This paper presents some teaching components which might serve as a basis for developing and improving teaching skills. Five interactive teaching functions are studied: managing classroom behavior, asking questions, interacting verbally, communicating nonverbally, and reinforcing pupil behavior. Managing classroom behavior deals with the teacher's control techniques and their effect on the conduct of pupils. Asking questions studies a) the way teachers phrase questions, b) the way teachers elicit pupil responses, and c) the thought level of teacher questions. Interacting verbally presents a model for teacher use, the Interaction Analysis Category System. Categories for interaction analysis include the direct and indirect influence of teacher talk, student talk, and silence. Nonverbal communication includes the use of body language, consisting of facial expressions, gesture and control maneuvers and certain classroom elements such as the use of space, time, and teacher travel. The fifth function studies the reinforcement of pupil behavior using the teacher, pupil, and peer group as change agents. Throughout this study, emphasis is placed on the quality of methods teachers use to implement teaching functions. Knowledge of alternatives and greater discrimination in their use will hopefully aid teachers to perform more rationally and influence more positively the classroom learning behavior of pupils. (MJM)
TEACHING PERFORMANCE: SOME BASES FOR CHANGE

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Introduction

Teaching is . . . an extremely complex process, which means a variety of things; giving and imparting knowledge, as well as asking questions; setting tasks and organizing the steps for accomplishing them; creating models for thought, and guiding discovery. Teaching is also viewed as a functional part of a trans-actional process which includes student response.¹

The improvement of teaching performance is made possible when a teacher gains awareness of his teaching behavior, fully understands the consequences of his actions and finally, accepts a perceived need for changing his behavior.

These conditions in and of themselves, however, are not sufficient for producing improved performance. In order for improvement to occur, the direction of change must be explicit and feasible; this necessitates knowledge of pedagogy and development of skill in performing the specific teaching strategies.

This monograph presents some teaching components which might serve as a basis for developing and improving teaching skills. It identifies a number of relatively distinct parts of elements of the teaching act which are evident from research and empirical data and characteristic of classroom instruction. The approach taken is an eclectic one since there is no commitment implied to a particular school of thought as to what constitutes "good" teaching. One purpose of this monograph is to suggest an approach to classroom instruction which treats it as a deliberate, rational process. As such, it is not intended to detract from the spontaneity essential to good teaching, but rather to complement spontaneous classroom behavior with available knowledge about instruction.

In most respects teaching is both a rational and spontaneous process.² It is rational in the sense that much of teaching is an intellectual activity which entails weighing evidence, reasoning out problems, hypothesizing about the outcome of certain actions, and evaluating actions taken. However, many of these thought processes occur when the teacher is not in the presence of the pupils in what Jackson refers to as the preactive part of teaching.³ This part of teaching includes a variety of tasks such as preparing lesson plans, evaluating papers and organizing instructional activities—tasks which are basically deliberative in nature.

The spontaneous part of teaching takes place predominantly in the interactive or classroom setting. Although this part of teaching is not absent of thought, the teacher tends to do what he feels or knows is right in the presence of pupils rather than what he reasons is right. Since pupils to some extent control what the teacher does and since a multitude of classroom events occur rapidly and are dealt with as they happen there is seldom adequate opportunity to reason what is right.⁴ Instead the reaction tends to be spontaneous or based on prior experience. This explains partially why experienced teachers usually are able to cope more satisfactorily with unexpected classroom incidents. They react on the basis of previous, similar experiences which have been thought out and for which there is some precedent, rather than responding spontaneously to a totally unfamiliar situation.
The experienced teacher has at his command a greater selection of alternative behaviors for meeting the demands of the situation.

One way of looking at the interactive part of teaching which could contribute to its being a more rational and deliberative process is in terms of the various functions teachers perform in the classroom. That is, there are various categorical behaviors typical of classroom instruction which describe what teachers do. They ask questions, give directions, communicate nonverbally, interact verbally, reinforce pupils and so on. Each of these behaviors is a category; each designates a dimension of classroom teaching. The diagram on the next page illustrates the functional nature of these categorical behaviors.

While this schematic presentation of the interactive part of teaching may be limited in scope, it does distinguish some important components of classroom instruction. Needless to say, understanding of these various interactive functions can improve the teacher's ability to perform rationally and deliberately. Hopefully the discussion that follows will help teachers increase their self-awareness of the teaching act and provide a basis for reviewing the decisions they have made and the alternatives they have considered for improved performance.

Managing Classroom Behavior

There are essentially two parts to this teaching function or category: management of pupil behavior and management of classroom activities. Although the two parts are reasonably discrete, from a functional aspect they are closely interrelated and consequently have been joined together under the single topic of Managing Classroom Behavior.

