from such an approach. Such a learner is not deterred by a dull lecturer if the material presented is well organized and meaningful. This preference also includes deference to authority in a learning situation and a low tolerance for environmental distractions which could cause him to divert energy from the task at hand.

Teaching approaches which utilize extensive reading, lectures, audio-tapes, instructional phonograph records, and a quiet, well-controlled environment appeal directly to people who exhibit a strong abstract sequential learning preference.

The Abstract Random Learner

The abstract random learner is distinguishable by his attention to human behavior and an extraordinary ability to sense and interpret 'vibrations.' He is attuned to nuances of atmosphere and mood. This type of learner associates the medium with the message. He ties a speaker's manner, delivery, and personality to the message being conveyed. In doing so, he evaluates a learning experience as a whole.

The abstract random learner prefers to receive information in an unstructured manner and is therefore comfortable in group discussions, activities which involve multi-sensory use, and busy environments. He seems to gather information and delay reaction. He then organizes material through reflection to get what he wants.

This type of learner has strong preferences for short reading assignments followed by class activities, group discussions, lectures followed by discussion, group or team work, filmstrips with records, movies, television, and assignments that permit reflection or "soaking" time.

The Concrete Sequential Learner

The concrete sequential learning preference is characterized by a finely tuned ability to derive information through direct, hands-on experience. This learner exhibits extraordinary development of his five senses.

Order and logical sequence of the if-then, premise-conclusion variety are appreciated, as are touchable concrete materials. If a biology class is to be introduced to the parts of a flower, a plaster model handled by the teacher is insufficient for this learner. He wants to have a flower to take apart himself.

This learner prefers step-by-step directions when confronted with a learning situation. He is the one learner who not only looks for directions but follows them. He also likes clearly ordered presentations. The concrete sequential preference learner will defer to authority and guidance in the learning environment and, like the abstract sequential learner, will not tolerate distraction.

Materials that appeal to a person with a strong concrete sequential preference include: workbooks and lab manuals, lectures accompanied by overhead transparencies, drawings or models, hands-on materials and equipment, programmed or computer assisted instruction, and well-structured field trips.

The Concrete Random Learner

The concrete random learning preference is characterized by an experimental attitude and accompanying behavior. Such learners get the gist of ideas quickly and demonstrate uncanny ability to make intuitive leaps in exploring unstructured problem-solving experiences. Occasionally, however, they also have insights and make leaps in structured situations. They are then chided for not showing their steps or for jumping to conclusions.

Concrete random learners utilize the trial-and-error approach when acquiring information. They do not like cut-and-dried procedures which deny them opportunities to find answers in their own

ways. They also do not respond well to teacher intervention in their independent efforts. Like their abstract random companions these individuals function well in a stimulus-rich environment.

Teaching approaches that speak to the concrete random learner include games, simulations, independent study projects, optional reading assignments, problem-solving activities, and brief mini-lectures that set the stage for exploration (44).

Further study by Gregorc and Ward (44) supports the position that style characteristics are related to systems of thought and driving forces of the mind. Individuals were found to learn better when environmental demands and expectations correspond with their particular systems of thought. Strong correlations were also found among the individual's learning style, the media, and teaching approaches. Gregorc emphasizes that if one accepts the proposition that style is a sign of how an individual interacts with the world, major shifts of thinking must occur among educators. He states:

Equal educational opportunity may not mean that all learners address the same goals or pursue the same curriculum, the same textbook, the same time blocks, and the same teaching style. Perhaps teachers set a tone in their classrooms which favor certain styles, systems of thought, and mind qualities. Those learners who comply with the teacher's preferred style may receive favoritism while their counterparts are reprimanded for their individualities (41).

Learning style is essentially an attempt to determine how one learns best. Some researchers theorize that pupils' learning styles should be determined and then teaching should be adapted to match the students' learning style. Others disagree. Studies conducted to date have failed to come to a common solution to this problem.

Summary

The Review of Literature chapter has focused on the use of professional improvement commitments as they relate to the process of teacher evaluation and the concept of learning style. An examination of the current research on the state of the art of evaluating teacher effectiveness was followed by a step-by-step explanation of creating and successfully fulfilling performance evaluation through the use of improvement commitments.

The use of PIC's can be thought of as a prescription for improvement. Joint responsibility must be shared by both the evaluatee and evaluator. Cooperation and communication between the two parties are essential. Clearly defined commitments for improvement must be established keeping in mind the specific results expected to occur, how these results will be measured, and a timeline for completion of the goals. The measurable results should be clear enough that they could be described to varied school publics. Determining performance effectiveness requires data that reflects the actual performance of the evaluatee. Input from the classroom observation itself as well as an analysis of that information are integral parts of the process. The PIC approach to evaluating teacher effectiveness is an adaptable system and can be utilized in school districts with varied needs. Regardless of the district's needs, improvement of instruction and professional growth should be essential components of the overall plan for the future.

Evaluation through the use of improvement commitments is continuous.

Successful implementation of the plan will result in fulfilling the following objectives (95):

1. Clarify each staff member's duties and responsibilities.
2. Improve instructional performance.
3. Facilitate communications between evaluator and teacher.
4. Promote professional growth.
5. Foster job satisfaction.

Are administrators able to write quality PIC's? According to the results of a study done by Rauhauser (93):

The quality of job improvement targets written today is low, and does not vary by school size, teacher's grade level or subject matter, or by the degree of participation by teacher and administrator in developing the target.

The concept of learning style was examined as it relates to matching instructional approaches with preferred learning modes. This concept provides students with opportunities to use their particular strengths. It does not, however, promote balancing of styles or requiring students to broaden themselves. Studies are inconclusive in their findings as they relate to the matching of teaching and learning styles and the effect upon learning. This study, using the Gregorc Style Delineator as a learning style inventory, will examine the quality of written professional improvement commitments and the learning styles of the individuals who have received training in PIC development.

CHAPTER III. METHODOLOGY

What is the best way to train teacher evaluators to write professional improvement commitments? This study was designed to look for answers to this question. Also, the study examined what effect, if any, evaluator's position title, level of position, or learning style have upon his/her ability to write quality professional improvement commitments.

Subjects

The subjects in this study were comprised of 73 persons, all participants in a workshop entitled "Evaluation and Improving Teacher Performance" held from June 23 to June 27, 1986, in Ann Arbor, Michigan. Workshop participants consisted of building level administrators, superintendents, central office personnel, teachers, and intermediate unit personnel from 13 school organizations in Michigan, one from Indiana, one from Illinois, and the local intermediate unit which hosted the conference.

Information regarding each participant's job title as well as position level was collected. The Style Delineator developed by Gregorc (42) was used to determine each participant's learning style. The Style Delineator provides scores that determine an individual's learning style to be either concrete sequential (CS), abstract sequential (AS), abstract random (AR), or concrete random (CR).

Shrinkage in the number of study participants occurred during the week the workshop was held. A number of participants missed partial sessions during the week due to job responsibilities with their local

school organizations. Others, due to fatigue or other personal reasons, did not complete the entire week-long process. Any workshop participant could exclude him/herself from the study at any time by not handing in his/her written PIC's or learning style scores. Therefore, partial information for several of the trainees was included with complete information for the remainder of the group.

Data Collection Methods and Procedures

The participants in the study were randomly assigned to one of four experimental groups:

- Group I - received pretest, learning packet, intermediate test, training, and posttest.
- Group II - received pretest, training, and posttest.
- Group III - received training and posttest.
- Group IV - received learning packet, intermediate test, training, and posttest.

All participants were in attendance at a week-long workshop entitled "Evaluating and Improving Teacher Performance." The first day of instruction centered around the recent research on school and teacher effectiveness and the development of a teacher performance evaluation system. Observation techniques were practiced and refined using videotaped lessons. Day two began with the administration of the pretest on professional improvement commitments to experimental Groups I and II following viewing of a videotaped lesson involving the teaching of third grade reading. (For testing instructions, see Appendix A.) Instruction for the day centered on conferencing techniques and appraising lessons and performance. Day three included more practice on collecting and analyzing

data, discussing and instructing the topics of using teaching research, and debriefing the supervisory plan. The intermediate test on writing PIC's was administered to Groups I and IV during the afternoon session of the third day following viewing of a videotaped eighth grade social studies lesson. The fourth day of the workshop focused on instruction in the writing and use of professional improvement commitments, discriminating criteria, and formal and informal classroom observations. All four experimental groups were tested on their ability to write a quality PIC during the afternoon session following the viewing of a videotaped junior high level mathematics lesson. Day five, the final day of the workshop, reviewed information discussed earlier in the week and introduced the topics of the board's role and need for documentation in dismissal procedures.

The sessions lasted from 8:30 a.m. to 3:30 p.m. each day with morning and afternoon breaks held and a lunch served from 11:45 a.m. to 12:45 p.m. The workshop was held in a conference room at the Ann Arbor Inn, near the University of Michigan campus. The presenting consultant and leader of the workshop was Dr. Richard P. Manatt, professor at Iowa State University, co-director of the School Improvement Model, and educational consultant.

Materials used for instruction in the writing of PIC's were developed by this researcher and adjusted by the presenter to meet the needs of the workshop participants. Prior to being used in the workshop, the materials were extensively pilot-tested and revised as needed. In June 1985, this researcher used the materials--overhead transparencies, learning packets, supplemental handouts, and guided discussion outlines--in presenting to

graduate students at Iowa State University. In February 1986, a total of 382 teacher evaluators in the Dallas, Texas Independent School District received similar training in the writing of quality PIC's.

