ABSTRACT
             A system of evaluation which generates copious
information with minimal demands on teachers and administrators can
improve the quality of teacher assessment while lowering the tensions
associated with the process. Multiple-Strategies Model for Effective
Teaching is made up of 10 component parts. Each component represents
an element in a framework upon which effective instruction can be
built. Based on teaching effectiveness research and classroom
practice, the model has proven effective in training and retraining
teachers and is now proving highly useful as an inservice teacher
evaluation device. Because the model prescribes several specific
elements such as objectives, justification, and evaluation, teachers
can retain the plans in which these elements are designated as
evidence that they are using the preferred system on a regular basis.
When the model is used as a standard, the assessor can suggest that a
teacher focus greater attention on a particular area. When teachers
meet or exceed the standard, they can be rewarded appropriately; if
they fail to reach the standard, they can be directed toward specific
improvement based on the model. The components covered in the model
are: (1) classroom climate; (2) opening lessons: (3) instructional
objectives; (4) justification of content; (5) selection of content;
(6) teaching strategies; (7) review of material; (8) lesson
evaluation; (9) student achievement evaluation; and (10) classroom
management. (JD)

# Demystifying Teacher Evaluation:

# The Multiple-Strategies Model Used as an Assessment Device

by

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# Demystifying Teacher Evaluation:
## The Multiple-Strategies Model Used as an Assessment Device

Teachers and administrators alike are uncomfortable with the process of teacher evaluation. They question the validity of such evaluations, and lament the anxiety and hard feelings which can grow from unfavorable assessments. The consequences of such assessments can be devastating: teachers may lose opportunities for advancement or even employment; administrators may face faculty protest or litigation. There exists a clear need for improving the quality of assessment while lowering the tensions associated with it.

A similar need grows from the widely held belief that teacher behavior during assessment is not indicative of what they normally do in their classrooms. Curriculum, classroom climate, rules of behavior and other classroom dynamics often change when assessors are present, only to return to their former statuses following assessment. What is required is an evaluative system which can be employed over time, even when assessors are not present in the classroom.

A tertiary concern grows from the fact that administrators are often asked to make consequential decisions about teachers on the basis of sketchy information and limited evidence. A system of evaluation which generates copious information with minimal demands on teachers and administrators would do much to improve this situation.

Finally, when evaluators determine that improvement is required, they should offer teachers assistance in the form of specific suggestions. Dispensing platitudes or non-specific words of encouragement are of limited usefulness and do little to improve teaching skills. Moreover, when improvement in teaching is demanded in the absence of such specific assistance, administrators may find it difficult to defend any actions taken against teachers who do not demonstrate improvement. The Multiple-Strategies Model for Effective Teaching offers promise of meeting these needs through a teacher evaluation system equally attractive to teachers and administrators.

The Multiple-Strategies Model is made up of ten component parts. Each component represents an element in a framework upon which effective instruction can be built. The components can be carefully explained and demonstrated to a single teacher or an entire faculty, and then used as criteria in teacher evaluations. Based on teaching-effectiveness research and classroom practice, the model has proven effective in training and retraining

hundreds of teachers. Likewise, it is now proving highly useful as an inservice teacher evaluative device.

When teachers and administrators share common ideas about effective teaching, that is, when they speak the same teaching language, they feel more comfortable with their roles in the assessment process. Knowing what general components of classroom teaching are expected, teachers can exercise flexibility in planning and delivering lessons while being accountable for their products. Administrators on the other hand, know which elements of effective teaching they should look for and can offer specific suggestions for improvement when necessary.

Because the Multiple-Strategies Model prescribes several specific elements such as objectives, justifications and evaluations, teachers can retain the plans in which these elements are designated as evidence that they are using the preferred system on a regular basis. Occasional observation of classes should confirm that teachers are using the effective techniques associated with the model. Not only does this technique provide assessment over long periods of time, but it also produces far more hard data (through teacher-designed materials, student work and evaluator-generated documentation) than is normally available. When resources permit, evaluators and teachers may want to make video or audio tapes of lessons. Later the teacher and the assessor can review this material and talk about specific strengths and weaknesses.

Specification of improvements is possible when the model is used as a standard. The assessor can suggest that a teacher focus greater attention on a particular area. The assessor can be quite specific about what is needed, and can direct the teacher to re-read parts of the model in an effort to improve. In addition, the assessor can refer the teacher to staff development or other activities where skills can be refined. What separates this approach from others is the acknowledgement of a standard. When teachers meet or exceed the standard they can be appropriately rewarded. If they should fail to reach the standard, they can be directed toward specific and predictable improvements based upon the model. If improvement is not demonstrated after a reasonable time, the administrator has a wealth of information as support for appropriate action.