What teachers do that makes a difference in managing the learning behavior and conduct of pupils in the classroom has not been validated conclusively by research. However, a few empirical studies of teaching behavior as it relates to pupil conduct have revealed some new dimensions of classroom management, particularly from the standpoint of a teacher's techniques. The manner in which a teacher exerts influence or employs various control measures seems to relate to the behavior of pupils.

That part of managing the classroom which has to do with pupil behavior includes teacher talk and actions which request or demand compliance to classroom norms and rules of conduct. The educational literature offers some interesting insights about the effect of a teacher's method of handling the misbehavior of one pupil and the way in which it influences the other pupils who are watching and listening. That is, while the teacher is correcting Dick, what effect does the control technique have on observing classmates? The research findings of Kouin and Gump indicate pupils who are not themselves targets of the teacher's actions are nevertheless affected by the actions. ¹

The reactions of pupils observing a disciplinary event tend to be related to the clarity, firmness, and roughness of a teacher's control technique and also to the extent of their involvement in the occurring misbehavior. If the verbal commands of the teacher are clear so the pupil and misbehavior are identified and he is directed toward a task in a non-threatened manner, his classmates are less apt to misbehave. For example, a teacher remark such as, "Jimmy, pick up the paper you have thrown and put it in the waste basket," clearly defines the misbehavior and gives direction to the pupil. The teacher could increase the degree of firmness to the verbal command by adding emphatically, "and I mean it!" Firmness in the teacher's behavior when it is not rough and threatening tends to increase conformance of other pupils who also may be involved or observing the misbehavior. On the other hand, rough teacher disciplinary techniques (expressions of hostility and exasperation, angry instead of serious reactions, or punitive actions) increase pupil anxiety and may lead to further behavior problems. In general, clear and firm control techniques promote acceptable conduct while severe techniques tend
INTERACTIVE TEACHING FUNCTIONS

CLASSROOM TEACHER

Managing Classroom Behavior

Asking Questions

Interacting Verbally

Communicating Nonverbally

Reinforcing Pupil Behavior

CLASSROOM PUPILS
to result in more disruptions and defiance.

A dimension of classroom management that is directly related to pupil behavior management is the extent to which the teacher is tuned-in or with-it. Teachers who are with-it convey to pupils that they are aware of what is going on. They are able to divide their attention among several teaching tasks, yet tune in as necessary to the critical incident of the moment. Pupils seem to know when teachers lack this characteristic of "withitness." One way pupils know is when the teacher attends to a minor behavior problem while a major one is occurring. For example, the teacher may reprimand one pupil for sharpening his pencil during a class discussion while at the same time another pupil defacing the top of his desk with a knife goes unnoticed. In effect the teacher has dealt with the lesser of two concurrent pupil behavior problems.

The teacher's withitness also is manifested in his alertness and timing in coping with deviant behavior. If the teacher is alert to potential problems and reacts quickly he can generally prevent major acts of misbehavior. On the other hand, if the teacher intercedes too late the deviancy may intensify and spread. On the whole, the more the teacher is with-it, the lower is the rate of deviant behavior and the higher the involvement of pupils in normal class activities.

Another dimension of classroom management affecting pupil conduct is the way transition points in classroom work are handled. That is, the way the teacher shifts from one task or activity to another—from science to reading, from the old activity into a new one.

Skillful management of transition points is related primarily to three factors: pupil readiness for a new activity, clarity of the teacher's directions, and the time lapse between activities. If the pupils are busy engaged in one activity at the time the teacher signals a start of a new activity they are less likely to be receptive to making the transition and are more likely to not conform. The teacher who anticipates this potential for misconduct can take steps to prepare the pupils for the transition. One way this might be accomplished is by employing a "count down" near the close of the old activity, informing the pupils at certain intervals of the time remaining. An alternative strategy might be to delay beginning the new activity until the pupils' attention to the old task shows signs of lessening.

Clarity of the teacher's directions concerning the new learning task affects skillful transition. If the directions are confusing, incomplete or too complex the pupils will not be able to focus properly on initiating the new activity and the chances for deviancy will increase. Similarly, providing too many minute details at one time ("Put your name in the right hand corner," "Sit up straight," etc.), repeating information the pupils already know, and raising an issue pertaining to an old activity after starting a new one (Example: Asking how many pupils had all their spelling words right after starting on science) increase restlessness and the likelihood of deviant acts by pupils during the period of transition.