The quality of the PIC's written by the trainees was rated on a 20-point scale which was developed and used in an earlier study of job improvement targets conducted by Rauhauser (93). Scoring was done by a panel consisting of this researcher and two other individuals who had been trained in the writing of PIC's and who had attended several recent conferences and workshops on school improvement and teacher evaluation. Each evaluator scored the PIC's independently. The three scores for each PIC were then averaged to come up with a quality rating of from 0 to 20 points. Extensive practice for this study was accomplished by the rating of the 382 PIC's from the Dallas training. Criteria used in evaluating the PIC's were:

1. Specificity and measurability of the PIC statement.
2. Inclusion of clearly written procedures.
3. Inclusion of a clearly written appraisal method.
4. Specification of a target date.
5. Inclusion of a timeline for the procedures.

Information regarding the job title (building principal, central office/superintendent, teacher, other) and position level (elementary, secondary, district-wide K-12, other) was collected from each participant as they completed the writing of the PIC's. Identification numbers were assigned to all participants to protect the confidentiality and anonymity of their responses.

Each participant's learning style was assessed using the Gregorc Style Delineator (42). Scores received following the administration of the instrument indicated each participant's preferred learning style to be concrete sequential (CS), abstract sequential (AS), abstract random (AR), concrete random (CR), or as in several cases where two learning styles received equal ratings, multi-modal.

Analysis of Data

The primary purpose of this study was to determine the best way to teach the writing of professional improvement commitments. The four different experimental groups can be symbolically shown:

| | | | | | |
|-----------|----|---|----|---|----|
| Group I | 01 | L | 02 | T | 03 |
| Group II | 01 | | | T | 03 |
| Group III | | | | T | 03 |
| Group IV | | L | 02 | T | 03 |

Learning Packet = L

Training Session = T

Pretest (Writing a PIC) = 01

Intermediate Test (Writing a PIC) = 02

Posttest (Writing a PIC) = 03.

Data processing was conducted at Iowa State University's Computation Center using the Statistical Package for the Social Sciences (108). For the purposes of this study, t-tests for both independent and dependent sample means and analysis of variance (ANOVA) were used. The t-test for dependent sample means was used in attempting to discover if scores of written PIC's were significantly different before and immediately following the use of the learning packet in Group I; before and after using the learning packet and receiving the training in Group I; and before and after receiving the training in Group II.

Hypothesis #1

| | | | | | |
|---------|----|---|----|---|----|
| Group I | 01 | L | 02 | T | 03 |
|---------|----|---|----|---|----|

Hypothesis #2

| | | | | | |
|----------|----|--|--|---|----|
| Group II | 01 | | | T | 03 |
|----------|----|--|--|---|----|

Hypothesis #3

| | | | | | |
|---------|----|---|----|---|----|
| Group I | 01 | L | 02 | T | 03 |
|---------|----|---|----|---|----|

The first three hypotheses were submitted to examination by using a paired t-test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2} - 2r\left(\frac{s_1}{n_1}\right)\left(\frac{s_2}{n_2}\right)}$$

The t-test for independent sample means was used in attempting to discover if scores of PIC's written after using the learning packet were significantly different in Group I, which had a pretest, from Group IV, which had no pretest. This test was also used to discover if the scores of PIC's written after the training session were significantly different in Group II, which had a pretest, from Group III, which had no pretest.

Hypothesis #4

| | | | | | |
|----------|----|---|----|---|----|
| Group I | 01 | L | 02 | T | 03 |
| Group IV | | L | 02 | T | 03 |

Hypothesis #5

| | | | | | |
|-----------|----|--|--|---|----|
| Group II | 01 | | | T | 03 |
| Group III | | | | T | 03 |

Hypotheses #4 and #5 were submitted to examination by a separate t-test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

A one-way analysis of variance (ANOVA) test was used to determine if the scores of PIC's written by one group were significantly different from scores written by any of the other groups following the training session.

Hypothesis #6

| | | | | | |
|-----------|----|---|----|---|----|
| Group I | 01 | L | 02 | T | 03 |
| Group II | 01 | | | T | 03 |
| Group III | | | | T | 03 |
| Group IV | | L | 02 | T | 03 |

This test (ANOVA) was also used to determine if there was a significant difference in scores of PIC's written by trainees of different job titles (Hypothesis #7), position levels (Hypothesis #8), or learning style (Hypothesis #9). The statistical formula for the one-way ANOVA is:

$$MS_B = \frac{SS_B}{df_B}$$

$$F = \frac{MS_B}{MS_W}$$

$$MS_W = \frac{SS_W}{df_W}$$

CHAPTER IV. FINDINGS OF THE STUDY

Introduction

This chapter is designed to report the results of an analysis of the quality of professional improvement commitments written by participants who attended a workshop on evaluating and improving teacher performance. The participants were randomly divided into four separate experimental groups receiving training in the writing of quality PIC's. The primary purpose of the study was to determine which experimental method proved to be the most effective. This chapter is divided into two sections: (1) Descriptive Data, which reports frequencies and means; and (2) Findings and Hypothesis Testing, which reports the analysis of data using t-tests to test the effects of the learning packet, training module, and pretests; and one-way analysis of variance (ANOVA) to test the effectiveness of the four experimental methods as well as effects of the demographic data and learning styles.

The data were collected from 73 participants who attended a workshop in Ann Arbor, Michigan in June 1986. These participants represented local and intermediate school organizations from the states of Michigan, Illinois, and Indiana, and consisted of building principals, central office personnel, superintendents, teachers, and intermediate unit personnel. The subjects were randomly divided into four different experimental groups designed to test various methods of training in the writing of quality professional improvement commitments. The written PIC's were analyzed and scored by a panel of individuals who independently judged their quality.

The data were analyzed by using t-tests and one-way analysis of variance from the Statistical Package for the Social Sciences (SPSSX) (108). Following a description of the sample, the findings are discussed in this chapter.

Descriptive Data

Table 1 presents the distribution of workshop trainees in each experimental group by their position title. The 73 workshop subjects used were "survivors" who completed all of the required PIC's.

Table 1. Distribution of participants into experimental groups by position (N's)

| Groups | Principal | Central office/ superintendent | Teacher | Other | Total |
|------------|-----------|-----------------------------------|---------|-------|-------|
| I | 16 | 2 | 0 | 1 | 19 |
| II | 11 | 4 | 0 | 5 | 20 |
| III | 10 | 1 | 2 | 3 | 16 |
| IV | 15 | 2 | 0 | 1 | 18 |
| | — | — | — | — | — |
| All groups | 52 | 9 | 2 | 10 | 73 |

Table 2 shows the distribution of workshop participants into the four experimental groups by their level of position. The participants were randomly assigned to each of the groups.

Table 3 presents the distribution of workshop participants into each experimental group based upon their individual learning style as indicated by the Gregorc Style Delineator (42). Assignment of the trainees to the experimental groups was made from a roster in random order. This was done

Table 2. Distribution of participants into experimental groups by level (N's)

| Groups | Elementary | Secondary | K-12 | Other | Total |
|------------|------------|-----------|------|-------|-------|
| I | 8 | 9 | 2 | 0 | 19 |
| II | 9 | 5 | 3 | 3 | 20 |
| III | 3 | 8 | 1 | 4 | 16 |
| IV | 5 | 9 | 3 | 1 | 18 |
| | — | — | — | — | — |
| All groups | 25 | 31 | 9 | 8 | 73 |

Table 3. Distribution of participants into experimental groups by learning style (N's)

| Groups | CS | AS | AR | CR | Not reported | Bi-modal | Total |
|------------|----|----|----|----|--------------|----------|-------|
| I | 10 | 2 | 0 | 3 | 3 | 1 | 19 |
| II | 8 | 2 | 3 | 2 | 4 | 1 | 20 |
| III | 4 | 3 | 2 | 3 | 3 | 1 | 16 |
| IV | 9 | 1 | 1 | 4 | 0 | 3 | 18 |
| | — | — | — | — | — | — | — |
| All groups | 31 | 8 | 6 | 12 | 10 | 6 | 73 |

prior to the workshop's beginning so that packets could be provided to the participants.

Considerable shrinkage occurred throughout the workshop week. As the participants were volunteers, they were not obliged to turn in all of their written PIC's or their learning style scores following the administration of the Style Delineator. Some trainees missed partial sessions or entire days due to their own job obligations. Others became

fatigued as the week went on and failed to participate in all of the workshop activities. Therefore, the number of trainees in each experimental group varied from day to day during the five-day workshop, thus the fluctuation in the number of subjects in any given cell. Approximately 85 trainees started the workshop; 80 completed all five days, but only 73 were willing to be subjects and able to complete all assignments.

Findings and Hypothesis Testing

The Statistical Package for the Social Sciences (SPSSX) (108) was used for data analysis. Results of the statistical analysis were tabled and are presented in this chapter in the form of the nine null hypotheses presented in Chapter I.

Hypothesis #1

There is no significant difference in the pretest and posttest scores of trainees after using the learning packet. This hypothesis was formulated to determine if the use of a learning packet would have any effect upon the quality of professional improvement commitments written by trainees. Individuals in experimental Group I were given a learning packet on writing PIC's preceded by and followed by writing an example. A quality rating was given to each written PIC by a panel of individuals trained and experienced in their evaluation. Ratings could range from a score of 0 (low) to 20 (high) and were determined by allocating points for each of the elements, as shown in Table 4.

