Interaction analysis, based on the Flinders system but containing the additional category of maladjusted behavior, was applied to three videotaped classroom situations involving socially maladjusted children. The first two were made in January; the teacher was involved in a T-group experience in February; the third videotape was made in May with the same 15 boys as in the earlier and one girl previously absent. Analysis indicated significant changes in both the teacher's and the students' behaviors. The teacher became more indirect, reduced controlling behaviors, and increased praise and questions. The students' socially maladjusted behaviors were reduced and apparently eliminated for half of the members of the class. Confusion decreased and response to teacher and self initiated responses increased. (Author/JD)
Socially Maladjusted Children in the Classroom—An Interaction Analysis

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This field study research employed the methods of interaction analysis to describe the behavior of socially maladjusted children in school classrooms and the relationships between their behavior and the behavior of their teachers.

Procedures

This study is based on the observation of three videotapes made in special education classrooms and the Diagnostic, Counseling and Remedial Center in Terre Haute, Indiana. Each videotaping session was preceded by placement of all taping equipment in the classes several hours before operation. Other videotapes were made before and during the period under study so the children were acclimated to the recording equipment.

In classroom situation I, early January 1969, the participants were eight boys, ages 10-15, and their teacher. Classroom situation II, also early January 1969, involved seven boys, ages 7-10, and their teacher. In classroom situation III, taped in mid-May 1969, the fifteen boys in the two earlier situations and one girl who was absent during the first taping took part, and the teacher was the same as in situation II. Each situation lasted for fifty minutes.
The original plan for this field study had been to observe the two groups with their respective teachers at a four month interval. Because of circumstances beyond our control, the teacher in classroom situation I was not available for observation in mid-May, and her students had been transferred to the class of younger boys early in May.

The tapes were observed and the behaviors were recorded by David B. Crispin using the Profile of Interaction in the Classroom, called "PIC." The PIC method employs the Flanders system of interaction analysis but avoids the use of a matrix; the observer tallies directly on to a grid form the ten Flanders categories. An additional category—maladjusted behavior—was created for the purposes of this research.

From the video tapes, behaviors of teachers and students were recorded every three seconds or as fast as they occurred in cases of change of behavior or speaker. Each video tape was observed in its entirety three times, and stopped and reversed and rerun as needed for a careful and accurate categorization of behaviors. In addition to the three global observations, each video tape was rerun in its entirety the same number of times as there were students in the class. This allowed the observer to record—in addition to the Flanders categories—all the maladjusted behaviors which occurred; in each of these observations the observer recorded the behaviors of only one student for the entire class period. Therefore, the only behaviors which occurred but were not recorded were those few instances when a student was temporarily off-camera.

1 Profile of Interaction in the Classroom, PIC forms and manual, by David B. Crispin, Association for Productive Teaching, 5408 Chicago Avenue, South, Minneapolis, Minnesota, 1969.
Operational Definitions

**Behavior:** Observable, oral, verbal acts of teachers or students.
The behaviors recorded were the ten categories of the Flanders system plus "maladjusted behavior" as defined below.

**Maladjusted Behavior:** All behaviors of students, verbal and nonverbal, which can be described in general as a typical, not normal, for children and youths between the ages of seven and fifteen. Such behaviors are more specifically described as dysfunctional, antisocial, silly, irrational, exhibitionistic, acting-out, uncommunicative, disruptive, childlike, extremely aggressive, unintelligible. Examples of maladjusted behaviors: Making noises like animals. Pretending to be a bird, a lion, etc. Pretending to be an army tank, army bomber, battleship, etc. Standing on one's head. Crawling on all fours. Fighting, wrestling, or pretending to. Going "ack-ack-ack-ack-ack-" like a machine gun. Pretending to shoot with an imaginary pistol or rifle. Pretending to stab with a knife. Giggling spontaneously when nothing funny has occurred. Singing spontaneously when no one else is singing. Making unintelligible noises. Putting thumbs in ears, wiggling fingers and shouting, "Hey Mom!" Throwing things. Making and wearing a paper hat. Irrational, non-productive, dysfunctional interruptions of the teacher or a fellow student. Making fun of another undeservedly, and at length.
Findings

Table I below sets forth the total number of instances of the behaviors of the teachers and the students in terms of Flanders categories plus the special category of socially maladjusted behavior.

<table>
<thead>
<tr>
<th>Behaviors:</th>
<th>Teacher</th>
<th>Classroom Situation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I (January)</td>
<td>II (January)</td>
<td>III (May)</td>
</tr>
<tr>
<td>1 -- Accepts feelings</td>
<td>8</td>
<td>33</td>
<td>14</td>
</tr>
<tr>
<td>2 -- Praise - Encouragement</td>
<td>63</td>
<td>74</td>
<td>216</td>
</tr>
<tr>
<td>3 -- Accept ideas</td>
<td>13</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>4 -- Questions</td>
<td>98</td>
<td>42</td>
<td>199</td>
</tr>
<tr>
<td>5 -- Lectures - Orientation</td>
<td>251</td>
<td>78</td>
<td>11</td>
</tr>
<tr>
<td>6 -- Directions - commands</td>
<td>70</td>
<td>80</td>
<td>33</td>
</tr>
<tr>
<td>7 -- Criticism</td>
<td>85</td>
<td>67</td>
<td>52</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 -- Response to the teacher</td>
<td>112</td>
<td>57</td>
<td>211</td>
</tr>
<tr>
<td>9 -- Self-initiated behavior</td>
<td>61</td>
<td>51</td>
<td>293</td>
</tr>
<tr>
<td>10 -- Silence or confusion</td>
<td>448</td>
<td>407</td>
<td>66</td>
</tr>
<tr>
<td>11 -- Maladjusted behavior</td>
<td>537</td>
<td>73</td>
<td>56</td>
</tr>
</tbody>
</table>