The Multiple-Strategies Model is the centerpiece of this plan. Like other models of teaching, it is research-based and has been extensively tested in elementary and secondary school classrooms.

Historically, teaching models have been named for the particular strategy of teaching which they emphasize, e.g. Role Playing, discovery, or Student-Team Learning. By contrast, the Multiple-Strategies Model for Effective Teaching specifies no particular strategy, but requires a teacher to consider and designate one or more strategies for each lesson. What is so unique and, I believe, so compelling about the Multiple-Strategies Model is the structure it provides to teachers.

As an undergraduate student being "taught to teach," I was presented with a wealth of information from myriad disciplines, little of which held meaning for me. As a result, my student teaching experience was a live-or-die exercise in discovery learning. That is, I was required to discover teaching. I do not believe this situation was unique to me or to the university at which I was a student. The university had instructed me in the conventional teacher-training curriculum including educational psychology, educational philosophy, educational measurement, and educational history all of which broadened my understanding and appreciation of my chosen profession, but which did little to prepare me for real teaching. Oddly enough, even my "methods of teaching" course did little more than discuss teaching in a theoretical, analytical manner. What I really needed was a reasonably prescriptive structure for teaching accompanied by supervised practice. It is just such a structure which characterizes the Multiple-Strategies Model for Effective Teaching.

Like the success of a building project, effective instruction depends upon careful planning, appropriate selection of materials, designation of specialized procedures and skill in the technique of putting everything together. The Multiple-Strategies Model offers teachers ten instructional prescriptions. Because these prescriptive elements are of a generic nature, they can be used successfully in virtually any instructional setting. By variably organizing, modifying, and emphasizing the elements, teachers have considerable latitude for making effective instruction interesting and fun.

In the following pages is presented a brief explanation of each component of the Model. (The original discussion of each component was written by the present author and Patricia L. Graham and published as ERIC Document Number: SP 028243, March, 1987.) More elaborative discussions are presented in the training program for the Model and in other materials being prepared for publication.

## Climate

In the Multiple-Strategies Model, "climate" refers to the total classroom environment, the sum of a consciously created environment and its often unintentional affective and physical dimensions. Such climate is always present in a classroom, but whether it aids or detracts from effective teaching is in part a function of its nature. The Multiple-Strategies Model and current research support the promotion of a positive, caring, and humane classroom climate.

Students function best in classrooms with teachers who enjoy working with students, who care about student needs, and who empathize with student problems. Moreover, effective teachers display genuine enthusiasm for their subject and offer students the opportunity to share in this enthusiasm. Because students have a natural inclination toward solving problems in which they have genuine interest, teachers should encourage student curiosity and interest. Moreover, a teacher's personal interest and enthusiasm can do much to promote positive student attitudes about learning.

In the Multiple-Strategies Model climate must be honest and consistent. A positive climate may be established but not maintained when a teacher opens a lesson on a friendly note only to move to an antagonistic posture toward students. A best climate is established at the first encounter with students. This might be done at the door to the classroom or in the hallway as classes are changing. Here it is important to be friendly, to display genuine interest in students and to be enthusiastic about the classroom events soon to begin. These positive attitudes must be maintained throughout the lesson, promoting positive teacher-student relations during class and sustaining them through dismissal.

Teachers must understand that students tend to reflect the affective dimensions they see in their teachers. Therefore, if teachers want their students to be enthusiastic about learning, to be courteous, and to care about others, they must exhibit these attitudes in their own behavior.

This should not be interpreted as encouragement toward frivolous or inappropriately familiar behavior. Effective teachers are not only friendly and caring, but businesslike. They define tasks for themselves and their students and teach to them.

As in the business world, the ideal boss is not only competent to get the job done, but also cares about others in the workplace. These same attributes are appropriate to the classroom.

Finally, a word about maintaining an appropriate climate under less than wholly positive circumstances. Consider a situation in which a student has misbehaved. How does the teacher maintain a positive climate? Use of Assertive Discipline (Canter, 1986) or other unobtrusive management techniques allowing the teacher to continue teaching without interference are recommended. Stopping a class to verbally discipline a student interferes with the flow of instruction and may destroy a positive climate. Teachers should strive to maintain a positive climate in all but the most uncommon circumstances.