Table 4. PIC quality point scale

| Item | Possible points | Weighting | Total points possible |
|-------------------------------|-----------------|-----------|-----------------------|
| Specificity and measurability | 3 | 4 | 12 |
| Procedures | 2 | 1.5 | 3 |
| Timeline | 1 | 1 | 1 |
| Appraisal method | 2 | 1.5 | 3 |
| Target date | 1 | 1 | 1 |
| | | | — |
| Total | | | 20 |

Table 5 outlines a summary of the data regarding the ratings of the PIC's written by trainees in experimental Group I before and after the use of the learning packet. Higher-quality PIC's were written after using the learning packet (12.47) than before (8.69). A t-test for dependent sample means was administered to determine if the difference was significant. The difference in mean quality was significant at the .01 level. Therefore, the null hypothesis was rejected.

Table 5. Comparison of pre- and posttest ratings for learning packet (Group I)

| Test | N | Mean | SD | t | 2-tail probability |
|---------------|----|-------|------|---------|--------------------|
| Test 1 (pre) | 13 | 8.69 | 3.86 | -3.94** | 0.002 |
| Test 2 (post) | 13 | 12.47 | 3.17 | | |

**Significant at the .01 level.

Hypothesis #2

There is no significant difference in the pretest and posttest scores of trainees after participating in the training module. This hypothesis was formulated to determine if trainees would be able to write higher-quality PIC's following the training module than they did prior to the instruction. Table 6 presents the data collected from trainees in experimental Group III. The mean rating following the training (12.03) was higher than the mean rating prior to beginning the workshop (6.64). The difference was determined to be statistically significant at the .01 level following administration of a t-test for dependent sample means. The null hypothesis for H2 was rejected.

Table 6. Comparison of pre- and posttest ratings for training module (Group III)

| Test | N | Mean | SD | t | 2-tail probability |
|---------------|----|-------|------|---------|--------------------|
| Test 1 (pre) | 13 | 6.64 | 4.03 | -4.17** | 0.001 |
| Test 2 (post) | 13 | 12.03 | 4.22 | | |

**Significant at the .01 level.

Hypothesis #3

There is no significant difference in the pretest and posttest scores of trainees after using the learning packet and participating in the training module. This hypothesis was formulated to determine if a combination of the learning packet and the systematic training module had

any effect on the quality of written PIC's. Results of the data analysis are shown in Table 7. The mean score for the PIC's written by trainees in experimental Group I after the comprehensive training (13.64) was higher than the mean score of the PIC's written prior to the learning packet and instruction (8.46). A t-test for dependent sample means found the difference to be statistically significant at the .01 level. The null hypothesis was rejected.

Table 7. Comparison of pre- and posttest ratings for learning packet and training module (Group I)

| Test | N | Mean | SD | t | 2-tail probability |
|---------------|----|-------|------|---------|--------------------|
| Test 1 (pre) | 14 | 8.46 | 3.80 | -4.73** | 0.000 |
| Test 2 (post) | 14 | 13.64 | 4.20 | | |

**Significant at the .01 level.

Hypothesis #4

There is no significant difference in the posttest scores of trainees who have received a pretest prior to the learning packet and trainees who have not received a pretest prior to the learning packet. This hypothesis was formulated to determine if the presence of a pretest had any effect upon the quality of the PIC written following use of the learning packet. When comparing the intermediate PIC ratings of experimental Groups I and IV, it was found that the mean rating of PIC's following use of a pretest (12.47) was higher than the mean rating of PIC's not preceded by a pretest

(9.33). Results are shown in Table 8. A t-test for independent sample means was administered and found the difference to be statistically significant at the .05 level. The null hypothesis was rejected.

Table 8. Comparison of PIC ratings following learning packet with pretest and learning packet without pretest (Groups I and IV)

| Group | N | Mean | SD | t | 2-tail probability |
|-----------------|----|-------|------|-------|--------------------|
| I (pretest) | 13 | 12.47 | 3.17 | 2.38* | 0.024 |
| IV (no pretest) | 17 | 9.33 | 4.04 | | |

*Significant at the .05 level.

Hypothesis #5

There is no significant difference in the posttest scores of trainees who have received a pretest prior to the training module and trainees who have not received a pretest prior to the training module. Formulation of this hypothesis was to determine if the use of a pretest had any effect upon the PIC's written after the training session in experimental Groups II and III. Table 9 presents the data which show that the mean rating of the PIC's written following use of a pretest (12.19) was higher than the mean rating of the PIC's written without use of a pretest (11.68). A t-test for independent sample means was administered to determine if the difference in mean ratings was statistically significant. Finding no significant difference, the null hypothesis was not rejected.

Table 9. Comparison of PIC ratings following training with pretest and training without pretest (Groups II and III)

| Group | N | Mean | SD | t | 2-tail probability |
|------------------|----|-------|------|-------|--------------------|
| II (pretest) | 15 | 12.19 | 4.10 | 0.340 | 0.737 |
| III (no pretest) | 16 | 11.68 | 4.30 | | |

Hypothesis #6

There is no significant difference in the posttest scores between all experimental groups of trainees. This hypothesis was formulated to determine if any of the four experimental methods was more successful than the others at training workshop participants to write quality professional improvement commitments. Treatment methods for the four experimental groups were:

| | | | | | |
|-----------|----|---|----|---|----|
| Group I | 01 | L | 02 | T | 03 |
| Group II | 01 | | | T | 03 |
| Group III | | | | T | 03 |
| Group IV | | L | 02 | T | 03 |

L = Learning Packet

T = Training Session

01 = Writing a PIC (pretest)

02 = Writing a PIC (intermediate test)

03 = Writing a PIC (posttest)

Table 10 shows that the mean rating of PIC's written by trainees in Group IV (13.29) was the highest and the mean rating of PIC's written by trainees in Group III (11.68) was the lowest of the four groups. A one-way analysis of variance was administered to determine if there was a statistically significant difference in mean ratings among the groups.

Table 10. Means and standard deviations of PIC ratings for groups on Test 3

| Group | N | Mean | SD |
|-----------|----|-------|------|
| Group I | 15 | 13.12 | 4.52 |
| Group II | 15 | 12.19 | 4.10 |
| Group III | 16 | 11.68 | 4.30 |
| Group IV | 12 | 13.29 | 3.70 |

Table 11. Analysis of variance of PIC ratings by groups on Test 3

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 3 | 8.54 | .4851 |
| Residual | 54 | 17.60 | |

No significant difference was found, and the null hypothesis was not rejected.

Hypothesis #7

The quality of professional improvement commitments does not vary according to the trainee's position. This hypothesis was formulated to determine if trainees belonging to one category of position (building principal, central office/superintendent, teacher, other) were able to write higher-quality PIC's following the training than those of other categories. Table 12 presents data that indicate differences between central office personnel/superintendents who had the highest rated PIC's (13.31) and "other" who scored the lowest (12.26). A one-way analysis of

variance was administered. Finding no statistically significant difference in PIC's written by trainees of different positions, the null hypothesis was not rejected. It was also found that no significant difference existed in PIC's written by trainees of different positions for Test 1 or Test 2.

Table 12. Means and standard deviations of PIC ratings for positions on Test 3

| Position | N | Mean | SD |
|-------------------------------|----|-------|------|
| Building principal | 40 | 12.35 | 4.38 |
| Central office/superintendent | 9 | 13.31 | 3.96 |
| Teacher | 2 | 13.09 | 0.59 |
| Other | 7 | 12.26 | 3.98 |

Table 13. Analysis of variance of PIC ratings by position on Test 3

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 3 | 2.63 | .1465 |
| Residual | 54 | 17.93 | |

Hypothesis #8

The quality of professional improvement commitments does not vary according to the trainee's level of employment. Formulation of this hypothesis was to determine if trainees from one level of employment (elementary, secondary, district-wide K-12, other) were able to write higher-quality PIC's than those of other levels. The data in Table 14

show that for Test 3, trainees from the district-wide K-12 level wrote PIC's that were rated the highest (13.50), while those in the "other" category wrote PIC's that were rated the lowest (11.50). A one-way analysis of variance was administered to determine if the differences in the ratings from level to level were statistically significant. No significant differences were found, and the null hypothesis was not rejected. Results of the ANOVA performed on the data for Test 2 also failed to reject the hypothesis that level made no difference in PIC ratings. In analyzing the data for the PIC's written as pretests (Test 1), it was found that the elementary level trainees wrote significantly higher-quality PIC's than the trainees from other levels of employment.

Table 14. Means and standard deviations of PIC ratings for levels on Test 3

| Level | N | Mean | SD |
|--------------------|----|-------|------|
| Elementary | 19 | 12.85 | 4.30 |
| Secondary | 25 | 12.19 | 4.20 |
| District-wide K-12 | 8 | 13.50 | 4.19 |
| Other | 6 | 11.50 | 3.97 |

Table 15. Analysis of variance of PIC ratings by level on Test 3

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 3 | 6.22 | .3510 |
| Residual | 54 | 17.73 | |

Hypothesis #9

The quality of professional improvement commitments does not vary according to the trainee's learning style. This hypothesis was formulated to determine if a trainee's individual learning style as determined by the Gregorc Style Delineator (42) had any effect upon the quality of written PIC's. In analyzing PIC's written following the training module (Test 3), it was found that those trainees with an abstract sequential learning style wrote PIC's that were rated the highest (14.00), while those trainees with a concrete sequential learning style had the lowest-rated PIC's (11.89) as shown in Table 16. Administration of a one-way analysis of variance found no statistically significant difference in the scores. The test failed to reject the null hypothesis. In analyzing the PIC's written as Test 2, there was no significant difference in ratings among the learning styles. However, as shown in Tables 18 and 19, there was a statistically significant difference at the .05 level in ratings of PIC's written by trainees of different learning styles on the pretest (Test 1). Utilizing the Duncan procedure, it was determined that trainees of the concrete sequential and the concrete random learning styles had PIC's rated significantly higher than trainees of the abstract sequential learning style.

