This document presents a model for a program to guide teachers in effective self-evaluation. In this structured program, the teacher is expected to write course, unit, and daily lesson plans incorporating behaviorally stated objectives, which communicate his or her instructional intent. With the help of a trained observer-evaluator, the teacher is able, after the instruction period, to examine the results achieved and evaluate his/her own strengths and weaknesses in accomplishing the stated goals. Practice in this model program of inservice teaching should enable teachers to become proficient in evaluating their own performance in the classroom and improve their teaching skills. (JD)
Paper

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THE USE OF TEACHER EVALUATION TO IMPROVE INSTRUCTION

by

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Teacher evaluation or the act of determining a teacher's effectiveness is one of the most controversial issues in education. Much research has been conducted in this critical area of the professional preservice and in-service teacher's development but educational research has a history of not being much help to the classroom teacher. As recently as the late 1950's, Long, in a review of the literature on teacher effectiveness, commented that if all the preceding twenty years were wiped out overnight it would make virtually no difference. However, the nature of this literature has changed since 1960, and a major reason for this change appears to be the increasing use of the behavioral approach to lesson planning and its implementation along with systematic observation for the purpose of instructional self-improvement.

There is no one answer to the question of what good teaching is and who should evaluate teachers, but teachers universally agree that they must evaluate themselves. The purposes of any type of teacher evaluation, after all, are to determine how effectively the objectives of the teaching act are being met and to provide an informational basis for modification and improvement.

Teacher recognition of the necessity for self-evaluation, unfortunately, is not always accompanied by the skills necessary for such analysis. The teacher, along with the principal, department chairperson, grade chairperson, master teacher or team leader responsible for the evaluation of instruction in the school system must possess evaluative skills of an objective nature in order to communicate effectively with each other regarding specific elements in the teaching-learning situation. For all practical purposes, subjective assessments of teaching have often been the only basis for teacher evaluation other than student performance. In recent years, this absence of objective evaluative techniques has been recognized by all concerned and progress has been made in devising fair, objective methods for the purpose of improving instruction.


In 1969, the writer inaugurated a different type of program for the internship preparation of teachers at Stetson University, DeLand, Florida. Approximately 110 undergraduates from the Colleges of Liberal Arts and Music complete the program each year. A basic component of the model, which has undergone several revisions as the result of continuous field testing and evaluation, is the use of self-evaluation to improve instruction. The evidence supports the contention that through the use of the behavioral approach\(^1\) to lesson planning and its implementation along with various observation systems\(^2\), the teacher and supervisor can look at the teaching act from several points of view with good results. These dimensions of the teaching-learning situation include planning, verbal interaction, non-verbal behavior, cognition levels, domains, use of time, classroom management, self-concept and types of questions asked. The use of the Assessment of Instruction (Appendix, p. iv-v) used at Stetson allows one to focus in upon the kinds of practices the teacher brings to the classroom such as individualizing instruction, other instructional strategies, motivation, preassessment, course, unit, and daily lesson plans, behavioral objectives and types of student evaluation. Teachers who have undergone this training report that they are indeed aware of and able to control their own teaching behavior to the extent that they do a better job of determining where the learner is academically. The amount of progress made in achieving instructional goals increases dramatically.

It would seem logical that public school systems which have resources for the inservice training of teachers might profit from an experiment with this method of evaluating instruction. The following process can be operationally understood by principals and teachers and improvements in teaching-learning situations seem to be worth the investment in time, resources and effort. Inservice points, college credit, pay or released time may be arranged by the school system for this purpose.

**Description of the Process of Teacher Evaluation**

The first phase incorporates the use of five modules or self-contained learning units. These are:

\(^1\)The behavioral approach is composed of (1) writing meaningful behavioral objectives in terms of observable student performance that can be measured, (2) pre-assessment of learners, (3) developing and implementing effective and appropriate instructional and motivational strategies for the facilitation of learning as prescribed in the behavioral objectives, (4) evaluation, and (5) revision of objectives, strategies, and test items in terms of evidence collected during the evaluation.

\(^2\)An observational system is defined as any technique, designed for the purpose of identifying, observing, classifying or quantifying specific variables of the classroom teaching-learning situation.
1. Teacher use of Guidance Services and Student Records for use in preassessment and gathering formal, base-line data.


3. Planning for Instruction.

4. Use of the Lecture Method to Present Information. Should also incorporate other methods appropriate for the curricular area such as: Simulation Games, Role Playing, Inquiry, Discussion, etc.