Also affecting the transition phase is the time lapse between activities. This phase pertains to the span of dead time when pupils are putting away books, changing seat positions and carrying out similar routine tasks. If relatively short, efficient and business-like there is little opportunity for misbehavior. On the other hand, if the pupils are not ready for the new activity, if the directions are inadequate, or if the teacher fails to give the pupils something to do, then the span of dead time increases and the chances of deviancy also increases. Teachers who properly handle shifts from one activity to another have less misbehavior and more pupil involvement in their classes than do teachers who lack skill in coping with these transitions.

This section has dealt with the management of classroom behavior from the standpoint of the teacher's control techniques and their effect on the conduct of pupils. Specifically, three
dimensions of classroom management were discussed: the way the teacher controls the misbehavior of one pupil and its influence on those who are watching, the teacher's withitness behavior or awareness of what is going on, and the way the teacher handles transition points in classroom work. The teacher's understanding and skill in each of these dimensions of classroom management will have considerable influence on the quality of control techniques and effectiveness in handling disruptive conduct.

**Asking Questions**

Typically the function of questioning in the classroom is thought of and structured in respect to the subject matter content under discussion. Undoubtedly this is an important consideration, but there are at least three other factors which affect the quality of a question and the resulting discussion: (1) the way a teacher phrases the question, (2) the way a teacher elicits pupil response, and (3) the thought level intended to be evoked by the question.

**Ways Teachers Elicit Pupil Response.** Classroom observation reveals teachers exhibit different behavior patterns with varying effects in the way they phrase questions. One pattern is asking questions which are incomplete or indefinite about the intended response. For example, "What about Lincoln?" "How about that as a way of reporting?" "Why is this so?" In these illustrations the content antecedents are unclear and consequently the questions have the effect of not focusing pupil response.

A second observable pattern is asking several different questions in succession without permitting time for the response. Illustrative of this pattern are questions such as, "What is the square root of four? Is this ever a negative number? Why is this so?" This manner of questioning does not designate which part of the multiple question should be answered and the result is usually confusion on the part of the respondent.

A third pattern of questioning relative to phrasing is asking run-on questions with intervening and unrelated information. For example, "If you had, assuming this was possible though it probably isn't, all the grains of sand in the world stacked up, it would be quite a pile, I guess; could you, if you had time which would be more than a person usually has, count the grains?" Although the illustration is extreme, questions of this type obscure and change the content focus, usually resulting in an inappropriate response.

These illustrations are meant to suggest the manner in which a teacher phrases questions has more to do with the intended response and the direction of discussion. Only by asking or phrasing questions in a clear, concise and direct way can a teacher expect response congruent with his intentions.
which prevents pupil-to-pupil interaction without teacher intervention.

The uncontrolled response is characterized by the teacher presenting a question with no one designated to respond. For example, "What is the spoils system?" This method permits the self-selection of respondents. It necessitates the pupils assume responsibility for contributing to discussion and has the effect of allowing free, pupil-to-pupil interaction.

A spontaneous response occurs without questioning or designation of a respondent by the teacher. Pupils can contribute a comment or question without the teacher directly initiating the response. This type of response pattern usually evolves with the teacher posing an uncontrolled question which the pupil answers, followed by spontaneous responses from other pupils. It permits pupil-to-pupil interaction and encourages free and open discussion.

The mass response is characterized by a number of pupils responding to a question simultaneously. This response type is often used in connection with rote-learning activities such as in foreign language classes.

A teacher who asks solitary and controlled response questions is not likely to stimulate pupil-to-pupil interaction or genuine discussion; nor are pupils likely to feel free to be imaginative and spontaneous. The result more likely will be a recitation in which the interaction is teacher-to-pupil with a predominance of teacher talk. Conversely, the teacher who really wants discussion participation will pattern his behavior in ways which elicit uncontrolled and spontaneous pupil responses.

The Thought Level of Teacher Questions. The quality of classroom discussion and levels of thinking also are related to the kinds of questions or problems a teacher poses for pupil response. One useful model for classifying the thought levels being sought or elicited by a teacher has been illustrated by Sanders. His model, based on Bloom's Taxonomy of Educational Objectives: The Cognitive Domain, is organized into seven areas including memory, translation, interpretation, application, analysis, synthesis, and evaluation. The scheme is hierarchical in nature, beginning with memory, in that each level of thinking includes some form of all the preceding levels. Sanders suggests questions which might be asked to get at each level of thinking.

A memory level question asks pupils to recognize and/or recall information. An illustration would be, "What city is the capital of Oregon?" or "Who discovered the Columbia River?" (recalling previously learned content).

Translation calls for pupils to change ideas into their own words or different symbolic form. For example, the teacher asks a pupil to restate in his own words the dictionary definition of a certain word, or translate a passage of French literature into English.