Table 16. Means and standard deviations of PIC ratings for learning styles on Test 3

| Style | N | Mean | SD |
|---------------------|----|-------|------|
| Concrete sequential | 22 | 11.89 | 4.05 |
| Abstract sequential | 8 | 14.00 | 3.75 |
| Abstract random | 5 | 12.40 | 5.18 |
| Concrete random | 8 | 13.65 | 3.48 |

Table 17. Analysis of variance of PIC ratings by learning style on Test 3

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 3 | 11.80 | .7254 |
| Residual | 39 | 16.26 | |

Table 18. Means and standard deviations of PIC ratings for learning styles on Test 1

| Style | N | Mean | SD |
|---------------------|----|------|------|
| Concrete sequential | 17 | 9.36 | 3.57 |
| Abstract sequential | 4 | 3.96 | 2.65 |
| Abstract random | 3 | 6.22 | 2.10 |
| Abstract sequential | 5 | 9.33 | 4.06 |

Table 19. Analysis of variance of PIC ratings by learning style on Test 1

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 3 | 37.62 | 3.13* |
| Residual | 25 | 12.00 | |

*Significant at the .05 level.

CHAPTER V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The primary purpose of this study was to determine the most effective method of training school administrators in the writing of quality professional improvement commitments. Several attributes of the subjects in the study--position title, position level, and personal learning style--were also examined as to their relationship to ability to write quality PIC's following training. Data were collected from 73 individuals who were among those in attendance at a week-long workshop on teacher evaluation held in Ann Arbor, Michigan in June 1986. Not all of the 73 participants were in attendance at each of the daily workshop sessions for various reasons. Therefore, partial data for some subjects were included with complete data for other subjects in this study.

The SPSSX program (108) was used for data analysis. Statistical treatments used were the one-way analysis of variance for independent samples in conjunction with the Duncan and Scheffe' methods of testing multiple comparisons, and t-tests for both independent and dependent sample means.

Conclusions

In order to provide direction for this study, nine hypotheses were formulated. Chapter IV of this study lists the specifically stated test results related to each of the hypotheses. In a more general sense, the significant findings of this study were as follows:

1. Use of a learning packet to improve administrators' abilities to write quality professional improvement commitments proved to be beneficial. Scores for PIC's written after use of the learning packet were significantly better than those written as a pretest.

2. The training module without use of a learning packet also proved to be successful at improving the quality of PIC's written by the participants. Posttest scores following the training module were significantly higher than pretest scores before the training.

3. A combination of the learning packet and training module was also successful. Ratings of PIC's written following use of both the learning packet and training module were significantly higher than those written as a pretest.

4. The effect that a pretest had on the ability of the participants to write quality PIC's following use of a learning packet was examined. PIC's written following use of a learning packet which was preceded by a pretest were rated significantly higher than PIC's written following use of a learning packet not preceded by a pretest.

5. The use of a pretest alone, prior to the training module, did not significantly improve PIC ratings. There was no significant difference in posttest scores following training of participants who had a pretest and participants who did not.

6. When comparing the ratings of the PIC's written by participants of each of the four experimental groups, it was found that the groups using the learning packet in addition to the training had higher-rated PIC's. The difference was not, however, statistically significant.

7. When comparing the PIC's written by participants of differing positions (building principals, central office/superintendents, teachers, other), it was found that the central office administrators had slightly higher-rated PIC's. The difference, however, was not statistically significant.

8. The participant's level of employment (elementary, secondary, district-wide K-12, other) had no significant relationship to the ratings of the PIC's written following the training. The participants from the elementary ranks, however, did write significantly higher-rated PIC's on the pretest prior to using the learning packet or receiving the training. This could suggest that elementary participants were better prepared prior to attending the workshop or that use of a videotaped lesson from an elementary setting before writing the pretest had some effect.

9. Learning style was examined as having a possible relationship to ability to write quality PIC's following the training. No statistically significant difference was found among the mean ratings of participants from the four learning styles. As happened when employment levels and quality of written PIC's were examined, there was a significant difference in the scores on the pretest written prior to using the written learning packet or receiving the training. Participants with a concrete sequential or concrete random learning style had significantly higher-rated PIC's than those with an abstract sequential learning style.

10. A majority of teacher evaluators, as represented by this sample, are primarily concrete sequential learners.

Limitations

Several limitations were imposed due to the nature of the design of this study.

1. Due to the lack of compulsory attendance at the training workshop, considerable shrinkage in the sample population took place, thus, a shrink in the desired N for each cell. Also, the workshop participants were volunteers in this study and could exclude themselves at any time by not turning in their written PIC's or learning style information. As the work became progressively harder toward the end of the week, this happened with approximately a dozen participants.

2. Instruments used in this study for writing and scoring PIC's were nonstandardized. Therefore, there were no norms available for comparisons to be made when analyzing the data.

3. Use of the learning packet by members of experimental Groups I and IV was not monitored. The packet was simply made available to those selected participants.

4. The PIC's were written by the participants to fit situations from videotaped teaching vignettes. The three situations, one from an elementary classroom and two from junior high level settings, allowed all participants to have access to the same information, but was still a simulation and not as extensive as evaluating a real classroom performance in person.

5. Although the participants all indicated that they had come to the workshop with minimal, if any, training in clinical supervision, it was impossible to know the extent of previous experience each person had with

teacher evaluation, goal setting, or writing professional improvement commitments.

6. All information provided by the participants as to the position, level of employment, and learning style was assumed to be truthful and accurate. The participants were assured that all information collected would in no way be reported in a manner that would be personally identifiable.

Discussion

The first subproblem in this study sought to determine if use of a learning packet provided to teacher evaluators would improve their ability to write quality professional improvement commitments. Upon analysis of the data, it was found that PIC's written following use of the learning packet were rated significantly higher than those written before use of the packet. This advantage did not persist to the end of the training, however. The training module itself, without use of a learning packet, also proved to be successful at increasing the trainees' PIC ratings. A combination of learning packet and training module yielded the highest-rated PIC's, showing a significant difference between pretest and posttest scores.

Although the investigation discovered that certain aspects of the training proved to be successful, the findings did not show results from any one of the four experimental groups to be statistically superior. All four groups did receive the same training module, perhaps the reason for the similar ratings on the posttests. Differences in the groups were in the use of the learning packet and the presence of a pretest. Apparently,

these aspects, even though proving to be beneficial on their own, were surpassed in their benefit by the training module itself.

The second major area of investigation dealt with the effect of pretests upon the learning packet and training module. While the use of a pretest prior to the training module itself had no significant effect, the group which had a pretest prior to using the learning packet had significantly higher-rated PIC's than the group which had the learning packet with no pretest. The timing of the administration of the pretests may have had some relationship to their effectiveness as the learning packet was received immediately following the test, while the training module was delivered two days following the pretest. This could be an area for further investigation.

This investigation also attempted to determine the relationship between the trainee's position, level of employment, and learning style to his/her ability to write quality PIC's. The type of position and level of employment had no relationship to the quality of the PIC's written following the training. Elementary level participants were, however, able to write higher-quality PIC's as pretests prior to the training. Could this be because elementary level administrators are better prepared in the areas of supervision and evaluation? Or did the elementary level setting of the videotaped teaching vignette viewed prior to writing the pretest better suit their strengths? These questions cannot be answered by this study.

Learning style, as determined by the Gregorc Style Delineator (42), which was administered to all of the study participants, was investigated.

A large percentage of the trainees (54 percent) were from the concrete sequential learning style. Abstract sequential learners made up 14 percent of the total group, abstract random learners 11 percent, and concrete random learners 21 percent of the participants. While CS and CR learners were rated higher on the pretest than those with abstract learning styles, there was no significant difference in ability to write quality PIC's among the learning styles on the posttest following the training.

Many of the techniques used in the training during this workshop were those that work best with concrete sequential learners. Therefore, with a focus being upon the learning style of the majority, effectiveness of this workshop and the methods used should not have been hampered. Is there a way, however, to provide a balance of learning experiences and activities that will best meet the needs of learners of all four styles? This suggests a possibility for further study.

Recommendations

For practitioners

1. The training, as discussed in this study, was comprehensive in nature and compacted into a short period of time. Immediate application of skills was required of the workshop participants in the writing of PIC's. A longer training period with intermittent practice is suggested for best results.

2. Data on well-written PIC's should continue to be gathered in order to develop normative information.

3. An analysis of the participants' levels of employment suggests that elementary administrators may be better trained in supervision, evaluation, and/or goal setting than their secondary or district-wide counterparts. If this is indeed true, universities, through their graduate level preparation, and school organizations, through their inservice training, could focus on the needs of secondary level evaluators.

4. This study showed that a large percentage (54 percent) of the participants in the workshop on teacher evaluation were from the concrete sequential (CS) learning style (AS--14 percent, AR--11 percent, CR--21 percent). When training evaluators in the future, it is suggested that the needs of all learning styles be met through varied activities and experiences.

