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ABSTRACT

The Profile of Interaction in the Classroom (PIC) is a short-cut method of interaction analysis that can provide the quick feedback essential to effective supervision of instruction. And because the PIC contains a record of all the behaviors that occurred in the classroom, as well as the sequence, the data may be used to build a traditional matrix. The PIC employs the ten categories and the 3-second rhythm of the Flanders System, but instead of using numbers, the PIC uses a tally mark for all ten behavior categories. The tallies are recorded in ten columns, each of which is divided into 40 one-minute rows. The rows are divided into 20 sections, each representing 3 seconds. Thus a behavior can be recorded in the appropriate numbered column and in a position within a row which shows its place in the sequence of events. The primary advantage of the PIC over the traditional method is that it presents the data in an easier form for calculating the totals of different categories of behavior and the ratio of indirect to direct or student to teacher behavior. (Related to SP 003 937, in this issue.) (RT)

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PIC

PROFILE OF INTERACTION IN THE CLASSROOM

A Quick Feedback
of
Interaction Analysis

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INTRODUCTION

The Profile of Interaction in the Classroom--called the PIC-- is an in-service and pre-service training device toward the improvement of instruction. It may be used by a teacher as he observes someone else teach or as he records and analyzes an audio or videotape of his own classroom behavior. And it should prove especially helpful to the supervisor of instruction, the school staff member as he works with his colleague, the master teacher as he helps a student teacher, or the college supervisor as he works with teachers and student teachers.

The Profile of Interaction in the Classroom was created when Dr. David Crispin found, while training public school teachers and supervisors, that there was much resistance to the matrix. The teachers and supervisors found interaction analysis very helpful, but after their initial enthusiasm they lost interest due to the complexity of constructing the matrix.

Therefore, in order to make interaction analysis more widely used, Dr. Crispin decided to create a quick feedback method for on-the-job supervision.

Because the PIC affords a simple method of recording and analyzing teacher-pupil interaction, it allows for quick feedback to the teacher by avoiding the time-consuming tabulations and analyses involved in building a matrix. A supervisor, trained

in Interaction Analysis, can stop tallying six or eight minutes before the end of the class period, tabulate and analyze the interactions, and present the teacher with his "Profile" before the next class period begins. When the teacher is free after the observed class session, he and the supervisor can discuss the interactions. This is not possible where traditional methods of recording behaviors and matrix building are employed.

The PIC, then, is a short-cut method of Interaction Analysis that can provide the quick feedback essential to efficient and effective supervision of instruction. And, because the PIC contains a record of all the behaviors that occurred in the classroom--as well as the sequence--the data may be used to build a traditional matrix for a more detailed analysis or for purposes of research in classroom interaction. Also, the Profile can be a valuable adjunct to Microteaching methods of analyzing teacher-pupil interactions.

PROCEDURES

The PIC is not a system of Interaction Analysis. Rather, it is a shorthand method of tallying and analyzing teacher-pupil interactions that employs the ten categories of the Flanders System. Therefore, in order to use the PIC, one should have mastered the Flanders system.

The purpose of the PIC is to afford shorthand methods of Interaction Analysis. Instead of using 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, the PIC employs one symbol for all ten behaviors. The symbol to be used is a vertical mark like this: | .

Since the PIC employs the Flanders categories, it must account for ten different kinds of behavior. And since a "/" can represent only an occurrence of a behavior, and in itself cannot differentiate among behaviors, we need a method of differentiation. The PIC differentiates among behaviors through the use of columns--ten columns representing each of the ten categories:

CATEGORIES									
Totals									

The observer decides the category for the behavior he has just observed and then records that behavior by placing a "/" in the appropriate column. And the three-second rhythm used in the Flanders System is preserved. The observer should practice and learn to make a "/" slowly enough to consume three seconds. This can be done by counting silently "one thousand and one, one thousand and two, one thousand and three" as he slowly makes his

mark. Once the three-second rhythm has been learned, the observer must develop the "three-seconds or faster" habit; that is, on-going behavior is recorded every three seconds, but a change in behavior, or speaker, is recorded as it occurs, which can be faster than three seconds. The three-seconds-or-faster recording rhythm of the Flanders System is employed by the PIC. The difference is that instead of writing numbers one beneath the other down the page the observer makes a "↑" in the appropriate column of a prepared form.

This method presents simple, analyzable interaction data. I/Ds, Revised I/Ds, S/Ts, and percentages of each of the categories could be accurately and quickly derived. And herein lies the primary advantage of the PIC. It is much easier and quicker to count the tallies in each column and record the totals than it is to find the totals of each of the categories by going over the entire record ten different times. To find the total number of fives in the PIC, one looks only at Column Five. To find the total number of fives in the traditional record, one must go over the entire record. Essentially, then, the PIC requires less than one tenth as much time for computation. And it increases accuracy; there is no need to check or cross out numbers for fear of counting a number more than once. And, finally, the PIC method increases reliability in rhythm. It is easier for different observers to learn to make ,s with the same speed than to write ten different numbers at the same speed.

