    Because of the need to describe and analyze nonverbal as well as verbal classroom interaction, an attempt has been made to develop an observational system of complete behavioral analysis using the Flanders system as a base. Each of the 10 Flanders verbal categories (based on direct and indirect teacher influence) is combined with relevant dimensions of nonverbal behavior on a continuum ranging from encouraging to restricting interaction. The categories are: (1) accepts student feeling; (2) praises and encourages (congruent-incongruent); (3) uses student idea (implement-perfunctory); (4) asks questions (personal-impersonal); (5) lectures or gives information (responsive-unresponsive); (6) gives directions (involve-dismiss); (7) criticizes or justifies authority (firm-harsh); (8) student talk, response (receptive-inattentive); (9) student talk, initiated (receptive-inattentive); (10) silence or confusion (comfort-distress). The Indirect-Direct/Encouraging-Restrictive (IDER) system encompasses instances in which only nonverbal behavior influences interaction and those in which nonverbal cues accompany verbal communication. By marking a slash (encouraging) or dash (restrictive) to the right of the recorded tallies, an observer can record both verbal and nonverbal dimensions within the three-second time intervals, and data can be plotted on an IDER matrix (four 10x10 quadrants) providing four areas of study. (JS)

A DESCRIPTION OF TEACHER BEHAVIOR: VERBAL AND NONVERBAL

Russell L. French and Charles M. Galloway[1]

INTRODUCTION

The status of research in teacher nonverbal behavior remains an unfulfilled and incomplete area of investigation. This lack is especially prominent with respect to the mechanisms of nonverbal behavior and their effects in classroom instruction and learning. For indeed, there is a present tendency on the part of some researchers to minimize the importance of nonverbal cues. Interaction can be viewed as an exclusive process of verbal influence, if the researcher chooses to make the convenient assumption that a sampling of teacher verbal behavior is an adequate sampling of total behavior. Accordingly, research efforts to analyze have either centered on the verbal acts of teaching or the influence of teacher verbal behavior while the nonverbal dimensions of teaching have been assumed to be negligible or insignificant. A similar view is often held by teachers who rely upon words and verbalisms to convey meaning during instruction, and who believe that teaching is telling.

Many teachers readily accept the notion that to be instructive is to be verbal. To choose to be a teacher is to prefer a verbal world, for the very idea of teaching others is to be literate and to place a premium on written and spoken words. Classroom learning is heavily loaded with student and teacher usage of words, and educators view words as the very miracles of learning. How often have teachers resorted to these utterances: "How many times will I have to explain this?" "Haven't I explained that a hundred times already?" "Were you listening when I told you that?" "Alright, everybody pay attention--I am only going to say this one more time." Although these statements do not characterize teaching, they do portray a reliance on the power of words.

Relevance of Nonverbal Cues

While words and verbalisms may be the preferred symbols of schooling, they do not represent the only means of knowing. Nonverbal cues and clues represent elegant signs for conveying and receiving information, for actions do speak as loud as words -- perhaps, louder. To recognize that how we say something is as important as what we say can be verbally acknowledged, but not necessarily understood in behavioral terms. Providing information through nonverbal action can be process to which little conscious thought is given, and more importantly, we are usually unaware of our own awareness. Many ways to give-off nonverbal cues can be expressed: facial expressions, movements, postures, mannerisms, vocal tones, gestures, energy changes, etc.

---

[1] Russell French is Assistant Professor of Education in The Department of Curriculum and Instruction, The University of Tennessee.
Charles Galloway is Associate Professor of Education in The Department of Curriculum and Instruction, The Ohio State University.

On the other hand, the availability of nonverbal cues for an observer to witness, which can be portrayed by us, may be calculatingly managed to achieve a desired effect. We can color the perceptions of others by adroitly managing nonverbal expressions to convince others how we wish to be viewed and dealt with. Nonverbal expressions can be deliberately used to effect an impression or to convey an attitude. The females of our culture have long since learned the significance of exchanging mutual glances with males--if she is interested in him or wants him to be interested in her. This is perhaps the most efficient and quickest way for two parties to convey immediate attraction for each other. However, you do not engage in a warm mutual glance with another if you are disinterested. Females understand the consequences of mutual glances so well that they are capable of looking around, through, and by a male to avoid his gaze and to avoid attention.

Not only do we engineer expressions to convince others, but we can be taken in by our own performance. Such is the case when we take a driver's test to obtain a license, go to church, or listen to an instructor in a classroom. We may begin by deliberately engineering our nonverbal cues to convince an observer of the realness of our participation, but there is a very good chance that we too begin to believe that our performance is authentic.