5. It is common practice to use videotaped teaching vignettes in the preparation and inservice of teacher evaluators. With this method, a number of evaluators can observe the same lesson at the same time and evaluations can be compared based on the same data. One suggestion would be to provide a variety of teaching vignettes of all levels, of varied subject matter, and of good as well as poor examples of teaching. Also, the use of the vignettes showing the same teacher in different teaching situations would be helpful in training evaluators.

6. Continued training of teacher evaluators in the writing of quality PIC's is needed to improve their skills. Even with a week of training, the final PIC's were not of high quality.

For researchers

1. The experimental design should be replicated using samples with larger numbers, so that a stronger statistical analysis could be done.
2. This study examined the use of pretests and found that in the use of a learning packet, the pretest enhanced the learning packet's effect. The use of a pretest did not significantly enhance the effectiveness of the training module, but was administered two days before the actual training took place. Future studies might examine the use of pretests in terms of the relationship of length of time between pretest and instruction to the eventual effectiveness of the instruction.
3. Future investigation of learning style and its relationship to evaluation might focus on fitting the specific training methods to the trainee's individual learning style. This study found a large majority of teacher evaluators to be of the concrete sequential learning style. Are most teacher evaluation workshops designed to meet the needs of these CS learners at the expense of other styles?
4. This study might have been improved if additional demographic data had been collected from the subjects. Variables such as sex, amount of previous training in teacher evaluation, knowledge in the area of writing specific, measurable objectives, and highest level of education attained might be investigated in future studies.
5. Complete data were not available for all participants due to the absence of some individuals from partial or full sessions during the week. Future studies might focus on groups of subjects involved in workshops, inservice programs, or university courses with more stringent control on

attendance. Researchers should also keep in mind the importance of having an adequate number of subjects in each experimental cell to ensure the best possible statistical information.

6. In an attempt to find the best way to train teacher evaluators in the writing of quality professional improvement commitments, this study examined four distinct experimental methods and recommended that future attempts utilize the findings of this study and include the use of learning packets provided to trainees before the training sessions, pretests and posttests to evaluate the effectiveness of the training, practice in the writing of PIC's, and instruction designed to meet the varied learning styles of the participants.

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- To the SIM and RISE staffs for their never-ending help and smiling faces encountered throughout this study.

APPENDIX A. WORKSHOP MATERIALS

INSTRUCTIONAL PLAN

Title Evaluating and Improving Teacher Performance Page # 1
 Group or School Washtenaw Intermediate School District of 5
 Date(s) Monday 23 June--Friday 27 June 1986
 Attending Teacher Evaluators
Ann Arbor Inn, Ann Arbor, MI

Presenting Consultant(s)
Dick Manatt

Associated with:
 Richard P. Manatt, Educational Consultant
 2926 Monroe Drive, Ames, IA 50010

| TIME | TOPIC | PRESENTER | MODE | VISUALS | HANDOUTS | REMARKS |
|----------------|---|-----------|-----------------------------|------------------------------------|--|---------|
| <u>Day One</u> | | | | | | |
| 8:30 | Welcome/Logistics | Mastie | LGI | — | — | — |
| 9:00 | Teacher/School Effectiveness- State of the Art | Manatt | LGI | O/H Workbook Mod 1, pp. 1-4 | TPE/APE (pocket ref) | 82 |
| 10:15 | —Break— | OYO | — | — | — | — |
| 10:30 | Developing/Improving a TPE System | Manatt | LGI | O/H Workbook Mod 2, pp. 4-11 | SIM Model | — |
| 11:00 | Effective Teaching Behaviors (Criteria) | Manatt | LGI/SGD | Workbook pp. 6, 69 | Effective Behaviors Decision-Mak. Model (pocket ref) | — |
| 11:45 | —Lunch— | OYO | — | — | — | — |
| 12:45 | The Cycle (conferences, observations, targets) | Manatt | LGI | Videotape #1 Darlene F. | Workbook, Mods 3, 4 pp. 26-37 | — |
| 2:00 | —Break— | OYO | — | — | — | — |
| 2:15 | The Unannounced Visit (Zero-Warning Walk-In) | Manatt | LGI | Videotape #2 Cheryl L. | TAP (pocket ref) | — |
| 3:00 | Debriefing Videotape #1 | Manatt | Guided Practice (triads) | — | — | — |

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Page # 2
 of 5

Presenting Consultant(s)
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| TIME | TOPIC | PRESENTER | MODE | VISUALS | HANDOUTS | REMARKS |
|----------------|---------------------------------------|-----------|-----------------------------|--------------|---|------------------------|
| <u>Day Two</u> | | | | | | |
| 8:30 | The Announced Visit | Manatt | LGI | Videotape #2 | Timeline Data Cap Pretest O ₁ | Did it happen? |
| 10:15 | —Break— | OYO | — | — | — | — |
| 10:30 | Debriefing Videotape #2 | Manatt | Guided Practice (triads) | O/H | ASCD Kit | How do you compare? |
| 11:00 | Conferencing | Manatt | LGI | O/H | Conferencing Tips | — |
| 11:45 | —Lunch— | OYO | — | — | — | — |
| 12:45 | Appraising Lessons and Performance | Manatt | Triads | Videotape #3 | ASCD Kit Learning Style Inventory | National Norms |
| 2:00 | —Break— | OYO | — | — | — | — |
| 2:10 | Strategies for Improvement | Manatt | SGD | — | "JITS" workbook | — |
| 3:30 | —Dismissal— | | | | Learning Packet handed out to Groups I and IV | |

INSTRUCTIONAL PLAN

Title Evaluating and Improving Teacher Performance Page # 3
 Group or School Washtenaw Intermediate School District of 5
 Date(s) Monday 23 June--Friday 27 June 1986
 Attending Teacher Evaluators
Ann Arbor Inn, Ann Arbor, MI

Presenting Consultant(s)
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| TIME | TOPIC | PRESENTER | MODE | VISUALS | HANDOUTS | REMARKS |
|------------------|-------------------------------------|-----------|-----------------------------|---------------------|-----------------------------------|--------------------------|
| <u>Day Three</u> | | | | | | |
| 8:30 | Progress Check | Manatt | IS | O/H | PIC Review | |
| 9:00 | Legal Aspects | Manatt | LGI | O/H | Marginal Teacher | — 84 |
| 10:15 | —Break— | OYO | — | — | — | |
| 10:30 | Supervisors Annual Log | Manatt | LGI | O/H Videotape #4 | Timeline | — |
| 11:00 | Using Research on Teaching | Manatt | LGI | O/H Videotape #5 | Timeline | Teaching Functions |
| 11:45 | —Lunch— | OYO | — | — | — | — |
| 12:45 | Putting It All Together | Manatt | Guided Practice (triads) | O/H | "Larry Mann" Intermediate Test | Your Plan for '86-'87 |
| 2:00 | —Break— | OYO | — | — | <u>Q2</u> | — |
| 2:10 | Debriefing Your Supervisory Plan | Manatt | SGD | O/H | SMT Workbook | How do you compare? |
| 3:30 | —Dismissal— | | | | | |

INSTRUCTIONAL PLAN

Title Evaluating and Improving Teacher Performance Page # 4
 Group or School Washtenaw Intermediate School District of 5
 Date(s) Monday 23 June--Friday 27 June 1986
 Attending Teacher Evaluators
Ann Arbor Inn, Ann Arbor, MI

Presenting Consultant(s)
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 2926 Monroe Drive, Ames, IA 50010

| TIME | TOPIC | PRESENTER | MODE | VISUALS | HANDOUTS | REMARKS |
|-----------------|---|-----------|------|----------------------------|---------------------------------------|----------------------------|
| <u>Day Four</u> | | | | | | |
| 8:30 | Progress Check | Manatt | IS | O/H | PIC form | — 05 |
| 9:00 | Operational Procedures for Valid Performance Evaluation | Manatt | LGI | O/H | TPE pocket ref. Stakeholder manual | Common know- ledge base |
| 10:15 | —Break— | OYO | — | — | — | — |
| 10:30 | Criteria That Will Discriminate | Manatt | SGD | O/H | A/D criteria CATE/S form | Discrimination power |
| 11:00 | Legal Aspects of TPE | Manatt | LGI | O/H | TPE procedures pocket reference | Due process |
| 11:45 | —Lunch— | OYO | — | — | — | — |
| 12:45 | The Drop-by Visit | Manatt | SGD | Videotape #6 | Clinical timeline | Ms. Pickman |
| 2:00 | —Break— | OYO | — | — | — | — |
| 2:10 | The Formal Visit | Manatt | SGD | Videotape #7 Gerry Page | Reliability | Darlene Frazie |
| 3:00 | Review and Preview | Manatt | LGD | O/H | Informal indicators | A look ahead |
| 3:30 | —Dismissal— | | | | Posttest O ₃ | |

INSTRUCTIONAL PLAN

Title Evaluating and Improving Teacher Performance Page # 5
 Group or School Washtenaw Intermediate School District of 5
 Date(s) Monday 23 June--Friday 27 June 1986
 Attending Teacher Evaluators
Ann Arbor Inn, Ann Arbor, MI