Interpretation level questions ask pupils to draw, discover or use relationships between ideas. For example, do the United State and South Africa have the same or different attitudes toward the problem of race relations?

Application requires the pupils to solve a lifelike problem. This level is designed to give pupils practice in the transfer of learning. For example, the teacher sets up a problem in bookkeeping which requires pupils to use a "balance sheet." It is similar to one students might encounter as a bookkeeper.

Analysis requires pupils to be aware of reasoning processes in solving problems and reaching conclusions. Some examples of a reasoning process are inference, generalization and analogies. The distinctive feature of the analysis category is its requirement that problems be solved with conscious knowledge of the parts and processes of reasoning. Illustrative of this level would be to analyze the following quotation: "A sports writer asserts that Portland State University will take Idaho State University on the gridiron tomorrow the way Grant took Richmond." An appropriate analysis would point out this quotation makes use of an analogy. That is, the writer has expressed a judgment based upon an analogy between things of two different classes (athletic contest and war). It would not require an explanation of what the quotation means.

Synthesis presents an opportunity for pupils to solve problems requiring original and creative thinking. Original, that is, from the pupil's point of view. An example would be to instruct pupils to draw up a plan in which the class could participate in the campaign to make the election of the President of the United States dependent on popular vote.
Evaluation calls for the pupil to make a judgment of good or bad, right or wrong, according to the standards he designates. For example, "Is the book well written from a literary standpoint?" is an evaluation level question.

The Sander's scheme offers a model which can be studied by teachers in their effort to formulate questions which precisely tap the levels of thinking to which their instructional objectives are directed.

In summary, teachers can improve the quality of questions they ask by considering the way the question is phrased, the way the response is elicited and the level of thought to be encouraged. The models presented above which relate to each of these areas can serve as a guide for teachers in examining their patterns of questioning behavior.

Interacting Verbally

Flanders suggests no matter what a prospective teacher hears in his professional and academic preparation, he has, on the average been exposed to living models of teaching which are basically directive and dependent producing. While that assertion may be debatable, his research indicates that in elementary and secondary classrooms an average in constructive pupil attitudes and content achievement (as measured by pupil attitude and achievement tests), teachers were more indirect than direct in their verbal behavior. In lower achieving classrooms teachers were more direct in their verbal behavior. Although teachers in superior classrooms talked only slightly less, the more directive aspects of their verbal influence diminished considerably.

If in fact less teacher dominance contributes to more effective classroom learning it becomes increasingly important that both preservice and inservice teachers develop understanding of the kinds of verbal behavior that tend to influence pupils either directly or indirectly.

One model for a teacher to use in examining his verbal behavior in relation to classroom interaction is the Interaction Analysis Category System. The categories are presented on the next page.

The first seven categories are descriptive of teacher talk in the classroom. Of these seven the first four categories influence interaction indirectly. When the teacher accepts feeling, praises or encourages, accepts or uses pupil ideas or asks questions he is increasing pupil freedom to respond. Categories five, six and seven are direct kinds of teacher influence. When the teacher lectures, gives directions, or criticizes he is limiting pupil interaction and thereby exerting direct influence.

Categories eight and nine describe pupil talk, with category eight being pupil talk in response to the teacher and category nine, pupil initiated talk. Category ten is silence or confusion, but does not have a great deal of relevance unless the system is being used as originally intended to record classroom talk according to the numbered categories.

The relevance of the system here is that the teacher can use the categories as a mirror for his behavior. By illustration, the usual pattern of classroom verbal interaction is that the teacher asks a question, a pupil responds, the teacher repeats and accepts the response with a stereotyped "O.K.," "good," or similar expression and then asks another question. Using the Flander's model this interaction pattern consists of categories four, eight or nine, three and four.