The process of immediately understanding another and having the other understand us is commonly referred to as empathy. In fact, most of us believe that the most personal and valid kinds of information can be discovered this way. But, we rarely attribute our response to nonverbal cues. By reacting to the nonverbal cues of others, we pick up information which we use in deciding what to do next and in determining what our role needs to be. All of this activity seems so natural and spontaneous to us that we overlook the fact that we influence and are influenced by others through nonverbal cueing.

We constantly check on the fidelity of verbal remarks by reading the meanings that accompany nonverbal cues. It is much more "fun" to think that enlightenment is one way-- that we are free to observe and read the behaviors of others in an open license. But the challenging dilemna which poses itself for us is that each of us also conveys information to others through nonverbal cues. If we choose to come into contact with other, then our nonverbal cues will be read for the meanings they reveal, whether we like it or not. Especially is this true for those who teach in classroom and who communicate with students over an extended period of time.

Because we can hear ourselves when we talk, adjustments can be made in the intent of our verbal speech. Something can be uttered verbally and if it does not sound appropriate, information can be restated verbally. In a word, we can correct our messages to others. Oral communication permits this marvelous facility for receiving instanteous feedback in relation to what is said. In fact, teachers have often suggested that they were not precisely sure of what they thought until they heard themselves speak. In verbal communication, our very words become data not only for others but for ourselves. We can capitalize on our verbal utterances as sort of a feedback-loop to determine if our words meet our test of intent and meaning.

Feedback data from our expression of nonverbal cues are not so easily available, however, and the process is different. We cannot see ourselves when we behave. If we lived in a world of mirrors," perhaps nonverbal cues could be as easily manipulated as verbal behavior. But, this is not the case-- we have to rely on the reactions and responses of others in order to comprehend our nonverbal effect in the situation. In the classroom, unless the teacher is willing to be filmed for play back later or is willing to be observed, attending to the responses of students is the major source of information. Teachers seem to differ markedly in their ability to be sensitive to the behavior of youngsters toward them, and to use it as feedback data.

Nonverbal cues can be either spontaneous or managed and each of these conditions influences perceptions. While it is often difficult to detect the difference between the two kinds of cue-giving, nonverbal information facilitates any effort to understand others and to be understood. Whether a teacher deliberately chooses to react to the nonverbal cues of students or whether they unconsciously do so, the crucial conclusion is that expressive cues influence a teacher's view of students and their view of the teacher.

Combining Verbal and Nonverbal Dimensions

As the foregoing analysis implies, the need to describe and analyze the effects of teacher verbal and nonverbal messages and pupil response is of paramount concern. Such an analysis demands a useful observational system designed to provide data relevant to both aspects of teacher behavior. A number of systems for examining teacher verbal behaviors have been developed in recent years and they have contributed significantly to current knowledge regarding social-emotional climate, pupil-teacher interaction patterns, and the teaching-learning process.

The Flanders system of Interaction Analysis has perhaps enjoyed the widest acceptance and utilization of these several observational systems. Moreover, a significant amount of data suggests that Interaction Analysis can be learned easily and used with a relatively high degree of reliability. Because of this success and because the Flanders system focuses primarily upon the social-emotional climate of the classroom, an attempt has been made to develop a system of complete behavioral analysis using the approach of the Flanders system as the base. Combining its verbal categories with relevant dimensions of nonverbal behavior affords a unique approach to a more complete analysis of interaction in the classroom.

While Flanders Interaction Analysis is based upon direct to indirect teacher influence, the system proposed here incorporates these behaviors into a larger conceptual framework, and a continuum becomes the theoretical base. This continuum ranges from encouraging to restricting interaction, and is based upon a hierarchical structure of processes fundamental to teacher-pupil contacts. At the base of this hierarchy is communication which is understood as verbal and nonverbal messages. Yet, communication qua communication can exist independent of any involvement in a higher order human process which may be properly referred to as interaction. Interaction implies role-taking and empathic skills and it implies a mutual reciprocity of understanding others and being understood. This view of interaction is assumed to be a significant process and a key factor in producing learning in the classroom, and communication is viewed as the catalyst for encouraging or restricting interactions. Since the teacher is the dominant figure

in the classroom, teacher behavior becomes of the utmost importance in producing meaningful communications and subsequenct interactions.

Many teachers apparently accept student feelings, offer praise or encouragement, or criticize students by means of either simple or elaborate patterns of nonverbal cues with no verbal communication. However, face-to-face verbal communications are always accompanied by nonverbal cues. By the fact of physical presence, this situation cannot be avoided and confrontations of behavioral style during human contact must be dealth with and understood. In the following discussion, attention is addressed to those instances in which nonverbal behavior may influence interaction without verbal accompaniment, and situations in which verbal communication is accompanied by physical presence and, therefore, by nonverbal cues. No attention will be given to those instances in which verbal communication is not accompanied by physical presence, since these situations do not generally characterize teacher-pupil interaction.