5. How to Teach a Concept Using Examples and Illustrations

6. These and other modules have been developed by the author in the areas of Audio Visual Aids, Nonverbal Teaching Behavior and its Assessment, Classroom Management and Discipline, The Classroom Teacher and Special Education, Action Research in the Classroom for the Beginning Practitioner in Education, Incorporating the Process of Valuing in the Curriculum and The Use of the Concept of Career Education as a motivating factor in Developing Units of Instruction. These and others may be used in this phase if necessary or desirable, and if time permits.

These modules are self instructional and it should take inservice teachers about twelve hours to complete the first five. Most teachers can demonstrate competency to a certain degree in each of these areas. The Assessment of Instruction may be used by the teacher and designated evaluator as a point of departure for discussion during the post observational critiquing session.

In the second phase, the teacher is required to record, categorize and interpret the verbal interaction which takes place during an instructional period. It usually takes ten or more hours to learn to use the following type of systematic observation.

The Reciprocal Category System of Interaction Analysis (RCS), is used for the purpose of providing objective feedback on this dimension.

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3Margaret W. Horton, A Competency Based Student Teaching Program at Stetson University (DeLand, Florida: Stetson Press, 1975).

of teaching. A plotted matrix with its three ratios is used along with the Assessment of Instruction and the teacher's course, unit and daily lesson plans to provide objective information for self-evaluation. Research studies indicate that teachers who have been taught to use interaction analysis are found using significantly more verbal behaviors associated with higher student achievement and have positive attitudes toward their students and school. The ultimate value of the RCS is the use a teacher makes of the skills and awareness which is developed.

A plotted matrix of a segment of classroom interaction along with the teacher's lesson plans and Assessment of Instruction may be found on pages i-v of the appendix.

The third phase of this model requires that the teacher participate in a microsimulation. This is a controlled teaching experience in which the teacher presents a concept for a twenty minute time period to 5-10 role-playing peers in a laboratory setting. The twenty minute "teach" is audio and video taped for subsequent analysis. Copies of critiques are available for your perusal at the Product Seminar following this topic seminar.

DIRECTIONS FOR SIMULATED TEACHING

Terminal Performance Objectives

As a result and in culmination of their participation in this workshop, participants will:

1.0 Prepare and teach two twenty minute lessons in a simulated setting according to the following conditions and instructions for each lesson:
   a. State behaviorally and teach for at least three daily objectives.
   b. Select and plan instructional strategies which you can defend as being appropriate for facilitating the type of learning described in your stated daily objectives.
   c. Measure student learning by means of a valid evaluation instrument which measures the learning described in your daily objectives. Provide each class member with his own personal copy of the instrument rather than dictating or writing the test on the chalkboard.
   d. Prepare a model matrix showing the predicted verbal interaction patterns you plan to generate while teaching. Build the model matrix using any of the techniques demonstrated in this workshop.

2.0 Be able to evaluate your teaching performance using the directions for preparing critiques as a guide. Subsequently, using the special sheets provided, prepare a written evaluation of your overall teaching performance.
Format to be Used in Microsimulation

1. Describe your hypothetical class from information gathered during visit to an actual class. Use format provided for this purpose.
2. Assign timer.
3. Begin audio and video taping of twenty minute "teach."
4. End with assignment. Stop tape.
5. Give 5 minute exam.
6. Do perception sheets.
7. Turn tape on for 5 minute oral critique of "teach."

Teacher begins critique by taking the microphone in hand and briefly stating the positive and negative aspects of the "teach."
Each member of the simulation group does the same.

The fourth and final phase of this model incorporates the use of information gathered to analyze and evaluate the teaching performance.

The critiques should be written using the format shown on the transparency. The teacher then engages in a dual critiquing session with an administrator who reads the teacher's description, justification, and analysis of the "teach." They then watch a playback of the video microsimulation and the teacher identifies the strengths and weaknesses of the teaching act as he or she perceives them. The name of the game here is "honesty." The teacher is not evaluated—he or she evaluates! The effective and ineffective elements of the lesson are discussed in a non-threatening environment and the way is paved for continuous self-evaluation. Rapport is established with the administrator-observer on critical parts of the teaching-learning situation and a productive relationship is established as the teacher sets about building on strengths and eliminating, as nearly as possible, the weaknesses. Remember now—these are the strengths and weaknesses as seen by the teacher. The audio and video microsimulations, the plotted RCS matrix and the Assessment of Instruction are only ways to help the teacher see himself or herself realistically and as objectively as possible in the teaching role. The uses made of this information is the teacher's own business, although if a mutual respect and effective communication results from this inservice program, the teacher will ask for help from administrators when necessary.