A second and frequent variation of this pattern of verbal interaction occurs when the teacher asks a question (category 4), a pupil responds (categories 8 or 9), and the teacher elaborates on the response by giving facts or adding his own ideas (category 5). In this pattern of interaction teacher talk shifts from indirect influence (category 4, asking question) to direct influence (category 5, lecturing); from the pupils' viewpoint, a shift that limits freedom to respond. That is, when the teacher lectures there is restricted opportunity for pupil response.
<table>
<thead>
<tr>
<th>Teacher Talk</th>
<th>Indirect Influence</th>
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<tbody>
<tr>
<td>1. Accepts Feeling: accepts and clarifies the feeling tone of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included.</td>
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<tr>
<td>2. Praises or Encourages: praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying, &quot;umhm?&quot; or &quot;go on&quot; are included.</td>
<td></td>
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<tr>
<td>3. Accepts or Uses Ideas of Student: clarifying, building or developing ideas suggested by a student. As teacher brings more of his own ideas into play, shift to category five.</td>
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<tr>
<td>4. Asks Questions: asking a question about content or procedure with the intent that a student answer.</td>
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<tr>
<th>Teacher Talk</th>
<th>Direct Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Lecturing: giving facts or opinions about content or procedures; expressing his own ideas, asking rhetorical questions.</td>
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<tr>
<td>6. Giving Directions: directions, commands, or orders with which a student is expected to comply.</td>
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<tr>
<td>7. Criticizing or Justifying Authority: statements intended to change student behavior from nonacceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.</td>
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<tr>
<th>Student Talk</th>
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<tr>
<td>8. Student Talk - Response: talk by students in response to teacher. Teacher initiates the contact or solicits student statement.</td>
<td></td>
</tr>
<tr>
<td>9. Student Talk - Initiation: talk by students which they initiate. If &quot;calling on&quot; student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.</td>
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</tr>
<tr>
<td>10. Silence or Confusion: pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.</td>
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* There is no scale implied by these numbers. Each number is classificatory; it designates a particular kind of communication event. To write these numbers down during observation is to enumerate, not to judge a position on a scale.

Since there are different patterns of response and interaction with varying effects a teacher can use the Categories for Interaction Analysis as a means of thinking about the altering his own patterns of verbal influence. Special attention can be given to such matters as how pupils are involved in classroom talk, how the teacher responds to pupil talk, and how interaction patterns can vary according to the teacher's objectives. For example, if the teacher wants to encourage pupil response and class interaction he obviously will limit lecturing, giving directions and criticizing or justifying authority (categories 5, 6 and 7 respectively). Instead, his talk in response to pupil talk will fall into the first four categories. He will accept feeling, "Do you feel discouraged when you can't recall the answer"; praise or encourage, "That alternative would seem to fit well with the other recommendations"; accept or use pupil ideas, "Your suggestion, as I understand it, is to raise the tax rate to offset the deficits"; or ask questions using as a guide the preceding section on questioning. By being cognizant of
these four categories and developing alternative ways of utilizing them the teacher can vary verbal behavior which indirectly influences the patterns of interaction. In doing so, the teacher will be employing communication skills that are involved in responsive listening, accepting, paraphrasing and checking perceptions. Not only will these behaviors have a freeing effect on the learner, but their use also will allow the teacher to be much more flexible in adapting his behavior to meet the requirements of the class situation.

Communicating Nonverbally

Mehrabian has made reference to a formula for explaining the emotional impact of any message: total impact equals seven percent verbal plus thirty-eight percent vocal plus fifty-five percent facial.\(^{12}\) In effect, he is saying the nonverbal elements of voice inflection and facial expression act to qualify verbal communication and are primarily indicators of emotion. The result is that the way something is said can be just as important as what is said in terms of the impact it has on the listener.

All teachers communicate nonverbally. Most of them, however, are not aware of the ways in which they transmit nonverbal messages to pupils. Classroom culture has its own nonverbal language and pupils absorb its nuances along with the spoken language. According to Galloway nonverbal teaching behavior includes use of body language consisting of facial expression, gesture and control maneuvers; and certain classroom elements, such as use of space, use of time and teacher travel.\(^{13}\)

Classroom Body Language. One of the more potent elements in body language is eye behavior. By simply using his eyes a teacher can make pupils aware of him, comfortably or uncomfortably. Chances are looking at pupils more often than is usual with glances longer than the normal and maintaining eye contact with anyone who is talking conveys a message of assurance, encouragement and in general, interest in them as individuals. Likewise, a look or gesture such as a wink, smile or raised eyebrows may give approval and reinforce pupil behavior.

Conversely lack of eye contact, staring in silence or frowning usually will have a different and probably negative or uncomfortable effect on pupils.

Control maneuvers are similar nonverbal behaviors used by teachers to regulate pupil behavior. For example, the teacher may attempt to gain class attention nonverbally by placing a finger to his lips, standing with hands on hips or raising a hand to gain silence. These expressions remind pupils of teacher expectations and they usually respond accordingly.

Movement by a teacher toward a pupil, depending upon the circumstances, also will have certain effects. If a pupil is acting undesirably, a move in his direction by the teacher will probably be viewed as an effort to suppress the behavior. On the other hand, if a pupil is seeking help then the move by the teacher toward him will be seen as nonverbal behavior to facilitate the request for help.