The categories of the Flanders system in their briefest form can be identified in the following way: (1) accepts student feeling, (2) praises or encourages, (3) uses student idea, (4) asks questions, (5) lectures, (6) gives direction, (7) criticizes or justified authority, (8) student response, (9) student initiated talk, (10) silence or confusion. Category one of the Flanders' system (accepts student feeling) suggests both verbal and non-verbal phenomena. The verbal and nonverbal behaviors employed by the teacher in accepting student feelings are so closely related that any specification of particular cues which distinguish either the verbal or nonverbal aspect becomes exceedingly difficult. Indeed, the verbal characteristics are more elusive and hazardous to predict and defend than the nonverbal aspect. It is not difficult to determine whether the teacher does or does not accept student feeling, but an observer is pushed to make an observation solely on the basis of verbal information. The teacher behavior of accepting student feeling is a conjoint verbal and non-verbal activity.

Flanders category two (praises or encourages) implies a nonverbal dimension which can be classified as congruent or incongruent. When congruency occurs between the teacher's nonverbal cues and his verbal message the fidelity of teacher intent is clear and believeable. Nonverbal cues can reinforce and further clarify the credibility of a verbal message so that no ambiguity in interpretation is present. When a discrepancy or contradiction appears between verbal and nonverbal cues the appearance of an incongruity can be observed. Individual styles of teacher behavior are so variant in their consequence congruities and incongruities can appear in many behavioral manifestations. Praise and encouragement are demanding behaviors for teachers and incongruities occur most frequently when praising or encouraging students. An important ground rule to be noted in observing teacher praise and encouragement is that all behavior should be viewed as congruent until it is obvious that an incongruity is evident.

The nonverbal conseuqences of category three (uses student idea) is realted to the question of whether a teacher actually uses an idea of merely acknowledges it, which differentiates it as either an implementing or perfunctory behavior.

Although Flanders makes no distinction within this category, there are two ways in which teachers may respond to student ideas or thoughtful contributions. In one way he may merely recognize or acknowledge student expression by automatically repeating or restating it. A teacher's use of student ideas in this way is perfunctory or pro forma. Conversely, a teacher may respond by using a student's idea in subsequent discussion; he may react to an idea by reflecting on it; or he may turn the idea to the class as worthy of consideration. Teacher response of this nature can be distinquished from perfunctory acknowledgement of student ideas, and can be understood as truly using or implementing ideas. Both perfunctory and implementing teacher response are largely dependent upon the purpose and direction of teacher response. While nonverbal cues are always present, they are often fewer and more mechnical in a perfunctory response. A perfunctory use of a student idea undoubtedly provides steady reinforcement, and the value of this response cannot be denied. But the active involvement and partial reinforcement provided by implementing student ideas in discussion is important to fostering classroom interactions and classroom learning.

Teacher question-asking-category four of the Flanders system can be personal or impersonal. Essentially the difference between personalized and impersonalized questions is the difference between a face-to-face confrontation and a verbal interchange in which mutual glances, and intimate physical expressions of feeling are avoided. Nonverbal cues which personalize questions carry warmth, a sense of nearness or proximity, the implication that the teacher has a personal involvement in meaningful interactions. Impersonal question-asking will convey detachment, aloofness, and a sense of distance. In both instances, nonverbal cues provide the basis forthe distinction.

Lectures or given information (Category five) can be observed in light of teacher ability or willingness to use pupil nonverbal responses as cues to guide teacher talk. A teacher can be responsive or unresponsive to student behavior and the key factor of this dimension is the teacher's sensitivity to his own behavior when talking to students. If pupils indicate that they are restive, bored, disinterested, or inattentive, the teacher may change the pace or direction of his own talk---this is responsive behavior. Teachers are frequently unable or unwilling to alter the pace or direction of their talk: they also have difficulty in detecting the meaning and relationship of pupil nonverbal behavior to their verbal performance---teacher talk that continues in the face of unreceptive student behavior is unresponsive. A significant dimension in a description of teacher information-giving behavior is the response of pupil behavior to teacher talk, and the teacher's use of that feedback.

Category six (gives direction) can be viewed as behaviors that involve or dismiss students. Teacher directions can involve students in a clarification of either maintenance of learning tasks; or they can dismiss or control student behavior. While involving behaviors facilitate further pupil-teacher interactions, controlling behaviors restrict interaction. Facilitating directions get across to students the idea that learning is a conjoint venture in which both pupils and teacher have a mutual purpose. Dismissing directions tend to be punitive. The notion is communicated that the teacher would rather not clarify with directions but would rather control activity independent of student involvement.