## Opener

Maintaining student interest from the beginning of the lesson is a goal for which most teachers strive. One way of focusing student attention immediately and generating interest in the lesson is through the use of a motivational tool or "opener". An opener is a concrete object that is used to introduce a new concept at the beginning of the class. It serves as a starting point from which students draw relationships between the concrete object and the topic of the day. It also serves as a way of capitalizing on students' curiosity and observational skills. The concept of opener is illustrated in the following example:

> The teacher's instructional objectives for the day focus on the Addition Principle of Equality. As a motivator, she produces a football and asks students how many of them are fans, have attended a college or professional game, or enjoy watching football on television. After a brief discussion, she explains that the construction of a football field requires a firm understanding of certain mathematical principles by the architects, engineers, and construction workers involved in planning and constructing the field. She then explains how the Addition Property of Equality is vital for accuracy in construction and engineering.

The value of using concrete objects in teaching is widely accepted as valid educational practice. Particularly in areas of study that are more abstract in nature, such as in mathematics, concrete objects can help students draw important relationships between mathematical concepts and their every-day uses. For example, when introducing a lesson on the characteristics of a circle, the teacher might focus the students' attention on a bicycle wheel. Such an object is familiar and interesting to most students, and ties in with the teacher's main objective which is to introduce students to circles and their many uses. Similarly, in a science class, to illustrate the concept of static electricity, the teacher might

blow up a balloon in front of the class, rub it briskly on a student's sweater and stick it to the wall. A lively discussion concerning why the balloon adheres to the wall surely would ensue.

Novelty is an important component of motivation. There is actually a part of the brain, known as Magoun's brain, that is stimulated by novelty. Unfortunately, studies of schools indicate that students are given few experiences that are novel in nature (Goodlad, 1984). In studies with middle-aged adults, Flanagan (1986) found that individuals most frequently remembered experiences which they found to be both involving and interesting. Openers have the ability to generate such interest and at the same time serve as motivating introductions to lessons.

## Instructional Objectives

Teachers should begin the design of courses by first thinking about the cognitive products they would like to address in a final examination. Teachers should establish clear cognitive purpose and direction every time they offer instruction to students. Such purpose and direction is best created through use of instructional objectives.

Teachers and students alike can benefit from proper use of instructional objectives. For teachers, objectives serve as indicators of course content, as monitors of student progress, as directors of student evaluation, as guides to assignments and activities, and as conveyors of planning to students, administrators, or other teachers. Students benefit from instructional objectives because they are told exactly what is expected of them, under what circumstances they are to demonstrate their understandings, and the quantity of information for which they are responsible.

In the Multiple-Strategies Model, teachers are encouraged to have students read instructional objectives aloud in class before the content is taught. In this way the instructional objectives become the purpose of the lesson, and students can focus their attention on this particular set of learning tasks. The knowledge of what is to be learned can provide students with confidence. They are more likely to believe themselves capable of learning when the specifics of the learning tasks are clear.

It is important to acknowledge that cognitive outcomes are not a teacher's sole objective. In fact, promotion of affective considerations are both appropriate and important

in classrooms. Nonetheless, cognitive outcomes are best suited to quantitative measurement and should be the principal determiner of student grades.

## Justification

As the decision maker in the classroom, it is the teacher's responsibility to justify the content to be taught and, moreover, to be prepared to provide this justification to students. At some point every teacher has had students ask, "Why do we have to know this?" or "Why is this important?" The effective teacher goes beyond justifying the inclusion of content with abstractions or pedantic rationales such as "You need to know this because it will be on the test," or "This will be important for the next mathematics course you will take." Rather the teacher is able to provide students with real-life uses for subject matter. The following is an illustration of a teacher's justification for studying line segments. He first focuses the attention of the class on a set of blueprints which he presents as his opener. When he is satisfied the class is focused, he says . . .

> ". . . Knowledge of line segments is a necessary skill in drawing and understanding plans. Before any construction takes place, architects and engineers express their ideas on paper using line segments. These ideas serve as plans for constructing objects, e.g., homes, schools, classrooms, even the pencils or pens used for writing."

Teachers must offer compelling answers to student questions about the relevance of material. Such questions should not be seen as threats to authority, but as opportunities for reflection, i.e. "Why am I spending valuable class time on this information?" The teacher's answer to such a difficult question should determine course content.