Presenting Consultant(s)
Dick Manatt

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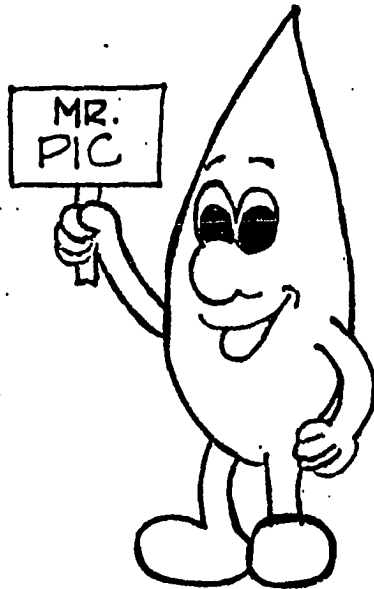
| TIME | TOPIC | PRESENTER | MODE | VISUALS | HANDOUTS | REMARKS |
|-----------------|--|-----------|--------|--------------|----------------------------------|------------------------------|
| <u>Day Five</u> | | | | | | |
| 8:30 | Building Upon Valid TPE | Manatt | LGI | O/H | IA pocket ref | Review of theory base |
| 9:00 | Learning Theory to Build the Case | Manatt | LGI | O/H | Decision Making pocket reference | Is it PD or SMT 86 |
| 10:15 | --Break-- | OYO | -- | -- | -- | -- |
| 10:30 | Review of Observation Skills (IA team) | Manatt | SGD | Videotape #8 | Workbook pp. 1-23 | Ms. Hartung |
| 11:00 | Debrief Videotape | Manatt | triads | -- | -- | -- |
| 11:45 | --Lunch-- | OYO | -- | -- | -- | -- |
| 12:45 | The Appropriate Intervention | Manatt | LGI | -- | Clinical timeline | Look for, report, conference |
| 1:30 | The Board's Role in Dismissal | Manatt | LGI | O/H | Steps | We're behind you! |
| 2:00 | --Break-- | OYO | -- | -- | -- | -- |
| 2:15 | Documentation for Dismissal | Manatt | LGI | Videotape #8 | -- | Supervisor's Log (T.Davis) |
| 3:00 | Winning! and workshop evaluation | Manatt | LGI | Videotape #8 | Workbook pp. 24-46 | Legal Aspect |

PROFESSIONAL IMPROVEMENT COMMITMENTS

AN INFORMATION PACKET
DEVELOPED BY
STEVE NANCE
E005 QUADRANGLE
IOWA STATE UNIVERSITY
AMES, IOWA 50011

This information packet was written to familiarize you with the writing of Professional Improvement Commitments (PIC's). You may be more familiar with the terms Job Improvement Targets (JIT's), or Performance Improvement Commitments; both terms are synonymous with Professional Improvement Commitments.

The following pages were designed to give you a step by step process to be followed in writing Professional Improvement Commitments (PIC's).

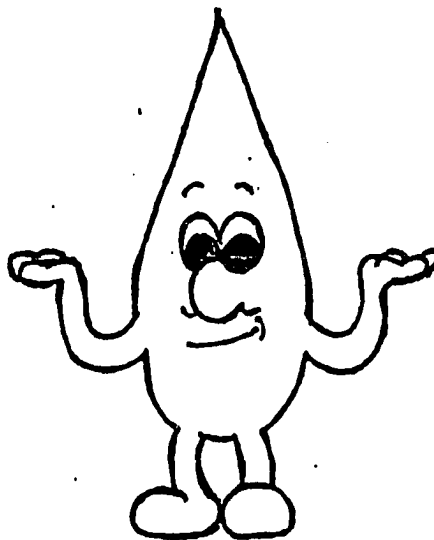


WHAT IS A PROFESSIONAL IMPROVEMENT COMMITMENT?

A Professional Improvement Commitment is a written component of an evaluation system which focuses on professional growth and is tied to a criterion of the evaluation system. It consists of: 1) a specific measurable behavior statement; 2) a plan of action or a list of activities designed to achieve the specific measurable behavior; and 3) a timeline which includes a starting date and completion date as well as planned status reports.

WHEN IN THE EVALUATION PROCESS ARE PIC'S WRITTEN?

Professional Improvement Commitments are usually written as a part of the summative evaluation at the end of an evaluation process. Throughout the teacher's on-cycle year data are collected. Usually the classroom observations are preceded by a pre-observation conference and should always be followed by a post-observation conference with the teacher. When all of the necessary data have been collected, a final summative evaluation report (SER) is completed and shared with the teacher. It is at this time that the evaluator and the evaluatee look at the latter's strengths and weaknesses in terms of the summative evaluation report. Those performance areas in greatest need of assistance should be focused upon. Usually, the criteria marked lowest on the evaluatee's SER would be given first consideration.



WHAT SHOULD BE DISCUSSED DURING CONFERENCES?

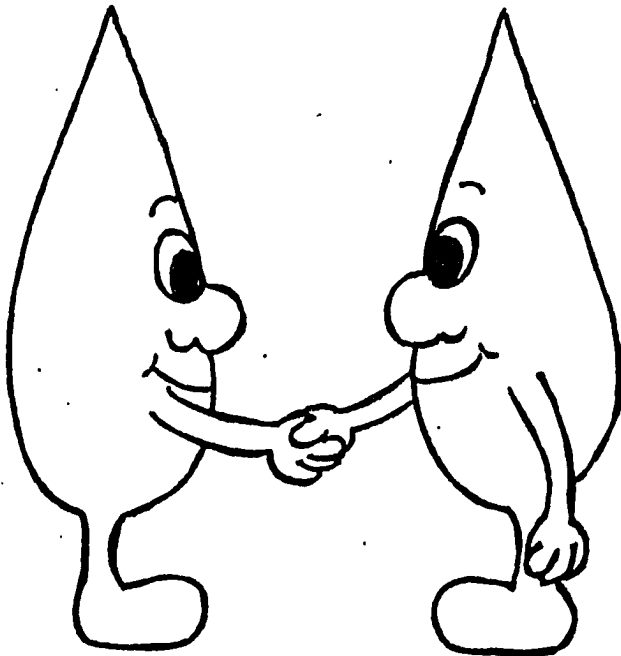
The teacher should come into the planning conference with a list of proposed PIC's, as well as rationale and documentation for their selection. The teacher should, at this time, be able to answer the following questions:

- Why is this proposed as a PIC?
- How will I accomplish it?
- What help will I need?
- What kind of data can be gathered regarding progress made?
- How will the evaluator know if the PIC has been met?

The evaluator should also bring proposed PIC's to the conference based on documentation gathered during the evaluation process. Each of the above questions should be discussed during the planning conference.

Monitoring is done periodically during the PIC process. This step determines how things are going and whether or not new direction is needed. During monitoring, the following should be kept in mind:

- Discussion should be frank - point to specifics.
- The evaluator must be prepared to offer suggestions to help the the evaluatee.
- The evaluatee should be prepared to identify reasons for failing to accomplish the specific measurable behavior.
- Redirection or modification of the PIC's may be needed.
- Review the tasks that lie ahead.
- Monitoring should serve as a reinforcement of appropriate behavior and as a motivator.
- Be aware of legal steps to be followed in case of a possible dismissal.



HOW MUCH INPUT SHOULD THE TEACHER HAVE IN DESIGNING THE PIC?

Research has shown that if teachers are to perceive that the PIC is something that will make them more effective, it appears helpful to strive for equal participation of the evaluator and evaluatee in its development. If this isn't possible, then the evaluatee should take the dominant role in the development of the PIC with the evaluator content to simply influence the PIC being developed. Having the evaluator develop the PIC without input from the evaluatee appears to be counter productive.

HOW DO I WRITE THE SPECIFIC MEASURABLE BEHAVIOR STATEMENT?

Several things must be kept in mind when writing specific measurable behavior statements. First, the statement should be sufficiently DELIMITED and SPECIFIC so as to give the evaluatee a reasonable chance to define it and achieve some results. Secondly, the statement should be CHALLENGING, yet REALISTIC and ACHIEVABLE. It should stimulate the evaluatee to reach out and improve his/her performance. However, there is no point in writing a specific measurable behavior statement which is so impossible that one faces certain defeat.

The third thing to keep in mind is to be certain that the results of the PIC must be MEASURABLE, so that the success or failure of it can be determined. Finally, you should emphasize PRIORITY NEEDS as it should relate to performance criteria. It should have meaning and be related to what the evaluatee is trying to improve/enhance.

Observable terms should be used to express what is to be accomplished. The following list of words is an example of terms which could be used:

| | | | |
|-----------|-----------|-------------|-----------|
| identify | describe | sort | apply |
| compare | summarize | name | repair |
| determine | combine | discuss | reproduce |
| translate | explain | write | list |
| define | use | demonstrate | organize |

Ambiguous words should be avoided. Examples of terms to avoid in writing specific measurable behavior statements are:

| | | | |
|------------|------|------------|------|
| appreciate | like | understand | know |
|------------|------|------------|------|

WHAT FORMAT SHOULD BE USED IN WRITING PIC'S?

A suggested format for writing Professional Improvement Commitments is defined as follows:

AREA: (These are the broad, general areas of performance commonly associated with teaching. Often used examples are: productive teaching techniques; organized, structured classroom management; positive interpersonal relations; and professional responsibilities.)

CRITERION: (The specific teacher behavior on which the PIC is based. This is one of the criteria from the summative evaluation report.)

PIC: (The statement of intent expressed in specific, measurable terms.)

PROCEDURES: (The plan of action, the steps that will be taken in order to accomplish the specific measurable behavior statement.)

TIMELINE: (Include the starting and completion dates.)

MONITORING: (The types of progress checks that are used in order to determine how things are going. Usually, monitoring consists of conferencing and classroom observations.)

EVIDENCE: (This is the documentation.)

STANDARD: (This is the model that the completed PIC should look like. It may be a district policy or procedure, a teaching model, an example from the research, or any other model that answers the question "How good is good enough?")