But so far we have neglected a crucial aspect of Interaction Analysis. For purposes of research, and for purposes of careful, sophisticated analysis of teacher-pupil interactions, the observer's record must preserve the sequence of events.

The basic method affords data that indicate that the teacher lectured or that he asked a question. But what happened when? Did the question precede or follow the lecture or did the question occur during the lecture? Cause and effect relationships and certain insights regarding human interactions cannot be derived unless our records of interactions preserve their sequence.

The PIC preserves the sequence by accounting for time in three-seconds-or-faster units, up to 40 minutes. More than 40 minutes of interactions requires the use of two PICs. One minute (20 three-second units) is maintained horizontally within a row:



Each of the 20 vertical guide marks along the bottom represents three seconds or fewer. If the observer makes his tally by placing his pencil on a guide mark and simply extending it upward (or by starting at the top and moving down), and if he begins with the first little guide mark near the boundary at the left and works

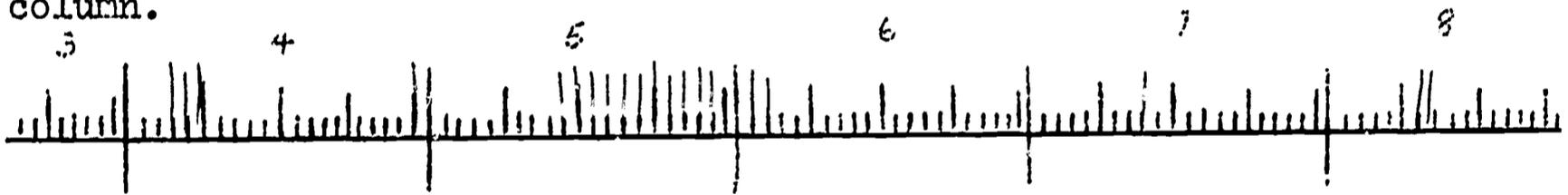
from left to right, he can record a sequence of behaviors as follows:



And if this represents Column Five, Category Five, for example, we have a record of one minute of lecturing. Because there are 20 tallies in Column Five and no tallies in the other columns, we know that only lecturing, Category Five, occurred during that minute.

When several categories are needed to record behaviors, the principle of tallying from left to right, using the guide marks in the appropriate columns, is the method for maintaining the sequence.

Here is an interaction sequence. Remember, the first behavior to occur is tallied on the left-most guide mark in the appropriate column.



The interaction sequence in the above example can be expressed horizontally as follows by using the numbers of the categories to represent behaviors:

6--6--4--4--4--8--8--7--5--5--5--5--5--5--5--5--5--5--5--4

The interaction began with the teacher's giving explicit directions, Category Six. This is evident because Column Six contains the left-most tally. The behavior lasted longer than three seconds

because the next tally represents the same kind of behavior. Then the teacher asked a question, evidenced by the tally at the third guidmark in Column Four. The questioning lasted approximately nine seconds because three tallies appear in sequence. The teacher's question was followed by a pupil's "response-to-teacher" behavior, Category Eight. The behavior lasted longer than three seconds; it required two tallies. This student behavior was followed by a criticism on the part of the teacher, Category Seven. Then the teacher "lectured", Category Five, for approximately 33 seconds. And this minute of interaction ended with a teacher's question, Category Four. It is evident that approximately a minute has passed because the last tally, Category Four, appears on the guide mark at the extreme right of that column next to the boundary; there are no more guide marks left for tallies. And there is no place to go but down--down to the next row.

When we move down to the next row, we go immediately to the left-most guide mark of the appropriate column and begin tallying left to right.

INTERACTION ANALYSIS

The PIC employs the traditional methods of analysis (except for the matrix). From the totals at the bottom of the columns

I/Ds, Revised I/Ds, S/Ts, and percentages of each of the categories can be derived. And the PIC form provides the formulas, as well as space for computations, so that the observer can provide analytical feedback quickly to the teacher.

The PIC can also be used for analyzing the sequence of interaction. The teacher and the supervisor can discuss what followed what, and perhaps why, by observing the sequence of tallies. However, for purposes of research based on interaction sequence, or whenever a complete and accurate computation of pairs of interactions is required, the traditional matrix is a more appropriate instrument than the PIC. A tally in a matrix represents two sequential behaviors; a tally in a PIC represents one behavior.

The purpose of the PIC is to provide quick feedback to the teacher. For a more detailed analysis, and where quick feedback is not essential, the traditional method of Interaction Analysis--writing the numbers of the categories one beneath the other down the page and then building a matrix--is preferred.