The inability of students to see applications beyond the classroom has been a growing concern within the field of education. The College Board (1985) expressed its concern in the area of mathematics when it wrote:

> Students need to see mathematics applied to problems outside the classroom and how people in various careers use mathematics. No one can anticipate the particular applications that a student will need as an adult, but every student can be given practice in applying a variety of mathematical ideas and methods . . . students need to learn not only how to use mathematical techniques but also how to recognize when they might be helpful. (p. 20-21)

In this vein Goodlad (1984) found that students fail to recognize relationships between facts and important concepts and how those connections might assist them in their futures. (p. 237) In the Multiple-Strategies Model, teachers are required to consider why material is

important for students to learn. Moreover, they must convince students that this information is of personal value to them.

Justifying the relevance of specific content can assist in other aspects of classroom life. Glasser (1986) points out that many classroom management problems stem from student inability to draw relationships between the subject matter and life. He contends that if students can be convinced of the validity of the material, they will work hard and take more responsibility for their learning. These findings and others support the contention that teachers should justify learning of the material they teach.

## Content

Selection of the content is possibly the most important decision a teacher makes. Considering the universe of possibilities, a teacher must choose those segments which are appropriate to the academic needs of students. Certainly, the teacher may turn to a number of sources for assistance in choosing content, but in the final analysis the classroom teacher makes the hard choices. The teacher must choose not only the specific content, but must decide which aspects of the content will receive greater or lesser emphasis.

In many school settings, content is mandated. Nonetheless, a classroom teacher can exercise great influence over a seemingly fixed curriculum. By varying emphases within the content, selecting from various teaching strategies, or differentially weighing evaluations, teachers reinforce their authority over content.

Although this model does not prescribe content, it does encourage teachers to make content decisions with care. That is, content should be relevant to students' lives, appropriate to their projected future needs, compatible with their learning capabilities and reflective of the current thought of leading scholars. Although teachers should take advantage of the motivation associated with teaching material in which they have personal interests, it is important that they not place inordinate emphasis on these elements of content at the expense of other equally important topics.

## Strategies

Teaching models have historically been named for the particular strategy they promote, e.g. Role Playing, Jurisprudential, discovery. Likewise, the Multiple-Strategies

Model is so named because it invites teachers to select from several strategies the one appropriately tailored to their needs.

Strategies should reflect the personality and skill level of the teacher as well as meeting the needs of students and the subject matter. Several researchers urge teachers to use a wide variety of teaching methods or strategies. It may be more realistic, however, to provide teachers with a limited but effective repertoire that suits their personalities, the needs of their students, the subject matter, and the classroom situation. Classroom research substantiates that only one strategy, that of teacher lecture, dominates instruction and is used approximately 85 percent of the time (Goodlad, 1984). Zahorik (1986) presents a compelling argument when he suggests that teachers ought to use a few compatible strategies reflective of their own beliefs about the aims of education, the nature of students, and the acquisition of knowledge. For example, instruction and supervised practice in teaching using direct instruction or Student Team Learning (STL) can provide the opportunity to accommodate different learning styles and goals while being interesting and motivating to both teachers and students.

## Review

The Multiple-Strategies Model promotes diagnostic review of material immediately before and following instruction and in summary form at the end of units. Review should be seen as an integral part of instruction. Used immediately after instruction, it can provide a powerful formative assessment of student learning. Random sampling of students during review is encouraged. Several students can be asked to demonstrate their understanding of each instructional objective covered in each lesson. When students provide inaccurate information or demonstrate incomplete understanding, teachers should direct a related question to one or two other students. Teachers should return to students who offer inaccurate responses after the correct information has been found. This technique serves as motivation for many, but should never be used to embarrass or otherwise upset students. In most cases, teachers should invite students to reveal the analytical processes they employ in arriving at specific answers, decisions or examples. In this way, teachers can more accurately diagnose strengths or deficiencies and, when necessary, offer appropriate remedial instruction.

Upon completion of a number of related lessons, a summative review should be used. In this procedure, the teacher has students read and respond to all instructional

objectives in turn. Although many of the same diagnostic and remedial benefits of formative review are present, the summative review provides additional opportunities for gaining insight into the meaning of objectives and the relationships among them. By placing emphasis on the instructional objectives, their justifications, and relationships, the student arrives at an enriched understanding which can be of greater inferential value and may be retained longer than less meaningful material.

Finally, teachers should provide students with frequent opportunities for practicing the skills as they review. When manipulation of formulas is involved, students should be provided with numerous, nonthreatening opportunities to practice the targeted skills. When essays or short answers are required, students should be given frequent invitations to write. The comfort condition which grows from such practice decreases the likelihood that subsequent evaluations will be flawed by the anxiety that can grow from procedures unfamiliar to students.