PRACTICAL EXAMPLES

Below are two situations involving teachers and their performances. Put yourself into the shoes of the evaluator who must sit down with each teacher at the end of the evaluation cycle and determine a PIC. Situation #1 is followed by a model PIC. Review the model and be prepared to write a PIC for Situation #2 at the upcoming training workshop.

SITUATION #1

Mrs. Star is a seventh grade teacher in your building. She has proven to be a capable teacher, well organized, and knowledgeable in her field. Throughout the year, in your examination of Mrs. Star's lesson plans, in observing her classroom, and in discussions with her, you have developed some concerns about several units Mrs. Star taught in seventh grade science. The units were Mrs. Star's "old favorites" and had nothing to do with what was in the district's prescribed curriculum.

You have spoken with Mrs. Star several times about this matter and the importance of following the prescribed curriculum. She replied that she understood the curriculum and believed that what she had to offer was much more interesting to the students in her class. She did indicate, however, that if she had to teach the "boring material in the text" that she would next year. Together you sit down to prepare a PIC.

The following is an example of a Professional Improvement Commitment which might be written for Mrs. Star. Study the example and be prepared to write a PIC for Mr. Baines in Situation #2.

AREA: Productive Teaching Techniques

CRITERION: Demonstrates effective planning skills.

PIC: For the next nine week grading period, the teacher will select learning content based on the instructional objectives which are found in the prescribed seventh grade science curriculum and which match student abilities.

PROCEDURES:

1. Review seventh grade science curriculum.
 2. Match prescribed objectives with students' abilities.
 3. Select learning content and list activities based on the chosen objectives.
 4. Review the list with the evaluator.
-

TIMELINE:

- Beginning date - August 1, 1985
 - Procedure #1 - By September 1, 1985
 - Procedure #2 - By October 1, 1985
 - Procedure #3 - By October 15, 1985
 - Procedure #4 - By November 1, 1985
-

MONITORING: Conferences will be held following procedures #2,3, and 4 as listed above.

EVIDENCE: The list of instructional objectives and learning content matched with student objectives.

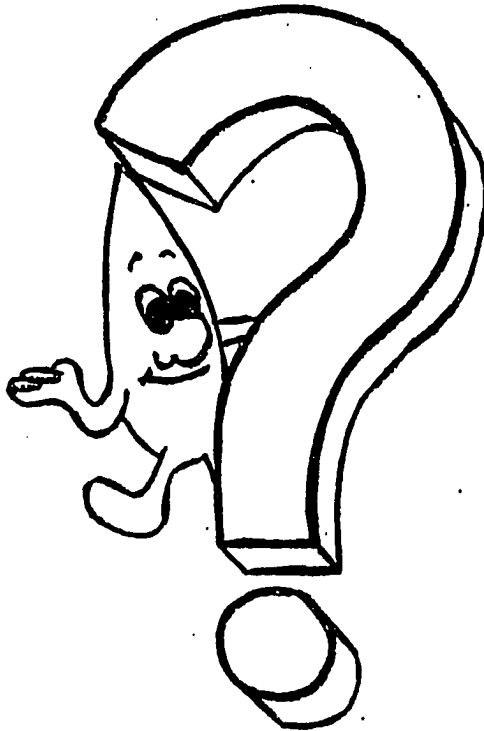
STANDARD: The district's seventh grade science curriculum guide.

APPRAISAL METHOD: The evaluator will compare the list and learning content with the standard. The evaluator will determine accomplishment based upon whether or not appropriate learning content (prescribed curriculum matched with student abilities) is covered in the seventh grade classroom.

SITUATION #2

Data gathered during the evaluation cycle indicate that Mr. Baines needs to work on improving student behavior in his classroom. His seventh and eighth grade students have been discipline problems all year and Mr. Baines has the most discipline referrals to the office.

Students have often complained that they didn't know what was expected of them in Mr. Baines' classroom. Mr. Baines argued throughout the year that students of this age should already know how to behave. He does agree that there have been problems and together you work on developing a PIC for the next school year.



Please indicate which of the following applies to you:

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1. Position
 Building
 Superintendent/Central Office
 Teacher
 Other (Please specify)

2. Level
 Elementary
 Secondary
 District Wide (K-12)
 Other (Please specify)

Write your Professional Improvement Commitment in the following space.

- Performance Area:

- Criterion:

- Goal:

- PIC (Observable, Measurable Behavior - What is to be done?)

- Procedures: (How will it be done?) Timeline:

- Progress Check: (How is it going?)

- Documentation/Appraisal Method (How will you know it was done?)

● Evidence:

● Standard:

● Appraisal Method:

PROFESSIONAL IMPROVEMENT COMMITMENT (PIC) ANALYSIS

- 1. Activity/Behavior**
 Not written as a target (0 pts)
 PIC stated in vague terms (1pt)
 PIC stated in terms of a specific
 behavior, but is not measurable (2pts)
 PIC stated in terms of a specific,
 measurable behavior (3 pts)

X 4 =

- 2. Procedures**
 Procedures not included (0 pts)
 Procedure is incomplete or vague (1 pt)
 Procedure is complete and clear (2 pts)

X 1.5 =

- 3. Timeline**
 Timeline is not included (0 pts)
 Timeline is included (1 pt)

X 1 =

- 4. Appraisal method for PIC accomplishment**
 Appraisal method not included (0 pts)
 Appraisal method is incomplete or vague (1 pt)
 Appraisal method is complete and clear (2 pts)

X 1.5 =

- 5. Target date**
 Target date not included (0 pts)
 Target date included (1 pt)

X 1 =

- TOTAL**

GREGORC

Style
DelineatorTM

by Anthony Gregorc, Ph.D.,
author of *An Adult's Guide to Style*.

Word Matrix

| | 1 | 2 | 3 | 4 | 5 |
|----|--|---|---|--|--|
| a. | <input type="checkbox"/> objective | <input type="checkbox"/> perfectionist | <input type="checkbox"/> solid | <input type="checkbox"/> practical | <input type="checkbox"/> careful with detail |
| b. | <input type="checkbox"/> evaluative | <input type="checkbox"/> research | <input type="checkbox"/> quality | <input type="checkbox"/> rational | <input type="checkbox"/> ideas |
| c. | <input type="checkbox"/> sensitive | <input type="checkbox"/> colorful | <input type="checkbox"/> non judgmental | <input type="checkbox"/> lively | <input type="checkbox"/> aware |
| d. | <input type="checkbox"/> intuitive | <input type="checkbox"/> risk-taker | <input type="checkbox"/> insightful | <input type="checkbox"/> perceptive | <input type="checkbox"/> creative |

| | 6 | 7 | 8 | 9 | 10 |
|----|--|---|---|---|--|
| a. | <input type="checkbox"/> thorough | <input type="checkbox"/> realistic | <input type="checkbox"/> ordered | <input type="checkbox"/> persistent | <input type="checkbox"/> product oriented |
| b. | <input type="checkbox"/> logical | <input type="checkbox"/> referential | <input type="checkbox"/> proof | <input type="checkbox"/> analytical | <input type="checkbox"/> judge |
| c. | <input type="checkbox"/> spontaneous | <input type="checkbox"/> empathy | <input type="checkbox"/> attuned | <input type="checkbox"/> aesthetic | <input type="checkbox"/> person oriented |
| d. | <input type="checkbox"/> trouble shooter | <input type="checkbox"/> innovative | <input type="checkbox"/> multi- solutions | <input type="checkbox"/> experimenting | <input type="checkbox"/> practical dreamer |

| a. | b. | c. | d. |
|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Total of above
CS AS AR CR

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Scoring

1. **Add Across.** Add across the "a." row of words in the 100 first five sets. Put that total in the top "a" column box. Do the same for the "b", "c" and "d" rows of the first set. Next, do the last group of five sets, putting the row totals in the bottom group of boxes.

Example

| | | | | | | | |
|----|---|---|---|---|---|----------------|----|
| a. | 4 | 4 | 1 | 3 | 2 | a | 14 |
| a. | 1 | 3 | 4 | 2 | 1 | | 11 |
| | | | | | | Total of above | 25 |
| | | | | | | | CS |

2. **Add Down.** Add the top and bottom box in each scoring column to get the total for that column.

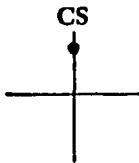
3. **Check.** If your combined total scores of CS (a), AS (b), AR (c) and CR (d) is greater or less than 100, please recheck your addition. All four columns should total exactly 100.

Graphing

Use the Style Profile below to graph your scores.

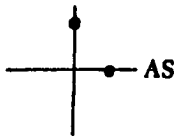
1. On the vertical axis leading toward 12 o'clock (Concrete Sequential) place a large dot by the number which corresponds to your total CS (col.a) score.

Example:



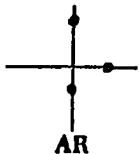
2. On the horizontal axis leading toward 3 o'clock (Abstract Sequential), place a large dot by the number which corresponds to your total AS (col.b) score.

Example:



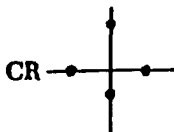
3. On the vertical axis leading toward 6 o'clock (Abstract Random) place a large dot by the number which corresponds to your total AR (col.c) score.

Example:



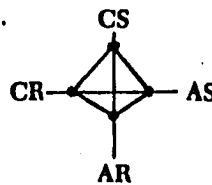
4. On the horizontal axis leading toward 9 o'clock (Concrete Random) place a large dot by the number which corresponds to your total CR (col.d) score.