The author has found that a large majority of teachers readily identify weaknesses but have great difficulty in finding anything they do that suits them. They have set, often subconsciously, high goals for themselves. It is interesting to note that teachers may find themselves using methods and types of verbal and nonverbal behaviors they deplore in others; and so it is that "seeing ourselves as others see us" becomes a very real type of learning experience. The administrator or instructor involved in the playback and dual critiquing session is placed in a position of being "the good guy." It is necessary for this person to listen, ask questions when appropriate and find strengths the teacher has failed to...
Behavioral change occurs only when the individual recognizes the need for change— not necessarily when students, fellow teachers, administrators or patrons of the school call a discrepancy in the teacher's role to one's attention. Most of us resent unsolicited advice from people who have a sketchy knowledge (i.e., one or two hour long observations per academic year) of our teaching situation. This type of help affects us in much the same way as does back-seat driving or kibitzing during a bridge game! The operational framework employed in this model assists the teacher and administrator in communicating about instruction. Each area identified in the Assessment of Instruction and RCS Matrix serves as a point of departure for discussion about the teaching act. The lesson plan which includes, among other things, behaviorally stated objectives as well as student and teacher activities serves as the standard of excellence by which the teacher evaluates and is evaluated. This then is the criterion-referenced strategy for self and other evaluation of the teacher and teaching.

The teacher then learns skills and methods deemed desirable by himself or herself and the school system. These competencies are described and incorporated into phases one and two of this inservice program. Competencies are demonstrated in phase three in both written and performance tests in a microsimulated setting. It is in phase three that the teacher synthesizes the knowledge and expertise he or she has gained from past experience and from this inservice program.

The RCS is used as a mirror in which the teacher can see himself or herself interacting with students. The teacher can determine from the ratios whether or not student self-concept was enhanced or damaged; the teaching style was direct or indirect, and if the lesson was student or teacher centered. It is possible to determine among other things the level of thinking engendered and the amount of time spent on classroom management procedures. The plotted matrix reflects the instructional strategy of the teacher. As it is used here, an instructional strategy is defined as a set of interrelated, sequential instructional activities or methods which serve the purpose of teaching a specific lesson. It is in this way that the teacher can acquire meaningful feedback in planning and controlling his or her own teaching behavior. Irrelevant, time-wasting activities diminish and the teachers do what they say they will do. Most teachers know better than they do. In short we have learned to "talk a good game!" It is this writer's contention that with this type of performance-based inservice program, teachers will learn to put theory into practice and let their actions speak more effectively than words.

Bruner asserts that the goodness of a structure depends upon its power for simplifying information, for generating new propositions, and for increasing the manipulability of a body of knowledge. Structure must
always be related to the status and gifts of the knower. Viewed in this way, the optimal structure of a body of knowledge is not absolute but relative.

The operational framework for this inservice program is simple to follow. In phases one and two the teacher's competencies are identified and self-instructional. These include the knowledge, comprehension, and application levels of cognition as well as elements of the affective and psychomotor domains. Phase three utilizes the synthesis or creative, intellectual level of thinking when the teacher is required to put it all together and teach a concept. Simple directions are given to facilitate the microsimulations but this phase is open-ended. The teacher selects the concept, the hypothetical class and plans the instructional strategy. Five to ten role-playing peers assemble in a small classroom where the "teach" is recorded. The instructor or administrator in charge is not present during the sessions. The simulation groups work very well because each one must teach and assist the others by participating in their "teaches." The short oral critiquing sessions are begun by the teacher citing the pros and cons of the "teach" and each role-playing peer does the same. This constructive criticism may be accepted or rejected by the teacher as he watches and listens to the playback one or more times. Data is collected and used by the teacher in analyzing and evaluating himself or herself in the teaching role.

The instructional strategy of this inservice program begins with large group instruction which terminates with a written examination at the knowledge, comprehension, and application levels of the Cognitive Domain. The participants then break into simulation groups of 5 to 10 for teaching and recording. This section primarily emphasizes the-synthesis level while the dual critiquing sessions employ the use of analysis and evaluation on an individual basis. It is in this way that administrators and consultants can demonstrate the type of teaching which they advocate. In short, they do "practice what they preach" and there is a measurable amount of behavioral change by the participants in desirable directions.