Nonverbal Classroom Elements. The way a teacher uses space, travels around the room, and uses time are examples of nonverbal elements in the classroom which have an impact on pupil behavior. Use of space refers to the manner in which the classroom is divided into territories and the teacher and pupils occupy space. Some arrangements are fluid and changing while others are unchanging. Some teachers position their desks at the front of the room, others in the rear or elsewhere. The pupils' desks can be in rows or arranged varying in clusters, semi-circles and so on. Space arrangement can be indicative of how the teacher views his own and the pupils' roles in relation to authority and control, instructional activities and other classroom priorities.

Where and when a teacher chooses to travel in the classroom also can signify meaning. A teacher who is usually observed behind the desk or travelling only between the desk and the front
of the classroom is nonverbally reinforcing the concept of territories. In essence, he is saying this is my territory and the rows of seats or desks is your territory. This use of rather limited movement through an assigned space can communicate a variety of things to pupils. First, the designation of property or ownership reinforces the cultural traditions the pupil meets in other areas of the environment: any casual wandering through my property is, in a sense, trespassing. In the eye of the pupil the teacher is less accessible; he can come to the teacher's desk only with permission or if he has something of importance to communicate. Second, it may effect relationships between teacher and pupil. By avoiding unnecessary contact with pupils the teacher reinforces the cultural concept of respect for authority figures. In essence, it conveys the notion that generals do not fraternize with the troops. As a result the relationship becomes one of status, confirming the power position of the teacher.

Conversely, the teacher who is found all over the room at different times of the day, who travels idely and freely, is reinforcing the concept of joint ownership. This approach conveys the message that this is our room, we are working together and private property as such is not one of my priorities. This teacher would probably be more accessible to answer questions and to give help or guidance. The physical movement of the teacher toward pupils communicates a desire to interact more freely. It may encourage pupils to communicate more openly and honestly. To a degree, it reinforces the concept that both are human beings, rather than "I am the teacher, you are the learner," thus minimizing the status aspect of position.

How teachers use their time also has implications for the value they place on certain classroom duties, subjects and learning experiences. For example, spending little or no time on a topic may indicate to the pupils the teacher lacks interest or knowledge in it. Likewise, the way a teacher utilizes his time during class can reveal something of his conceptual attitudes about teaching. For example, one teacher consistently spends class time marking papers at his desk. A teacher next door uses the same time helping children mark their own papers. Certainly these teachers have different concepts of evaluation, and it is revealed partially by their use of time.

The aforementioned nonverbal behaviors send cues and convey meaning even more readily and possibly more profoundly than speech. Whether consciously or not, they suggest to pupils teacher attitudes and are important in creating the classroom learning climate. If a teacher is to gain control of these nonverbal classroom phenomena he must become conscious of them, study their significance, determine their relationship to his own views about teaching and learning, and begin to regulate them.

Reinforcing Pupil Behavior

Reinforcement of pupil learning in the classroom is expressed in different ways. In some instances the support a pupil receives may be from an external source, such as a teacher or his peers, and be relatively explicit in terms of what behavior is being rewarded. For example, "Your penmanship is looking more and more like the example in our books, Carol. All the upper loop letters are three times as tall as the a's and e's." In another situation the reinforcement may be internal, coming from the pupil's self, without being expressed verbally or directly: Johnny gains personal satisfaction by achieving his goal of reading 500 words per minute with 85 percent comprehension.

Similarly, the effect or result of a teacher's reinforcing behavior varies. The teacher may reinforce pupils either positively or negatively, depending upon the context in which it occurs and how it is perceived. For example the teacher may say to the class, "I like David's paper with its even margins." The remark extends approval to David but at the same time gives disapproval of the other pupils, indirectly telling them to model their papers
after David's. Although the teacher may intend to be supportive the procedure usually results in mixed emotions by the pupil receiving the commendation, and resentment toward the teacher and model pupil from those who don't receive the approval.\(^{14}\)

In some circumstances the teacher's mode of reinforcement or support may encourage pupil dependency on him — "If you want help in spelling words for your story, raise your hand and I'll write the word on the chalkboard." Meaning, the teacher will do for the pupils what they could do for themselves by using the dictionary. Or conversely, the teacher may free the pupil to be more responsible for assessing his own performance. For example, the spelling objective for this week was to write without error on a final test the 20 assigned words. "Did you achieve that goal?"

Obviously, there is a variety of ways by which classroom pupil behavior is reinforced. Likewise, various actions produce different effects. If teachers are to employ reinforcement strategies that produce intended effects, they have to be cognizant of the various means by which it occurs. In short, they need a rationale or model for examining and altering their behavior.