## Evaluation

The Multiple-Strategies Model is primarily concerned with two forms of evaluation: teacher evaluation of student knowledge and teacher appraisal of the success of the lesson. Both forms are critical to effective teaching.

In this model, emphasis is placed on fair and accurate evaluation of student knowledge of the assigned objectives. In most cases, students want to be successful in school. When teachers properly use the techniques advanced here, students' opportunities for learning greatly increase. Therefore, it is imperative that students be provided opportunities to demonstrate they have mastered the designated content. Moreover, students benefit from frequent testing. During formative stages of instruction, teachers should use frequent announced quizzes. However, teachers should avoid "pop quizzes", because they are often motivated by punitive intent and can promote student distrust of the teachers who use them.

That construction of tests is essential to proper measurement is beyond debate. To suggest that teachers spend long hours constructing tests is, likewise, undeniable. Yet valid, reliable tests can be conveniently developed from well-written criterion-referenced objectives. Moreover, if care is taken to write objectives which appeal to all levels of

cognitive functioning, uncommonly demanding and thorough tests can be easily prepared. For example, a criterion-referenced objective might read:

> Based on material presented by the teacher, the eighth-grade science student will write an essay in which s/he distinguishes between two (2) unique features of each of the three major groups of natural rocks.

The examination question would then read:

> Based on material presented by the teacher, write an essay distinguishing two (2) unique features of each of the three major groups of natural rocks.

Evaluation items like this one requiring higher levels thinking skills are too seldom seen. Many teachers are content to have students memorize lists and isolated facts. Few would be comfortable presenting questions which call upon skills as complex as those needed to satisfy the objective in our example. Nonetheless, most students taught under the Multiple-Strategies Model would have little difficulty with this item. Their knowledge grows from knowing what they are to learn and by frequently practicing the skills associated with it. The thought processes demanded of writers is distinct and often superior to the cognitive processes required for verbal communication. The best approach incorporates verbal and written skills in each stage of instruction.

Teacher evaluation of the success of each planned lesson is a means of maintaining quality control while reducing the amount of time required in planning. When teachers make evaluative comments on each lesson plan, they send messages to themselves several months in the future. When it is again time to teach that material, the teacher will not have to reinvent the instructional wheel. Instead, a favorably evaluated lesson can be used again or revised for variety. On the other hand, a less favorable evaluation will certainly lead to revision. Across several years, teachers can build impressive personal libraries of objectives, instructional procedures and supportive materials.

## Classroom Management

Numerous reports have shown that teachers place discipline at the head of their concerns about teaching. According to a National Education Association poll (1981), nine out of ten teachers stated that student misbehavior interfered with their teaching and 25 percent said it interfered greatly. It seems safe to say that all teachers want their students to

behave in appropriate ways. All teachers, however, do not know how to promote such behavior in their students.

Classroom management is a critical component of effective teaching and therefore, is an integral part of the Multiple-Strategies Model. It is the "glue" that allows the well-planned teacher to effectively teach by using the other components of the Model. By creating lessons that are objective based, that contain interesting learning activities with a high rate of student involvement and relevance, disruptions and chronic misbehavior can be reduced. Effective classroom management requires the teacher to have a clear set of expectations for student behavior which have been explained to the class. Techniques such as focusing student attention, monitoring the classroom by walking and scanning with one's eyes, using nonverbal cues, and moving to trouble spots while continuing to teach are all examples of ways to increase the effectiveness of classroom management. As a general rule, most teachers should adopt Assertive Discipline (Canter, 1976) or similar types of unobtrusive management techniques.

The Multiple-Strategies Model represents a reliable framework upon which effective instruction can be built. This is especially appealing in light of its usefulness in all content areas and most academic levels. It may be the most comprehensive teaching model available.

In conclusion, the Multiple-Strategies Model for Effective Teaching offers acceptable responses to the five needs identified earlier. Specifically when faculty and administrators are trained in the model, it can be used as a teacher evaluation device which both faculty and administrators acknowledge as a standard. In this acknowledgment rests the promise of administrative evaluation of teachers which is less stressful, and seen as helpful rather than as punitive. In addition, because the model does not specify curriculum or teaching strategies, administrators can conduct long-term evaluations of teachers and collect copious information from which to draw meaningful conclusions. In turn they offer teachers useful suggestions for improvement. Because these suggestions grow from the expectations of the model, teachers may feel less subject to administrative whim.

Systematic and empirical studies are needed to fully assess the usefulness of the Multiple-Strategies Model as an evaluation device. In the meantime, it may be the best, most reasonable choice for school personnel dissatisfied with existing teacher evaluation procedures.

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Note:

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