One additional objective of this program, over and beyond the mastery of a body of knowledge and demonstrating competency in the teacher role is, as Bruner puts it, "to create a better or happier or more courageous or more sensitive or more honest teacher from the context of education in a democracy." The author feels that learning should be enjoyable and that an enthusiastic teacher makes learning fun.

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Teachers are professionals and they will apply themselves diligently to the task of self-improvement if they feel that an inservice program will aid them in their work with students. This program helps teachers convert the instructional strategy and knowledge gained into economical conceptual structures of their own and increases the likelihood that participants will recognize the transferability of what has been learned to their own teaching environments.

The focus of this inservice model is upon change within the school to retain original members and alter their behavior and attitudes in accord with the desired change. Giacquinta cites evidence which indicates that organizational innovations in schools appear to take place with minimal deliberate discarding of members. These changes occur more readily if changes in roles and statuses of members are not threatened. The use of teacher evaluation to improve instruction as proposed in this model, is simply another way to do a task which is already provided for within the school system. This change does not involve reorganization it does involve a revamping of one facet of the school operation.

The time and effort expended to enhance the use of teacher evaluation for improving instruction pays great dividends in student achievement, teacher effectiveness, higher teacher morale, and open, productive communication between teachers and administrators.

SUMMARY AND CONCLUSIONS

The standard of excellence for an evaluation is the teacher's behaviorally stated objectives. Course planning should include content and competencies for the year and the unit plans or segments of learning should contain directions, objectives, content and standards of performance for class and students as well as teacher and student activities.

The teacher uses student achievement as the criterion referenced yardstick for evaluation and the modification of instructional techniques and content. The Assessment of Instruction included in the appendix may be checked off by the teacher. In this instrument, we have identified seven components which all teaching-learning situations have in common and two six-hour day workshops will provide the necessary preparation for this part of the evaluative process. Systematic observation in the form of the Reciprocal Category System of Interaction Analysis provides information to the teacher. This in turn is used to make judgements on whether or not the teacher is able to control his teaching behavior to the extent that he in fact does what he says he will do. The teacher can see

certain aspects of the teaching role through a plotted matrix which mirrors the verbal interaction which took place in the classroom. The "Assessment of Instruction" combined with the plotted matrix and the daily lesson plan comprise the information necessary under this model for the teacher to make valid judgements regarding a specific teaching act.

Our position is that if a teacher is able to write course, unit and daily lesson plans incorporating behaviorally stated objectives which communicate his or her instructional intent in all three domains; and if this teacher has an operational understanding of systematic observation in the form of interaction analysis, nonverbal teaching behavior and a taxonomic analysis of the intellectual processes then that teacher will be able to do effective self-analysis.

Preassessment, both formal and informal, is an essential prerequisite to planning. The model includes 1) realistic planning at the course and unit level 2) preassessment in pre-school planning using the information from cumulative folders of students assigned to the teacher 3) devising appropriate instructional strategies for implementation of the lesson 4) evaluating students' progress 5) augmenting or revising the instructional goals if necessary. The reader is referred to the self-instructional guidance and planning modules\(^7\) for procedures to follow in preassessment and planning.

Field testing along with the results of longitudinal studies have substantiated the value of using the operational framework in this model for training preservice and inservice teachers. All of the afore mentioned aspects of the teaching-learning situation are used by the teacher in assessing the extent to which his or her instructional objectives are achieved. Systematic observation in the form of interaction analysis, the taxonomy of cognitive behavior, nonverbal teaching and the Assessment of Instruction all help the teacher to become aware of and to more effectively control his own teaching behavior. Much evidence has been compiled in recent years to support the idea that a teacher who knows an observation system - who has at least one feedback loop established - teaches differently than one who does not. It is our contention that this is the case and that these teachers are more flexible and effective. They build self-concept in their students, motivate them to learn, and control their own teaching behavior. They have fewer discipline problems and become more accountable in terms of student performance.