The means suggested here for looking at the reinforcement of pupil behavior is in terms of the agent of reinforcement. In the classroom the main agents of reinforcement are the teacher, the classroom group and the pupil himself. That is, these agents are the usual dispensers of reward or the sources of reinforcement for classroom learning. More often, however, the teacher is the primary agent or chief reward giver. His behavior more than the others influences the extent to which classroom reinforcement of pupil behavior occurs and the part other agents will play in dispensing rewards.

The Teacher as an Agent of Reinforcement. One way teachers verbally reinforce pupils is through the use of single stereotyped comments such as "uh huh," "all right," "O.K.," "fine," "good." These expressions tend to convey acceptance or approval by indicating the teacher has heard or recognized the pupil's response. They can most appropriately be used for that purpose. On the other hand, the teacher who uses expressions of this kind excessively and without reason might also consider the unplanned or incidental effects. For example, if the teacher reacts mostly to pupil responses with a stereotyped, "O.K., good" the effect more than likely will be that any response is acceptable regardless of quality. To the pupils it probably does not connote any special meaning or reinforcement for responding, thereby becoming just a verbal "tic" in the teaching behavior.

Another way teachers reward pupils is through the use of praise. It means expressing approval of the pupil or of his behavior without making public the basis for approval. In short, praise does not give information that will enable the pupil to judge for himself when he has done a good job. Some examples are: "Your penmanship is beautiful, Carol." or "That's a good idea" or "What a wonderful story you have written." In each of these illustrations the criteria for judgment are not made explicit. This type of reinforcement usually encourages the pupil to continue behaving in the same or similar manner if he wishes to receive the reward of praise or please the teacher. It also can have incidental or unplanned effects. For one, the excessive use of praise can make the pupil dependent on the teacher as the sole judge of acceptability and the giver of rewards. Secondly, praise can produce a binding effect in that it encourages pupils to conform to the teacher's standards without regard to criteria. Third, it can lessen the pupil's responsibility for evaluating the worth of his own performance in relation to defined objectives. And fourth, praise may cause the pupil to feel he wants or is expected to be praiseworthy each time he acts. Those acts which potentially are not praise producing may not be tried.

Commendation is another way in which teachers reinforce pupil behavior. Commendation is positive reinforcement which includes criteria
for judging the particular act as being worthy. It is explicit and encourages the pupil to continue the behavior if he wishes to attain the established standards. For example, the teacher may say, "You have courage to read aloud to us when you find it so difficult." In this instance, the specific behavior of being able to read aloud in class is reinforced. As another example the teacher might say, "The story you have written is very vivid; you used many colorful and descriptive words which helped to make the ideas you were expressing very clear." The commendation in this illustration is for the use of colorful and descriptive words which made the pupil's story expressive and vivid.

Commendation is a form of reinforcement that makes public the criteria on which it is based. It tends to diminish the person of the teacher since the focus of reinforcement is on the act or behavior and relative to certain criteria. As such, commendation encourages the use of specific criteria for assessing the worth of classroom actions.

One thread common to each of these types of reinforcement is that they are teacher directed. In other words, it is the teacher who is dispensing the rewards. Obviously, that in itself has an incidental effect—it increases the dominance of the teacher. The teacher who desires, however, can reduce his direct influence by encouraging the other agents of reinforcement to become more active.

The classroom peer group as an agent of reinforcement. One principle fairly standard among effective groups is that appropriate individual performance is dependent upon feedback from other group members. If a person is to learn how to be a constructive member of a group then he needs to receive feedback on the effect of his actions. The same principle applies to the classroom peer group and is very much related to reinforcing pupil behavior.

The teacher can build a climate in which the pupils become more active agents of reinforcement by helping them to be responsive to the contributions of their peers. The class can be more responsive if pupils understand seriously intended contributions are meant to be helpful to the group and that they express a pupil's need to test his perception of the situation. When a pupil's actions contribute to classroom goals, one way he can be rewarded is by the group giving explicit approval, "That's a good idea, Joe." Additionally, it suggests the class can function as an agent of reinforcement in much the same manner as the teacher by praising, encouraging, commending and using pupil contributions.

Conversely, failure to respond to contributions is an act of discrimination against the pupil and thus a form of rejection or negative reinforcement. If an idea is perceived as having no relevance, it is better for the other pupils to admit an inability to see its implications than to ignore it. That way the contributing pupil knows the effect of his remark and can use the feedback to improve the way he participates in class. If the climate is sufficiently objective and goal-centered then irrelevant contributions can be rejected without rejection of the pupil. This is an important requirement for learning in that it frees pupils to be more responsive since ideas are treated as the property of the class.