Example:



5. Now join the dots with straight lines to form a four-sided figure.

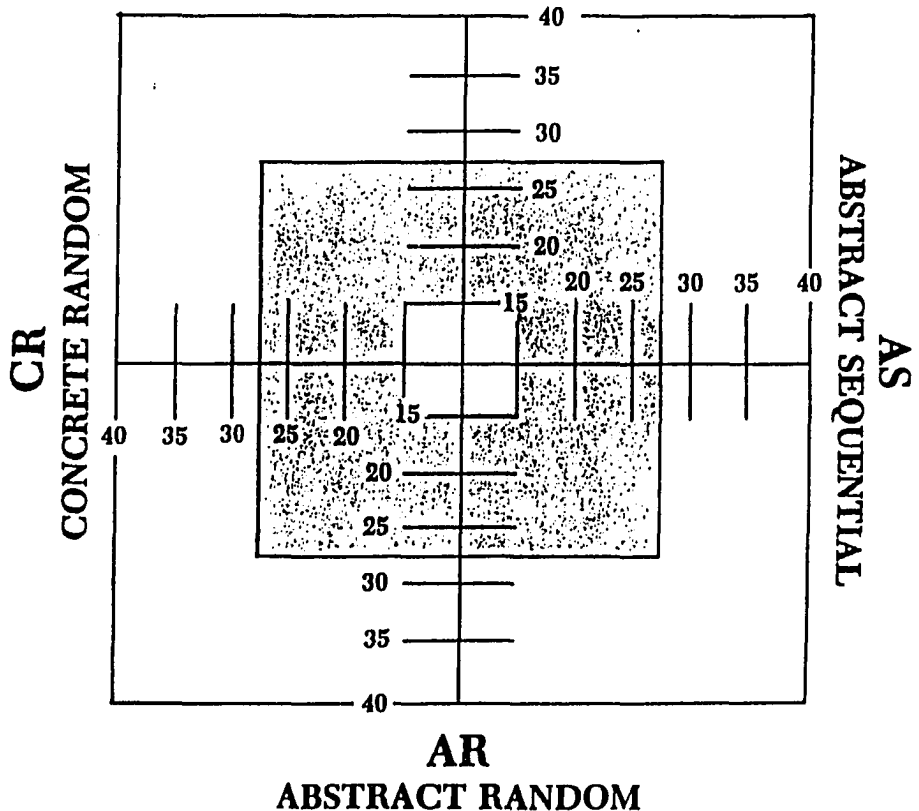
Example:



You now have a graphic representation of your dominant (27-40 points), intermediate (16-26 points) and low (10-15 points) style, or "mediation," channels.

STYLE PROFILE

CS
CONCRETE SEQUENTIAL



Style Comparison

The following brief synopses are condensed from *An Adult's Guide to Style*. They represent the dominant style characteristics of the four channels.

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| Category | CS Concrete Sequential | AS Abstract Sequential | AR Abstract Random | CR Concrete Random |
|----------------------------|---|---|--|--|
| WORLD OF REALITY | Concrete world of the physical senses | Abstract world of the intellect based upon concrete world | Abstract world of feeling and emotion | Concrete world of activity and abstract world of intuition |
| ORDERING ABILITY | Sequential step-by-step linear progression | Sequential and two-dimensional; tree-like | Random non-linear and multi-dimensional | Random three-dimensional patterns |
| VIEW OF TIME | Discrete units of past, present, future | The present, historical past, and projected future | The moment: time is artificial and restrictive | Now: total of the past, interactive present, and seed for the future |
| THINKING PROCESSES | Instinctive, methodical, deliberate, structured | Intellectual, logical, analytical, rational | Emotional, psychic, perceptive, critical | Intuitive, instinctive, impulsive, independent |
| VALIDATION PROCESS | Personal proof via the senses; accredited experts | Personal intellectual formulae; conventionally accredited experts | Inner guidance system | Practical demonstration; personal proof; rarely accepting of outside authority |
| FOCUS OF ATTENTION | Material reality; objects of value | Knowledge facts, documentation | Emotional attachments, relationships, and memories | Applications, methods, processes and ideals |
| CREATIVITY | Product, prototype, refinement, duplication | Synthesis, theories, models and matrices | Imagination, the arts, refinement, relationships | Intuition, originality, inventive, and futuristic |
| APPROACH TO CHANGE | Slightly adverse; speculative, hesitant and slow | Notoriously indecisive, cross-checks, deliberation, fence-straddler | Subject to emotions, level of interest; critical or impressionable | Open and amenable, often instigator, "rolling stone," "trouble shooter" |
| APPROACH TO LIFE | Realist, patient, conservative, and perfection-oriented | Realist; serious, determined, logical, and intellectual | Idealist; emotional, exuberant, transcendent, and intense | Realist/Idealist; telescopic attitudinal, inquisitive, and independent |
| ENVIRONMENTAL PREFERENCE | Ordered, practical, quiet, stable | Mentally stimulating, ordered and quiet, non-authoritative | Emotional and physical freedom; rich; active and colorful | Stimulus-rich, competitive, free from restriction, amenable |
| USE OF LANGUAGE | Literal meaning and labels; succinct, logical | Polysyllabic words; precise, rational; highly verbal | Metaphoric, uses gestures and body language; colorful | Informative, lively, colorful; "words do not convey true meaning" |
| PRIMARY EVALUATIVE WORD(S) | Good | Excellent | Super, Fantastic, Out-Of-Sight, Dynamite | Superior, Great |

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LIST YOUR STYLE POINTS

Concrete Sequential (CS) _____

Abstract Sequential (AS) _____

Abstract Random (AR) _____

Concrete Random (CR) _____

Evaluating and Improving Teacher Performance. (Videotape). ASCD, Arlington, Virginia, 1981. "Part 2 Practice Tape. Cheryl Lindholm - 3rd grade reading." 20 minutes.

Seventh Grade Social Studies - Practice Tape. (Videotape). Georgia Assessment Project, University of Georgia, Athens, Georgia, 1979. 30 minutes.

Effectively Implementing a Lesson Plan. (Videotape). Iowa State University Research Foundation (ISURF), Iowa State University, Ames, Iowa, 1986. Part 2. 30 minutes.

Before viewing, participants were told to view the tape and record upon timeline sheets provided activities of the teacher, students, and concepts taught. After viewing the tape, participants were reminded that this was simulation, that no principal under real circumstances would evaluate a teacher's performance and propose a PIC following only one classroom observation.

For training purposes, they were asked to assume that they had done a complete year's observation/evaluation activity. Every time they gathered data, the performance was at exactly the same level they had just observed in the videotape. Then they were asked to write a PIC (job target or professional growth plan) covering each of the items on the two-part (NCR) form provided.

APPENDIX B. ADDITIONAL TABLES

Table B.1. Means and standard deviations of PIC ratings for positions on Test 1

| Position | N | Mean | SD |
|-------------------------------|----|------|------|
| Building principal | 24 | 8.11 | 3.10 |
| Central office/superintendent | 6 | 7.56 | 6.24 |
| Teacher | 0 | -- | -- |
| Other | 6 | 8.11 | 2.97 |

Table B.2. Analysis of variance of PIC ratings by position on Test 1

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 2 | 0.77 | 0.0553 |
| Residual | 33 | 13.93 | |

Table B.3. Means and standard deviations of PIC ratings for positions on Test 2

| Position | N | Mean | SD |
|-------------------------------|----|-------|------|
| Building principal | 24 | 9.97 | 3.69 |
| Central office/superintendent | 4 | 13.38 | 5.12 |
| Teacher | 0 | -- | -- |
| Other | 2 | 14.00 | 0.95 |

Table B.4. Analysis of variance of PIC ratings by position on Test 2

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 2 | 31.58 | 2.1760 |
| Residual | 27 | 14.51 | |

Table B.5. Means and standard deviations of PIC ratings for levels on Test 1

| Level | N | Mean | SD |
|--------------------|----|------|------|
| Elementary | 16 | 9.24 | 3.29 |
| Secondary | 12 | 6.14 | 1.47 |
| District-wide K-12 | 5 | 7.97 | 6.89 |
| Other | 3 | 9.11 | 2.77 |

Table B.6. Analysis of variance of PIC rating by level on Test 1

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 3 | 23.29 | 1.9038 |
| Residual | 32 | 12.23 | |

Table B.7. Means and standard deviations of PIC ratings for levels on Test 2

| Level | N | Mean | SD |
|--------------------|----|-------|------|
| Elementary | 8 | 9.92 | 4.55 |
| Secondary | 16 | 10.18 | 3.44 |
| District-wide K-12 | 5 | 12.80 | 4.61 |
| Other | 1 | 14.67 | -- |

Table B.8. Analysis of variance of PIC rating by level on Test 2

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 3 | 15.71 | 1.0016 |
| Residual | 26 | 15.69 | |

Table B.9. Means and standard deviations of PIC ratings for learning styles on Test 2

| Style | N | Mean | SD |
|-------|----|-------|------|
| CS | 17 | 10.10 | 4.57 |
| AS | 3 | 12.56 | 2.51 |
| AR | 0 | -- | -- |
| CR | 5 | 10.47 | 4.25 |

Table B.10. Analysis of variance of PIC ratings by learning style on Test 2

| Sources of variation | df | Mean squares | F-value |
|----------------------|----|--------------|---------|
| Major | 2 | 7.71 | .4060 |
| Residual | 22 | 18.98 | |