\(^7\)Margaret W. Horton, A Competency Based Student Teaching Program at Stetson University (DeLand, Florida: Stetson Press, 1975), p. 1-25.
Supervisors of instruction whose function it is to evaluate teachers and teaching find this model to be very helpful. The teacher identifies strengths and weaknesses while the administrator is in a more advantageous position regarding assistance in improving instruction. The development of skills for use by the teacher and supervisor is not a difficult task. Eight to fifteen hours of instruction is generally sufficient to learn to use most systems and a two-week workshop using this model pays dividends in teacher morale and improved teaching and learning. Self-evaluation based on objective information is indeed more effective than punitive or ambiguous subjective evaluation.
DAILY LESSON PLAN

Teacher Mr. Neyer  Subject  P.E. - Volleyball

Section  Grade 9-12  Room Courts  Period 2-6  Date 9/27/76

TITLE OF UNIT: Power Volleyball

OBJECTIVES TO BE ACHIEVED TODAY:

1. The class will make contact with the proper underhand serving manner at least 60% of the time with no student contacting the ball in the proper manner less than 40% of the time.

2. The class will make contact with the ball in the proper overhand serving manner at least 40% of the time with no student contacting the ball in the proper manner less than 20% of the time.

3. The class will score 80% or better on a written exam covering the underhand and overhand serves with no student scoring less than 60%.

ACTIVITIES IN PROGRESS:

Informal lecture, demonstration, student practice and test

MATERIALS TO BE USED:

12 Volleyballs, study sheets and written tests.

<table>
<thead>
<tr>
<th>ANTICIPATED USE OF TIME</th>
<th>TEACHER ACTIVITY</th>
<th>STUDENT ACTIVITY</th>
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</thead>
<tbody>
<tr>
<td>½ minute</td>
<td>Warm Class</td>
<td>Listening, Responding</td>
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<tr>
<td>3½ minutes</td>
<td>Lecture and demonstration of underhand serve, directions to group.</td>
<td>Listening, movement without ball</td>
</tr>
<tr>
<td>4 minutes</td>
<td>Observation of group and individual inst.</td>
<td>Practicing underhand serve with ball</td>
</tr>
<tr>
<td>4 minutes</td>
<td>Lecture and demonstration of overhand serve, directions to group.</td>
<td>Listening, movement without ball</td>
</tr>
<tr>
<td>4 minutes</td>
<td>Observation of group and individual inst.</td>
<td>Practice serve with ball</td>
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</table>
3 minutes
Review and questions
Review and questioning
1 minute
Explanation of assignment.
Listening

EVALUATION:
Written test at end of period
Performance evaluation during class

ASSIGNMENT:
Using study sheets, perform movement of each serve for 10 minutes at home.
### Situation Audio Teach

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | T |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

**Actual Totals in Sub Matrices**

- $T-T = \frac{202}{440} = 0.46$
- $T-S = \frac{18}{440} = 0.18$
- $S-S = \frac{17}{440} = 0.17$
- $S-T = \frac{80}{440} = 0.18$

### Predicted Ratios:

- $I/D = \frac{15}{203} = 0.07$
- $I/D = \frac{3}{64} = 0.42$
- $I/D = \frac{1}{19} = 0.05$

### Actual Ratios:

- $I/D = \frac{15}{10} = 0.57$
- $I/D = \frac{3}{19} = 0.17$
- $I/D = \frac{1}{19} = 0.05$

### Predicted in black

### Actual in red

### Predicted Ratios:

- $I/D = \frac{15}{203} = 0.07$
- $I/D = \frac{3}{64} = 0.42$
- $I/D = \frac{1}{19} = 0.05$

### Actual Ratios:

- $I/D = \frac{15}{10} = 0.57$
- $I/D = \frac{3}{19} = 0.17$
- $I/D = \frac{1}{19} = 0.05$
Purpose

1. To provide an operational framework for communication between person observed and observer regarding instruction.

2. To cooperatively evaluate the teaching-learning situation in terms of student performance.

Procedure:

University Supervisor will make at least three classroom visitations to observe each student teacher.

The amount of time spent in each classroom will be determined by the length of the class period.

The observer will place a check in the blank if the procedure is observed.

In the internship seminars, the teacher and observer will cooperatively assess this record of performance. In the event that an agreement is not reached, the teacher may request that an additional observation be scheduled at which time the lesson will undergo audio-taping.

This assessment record will be filed in your intern folder and will be used in making a summary report and joint evaluation of your field experience.

Not all of the areas can be (or necessarily should be) incorporated into one preparation for observation.

<table>
<thead>
<tr>
<th>Name of Teacher</th>
<th>Subject</th>
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<table>
<thead>
<tr>
<th>Observation time (minutes)</th>
<th>Observation Date</th>
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Brief description of instructional strategies:

RCS Ratios from Matrix: I/D _16_, S/T ________, Revised 1/d ________