In the classroom the pupil can be thought of as an individual and the group as his environment. Once a pupil has acted there is an opportunity for the environment to influence his learning efficiency either positively or negatively. If the pupil views the consequences following his response as desirable or appropriate, the probability increases for his repeating the same kind of behavior when faced with similar conditions. In this respect the classroom peer group constitutes the environment and plays an important part in providing feedback or knowledge of results to each individual.

The teacher and pupils also can build a better climate for support and reinforcement if they recognize class members have different needs and opportunities for reward. All members do not contribute equally or in the same way at all times. Some pupils have a need to participate
a great deal while others satisfy a need by listening. Likewise the opportunities to contribute vary. All pupils do not have the same verbal facility, the same interests or the same objectives. The way a pupil contributes depends upon the opportunities for rewards he perceives in relation to the group role he can fulfill. If the class does not engage in activity which needs his participation, then there is no reason for being active. The aim of the teacher and class might be to develop a climate in which activities are dealt with in a comprehensive way so that all pupils can contribute if they wish; to eliminate barriers in the group that prevent needed contributions; and to vary learning activities giving more pupils a chance to find themselves and gain reinforcement. In essence, it means developing a classroom environment that is based on the principles of an effective group.

The pupil himself as an agent of reinforcement. This reference to reinforcement is contained in the thought that the type of reward which has the greatest transfer value to other life situations is the kind one gives oneself—the sense of satisfaction in achieving purposes. In other words the reward system is internal, within the learner and there is no need for extrinsic reward—praise or commendation—from the teacher or peer group. It is intrinsic and independent of the change agent.

Intrinsic reinforcement can occur in different ways. For example, a pupil contributes to class discussion and sees his idea used to solve a particular problem without any direction reference being made to the worth of the idea. The reward is intrinsic in that the pupil gains satisfaction from knowing his idea is being used by the class.

Another pupil is selected to chair a problem-solving group. Upon completion of the task no one says overtly to him that he was a good chairman or that he was of great help to the group in solving the problem. Instead, he is rewarded intrinsically by recognizing the worth of his own contributions in helping the group accomplish the assigned task.

A third pupil realizes his tentative ambition of reading 800 words per minute with 90 percent comprehension. No one says to him, "You are great because you can read 800 words per minute with 90 percent comprehension." No one has to, because his satisfaction comes from achieving the goal he established for himself.

A fourth pupil is confronted with a problem concerning something of personal interest. His teacher offers him a suggestion and he adapts and uses it to solve the problem. His reward is knowing that he accepted and used the suggestion because it helped to solve his problem and not because he wanted to obtain extrinsic reinforcement from the teacher.

In each of these illustrations the pupil has performed independently of any form of extrinsic reward. Instead, the rewards were intrinsic and relative to the learner's own value system. The pupils have learned to associate the way they perform with certain criteria for success and can tell by their own actions when they are performing accordingly.

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Customarily pupils do not use themselves as agents of reinforcement. More often than not they depend upon the teacher as the reward-giver. And the teacher usually reinforces this expectation by dispensing extrinsic rewards. But if the goal is to develop initiative, problem-solving ability and judgment in pupils, external rewards will generally fail. To liberate these qualities in pupils it is necessary to develop an internal reward system.

This presentation suggests teachers need to be cognizant of the kind of reinforcement—commendation, encouragement and praise—as well as the classroom agents of reinforcement—the teacher, the peer group and the individual pupil—and the potential influence of each. The teacher can facilitate the type of reinforcement deemed appropriate to instructional goals by making as clear as possible the expectations in given situations.
Summary

Hughes contends it is not what teachers do but how they do it that makes some teachers better than others. This contention has been made quite explicit in the preceding discussions on managing classroom behavior, asking questions, interacting verbally, communicating nonverbally and reinforcing pupil behavior. For these functions in essence, represent some of the things teachers do in the classroom. The evidence is reasonably clear that the way the teacher performs these various functions has more than an incidental effect on the quality of instruction. Although within each function numerous alternative behaviors are open to teachers, individual teachers generally exhibit rather limited ranges of behavior. Knowledge of the alternatives and greater discrimination in their use will help teachers to perform more rationally and influence more positively the classroom learning behavior of pupils.

Footnotes


2The reference to teaching as a rational and spontaneous process may seem to imply it is devoid of emotion or the affective component of the intellect. Quite apparently it is not. Emotion plays an important part in teaching, but coping with emotion involves reason in that there are alternative and rational ways to express it constructively. While reason does not dismiss emotion it does contribute to understanding and tolerance. If the teacher has not learned how emotion affects his behavior and how to utilize it in ways that promote constructive growth and change then he cannot be a genuine and totally effective teacher. To ignore emotion is to deny emotion and consequently, relinquish a quality of humaneness.


4Ibid.


7Ibid.


11Ibid.


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