The dimension firm or harsh helps to qualify category seven (criticizes or justified authority). Firm criticisms or justifications of authority have their use in the classroom. Such criticisms evalute a situation cleanly and crisply, and clarify expectations for the situation. They lack the hostility, severity, and indignity of harsh criticisms, and they are devoid of the aggressive or defensive behaviors which criticisms can sometimes yield. It is almost needless to point out that teacher nonverbal expressions most often provide the means for differentiating between criticisms or authority justifications that make the difference between appearing firm or harsh.

Flanders separates student talk into two categories (response to teacher category eight; and student initiated talk, category nine). One nonverbal dimension is appropriate to both categories, for teacher behavior during student talk is almost entirely the nonverbal activity of being receptive or inattentive. Receptive teacher behaviors involve attitudes of listening and interest, facial involvement, and eye contact, and suppression of teacher distraction and egoism. Inattentive teacher behaviors during student talk generally involve a lack of attending, eye contact, and teacher travel or movement.

Category ten (silence or confusion) in the Flanders' system is used as a "catch-all" category, and possesses little inherent value. Yet, there are different kinds of silence and confusion which can exist in a classroom. The dimension of comfort or distress is useful for recording the distinction-- comfortable silences are characterized by times of reflection, thought, or work; distressing instances are produced by embarrassment or tension- filled moments. Comfortable periods of confusion are those in which students are stimulated or exhibit excitement, while distressing instances of confusion reflect disorganization and disorientation. It is primarily the nonverbal cues provided by the teacher which set the stage for either comfortable or distress- ful classroom occurrances.

While the foregoing discussion may appear needlessly elaborate, the observational system for combining the verbal and nonverbal is presented in a simpler form below:

Indirect-Direct (verbal)	Encouraging-Restricting (nonverbal)
Accepts student feeling	
Praises or Encourages	Congruent-Incongruent
Uses student idea	Implement-Perfunctory
Asks questions	Personal-Impersonal
Lectures-Gives information	Responsive-Unresponsive
Gives directions	Involve-Dismiss
Criticizes or Justifies authority	Firm-Harsh
Student talk (response)	Receptive-Inattentive
Student talk (initiated)	Receptive-Inattentive
Silence of Confusion	Comfort-Distress

Coding Procedures

Given an understanding of the rationale and background of this system, an observer must have available a simple means of recording in verbal and nonverbal categories. This system is designed to enable an observer to use the categories, time intervals, and ground rules of the original Flanders system, while recording the nonverbal dimensions also. By marking a slash (encouraging) or dash (restricting)to the right of recorded tallies, an observer can record both the verbal and nonverbal dimensions of teacher behavior within the three-second time intervals. A circled number is used to enclose the category frequency when teacher behavior is solely nonverbal.

The Matrix

A unique and essential ingredient of Flanders' Interaction Analysis is the utilization of a ten-by-ten matrix into which coded verbal behaviors are sequentially plotted. In addition to making various quantitative data easily accessible, this matrix allows the observer to note verbal emphases of instruction and verbal flow patterns during classroom interaction.

In order to preserve the capacities of the Flanders matrix when plotting both verbal and nonverbal behaviors using the IDER system, a matrix approaching three dimensionalism has been conceptualized.

When laid out in two dimensions, such a matrix provides four distinct areas for study, as indicated in Figure I.

To interpret data provided by the IDER matrix, it is necessary to know that numbers from 1 through 10 represent Flanders verbal categories when these are accompanied by encouraging nonverbal cues. Numbers from 11 through 20 represent the same categories accompanied by restricting non-verbal expressions.

Quadrant one of the matrix provides data regarding verbal behaviors consistently accompanied by encouraging nonverbal cues. Quadrant three of the matrix supplies data regarding verbal behaviors consistently accompanied by restricting nonverbal expressions, and Quadrants two and four provide insight into patterns of behavioral transition.

FIGURE I

The IDER Matrix

Recent Research Findings

Recent research[2] involving over 27,000 IDER tallies has established the fact that observer reliability in the use of the system can be readily obtained. Further, several interesting findings have resulted:

1). Among the subjects observed, there was no significant relationship between the proportion of direct verbal behavior and the proportion of restricting nonverbal behavior exhibited.

2) Among the subjects observed, there was no significant relationship between the proportion of indirect verbal behavior and the proportion of encouraging nonverbal behavior exhibited.

3) All subjects observed tended to be more encouraging than restricting in their nonverbal cues.

4) Among the subjects observed, nonverbal behaviors within IDER category 3 (use of student ideas) were restricting significantly more often than they were encouraging.

Although a great deal more research is needed before the tenability of the IDER system can be either completely supported or rejected, recent studies suggest that the potential of IDER as both a research tool and a feedback system is significant.

---

[2] Russell L. French, A Study of Communication Events and Teacher Behavior: Verbal and Nonverbal. Unpublished Ph. D. dissertation. The Ohio State University, 1968.