Analysis of Data

The data in Table I reveal a significant difference between the behaviors of the students from the classroom situation in May (III). The differences prevail over all four types of student behaviors recorded. And the differences are significant at $p < .001$. 
If we remember that the boys in Situation III are the very same boys as in the two earlier situations, we see that their behaviors changed markedly during the four months. Response-to-teacher and self-initiated behaviors increased markedly. And, what seems more significant, silence or confusion reduced drastically. The 448 and 407 instances of confusion, respectively, observed in January are surely extremely high frequencies for class periods of approximately fifty minutes. This behavior was reduced to only 56 occurrences in May, Situation III, about one per minute.

The most salient behavior, regarding the purposes of this research, is maladjusted behavior. And Table I reveals that here occurred the most significant change of all. In Situation I the older boys behaved in a socially maladjusted way 537 times; the younger boys, 73 times. Moreover, these behaviors occurred throughout the class when they were supposed to be doing something else. Four months later, these same boys behaved socially maladjusted only 56 times. But what is more noteworthy, there were only 12 instances of socially maladjusted behaviors when they were supposed to be doing something else. That is, in Situation III the teacher gave the class five minutes of "free activity," and 44 instances of maladjusted behavior occurred during these five minutes. The 12 such behaviors that occurred throughout the remaining forty-five minutes were by only three boys. During the free activity period all of the maladjusted behaviors were shown by seven boys. Seven boys (and one girl) spent the entire observed period in Situation III, including the free activity period, without indulging in any socially maladjusted behaviors. This was not true in Situations I and II

2 The girl in Situation III joined the class midway through the semester. During the observed class, only three explicit behaviors were recorded for her, all 9's.
in which every student indulged in some maladjusted behavior. The most striking example of change occurred in one fourteen-year-old boy. His behavior was socially maladjusted 84 times in Situation II (the highest frequency for any boy), and he evinced no such behavior in Situation III four months later.

How can we explain these findings? If we consider the students' behaviors to be the dependent variable in this field study, the independent variable must be the behaviors of the teacher. The students we observed in Situation III were a combination of the two classes termed Situations I and II. The only teacher for whom we have data both in January and in May is the teacher in Situation II. His behavior, then, is our independent variable.

How did the teacher behave? Table I sets forth the data in terms of Flanders categories, 1-7, teacher behaviors. And Table II presents the analysis of his teaching pattern in terms of I/D's, Revised I/D's and S/T's.

<table>
<thead>
<tr>
<th>Ratios*</th>
<th>Situation II (January)</th>
<th>Situation III (May)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/D</td>
<td>.39</td>
<td>.80</td>
</tr>
<tr>
<td>I/D (Revised)</td>
<td>.43</td>
<td>.73</td>
</tr>
<tr>
<td>S/T</td>
<td>.21</td>
<td>.46</td>
</tr>
</tbody>
</table>

*The higher the I/D the more the teacher behaviors were 1's, 2's, 3's, and 4's (as compared to 5's, 6's, and 7's), the more indirect was teacher behavior. The higher the Revised I/D the more the teacher behaviors were 1's, 2's, and 3's (as compared to 6's, and 7's); the more supportive and accepting was teacher behavior. The higher the S/T the more the students talked as compared to teacher talk,
The teacher's behavior pattern in May as compared to January shows no significant change in either Accepts Feelings or Accepts ideas category. He did reduce both Criticism and Directions, although not radically. The greatest change in his teaching pattern occurs in three categories; he radically increased Praise and encouragement, and Questions, and greatly decreased Lecture-Orientation. Generally stated, this teacher moved from giving and controlling to asking for, and accepting and praising students' behaviors (questions and praise total 415 behaviors).

The Teacher's General Methods and Procedures

Early in the semester, in February, the teacher was involved in an intensive T-Group experience, after which he made such statements as: "I feel now that I know myself better," "I think I'm more sensitive to others," "I'm sure I'll be more sensitive to the kids," (his students). He decided to concentrate on being honest with his students and also to use as much praise and encouragement as possible. He did away with grades; no grades, or "marks," were given for particular performances, and no final grades were awarded at the end of the semester. He maintained the curriculum only loosely; math, language arts and reading were maintained, but study was on an individual basis with the teacher serving as a helper as needed. There were certain times set aside for study and work, but the students did not have to study during these times. They were free to do as they pleased as long as they did not disrupt others. Rows of seats became a large circle. Upright partitions separated students individually or in two's or three's according to their wishes. If a student wanted more privacy he could get a screen and place it between himself and his neighbor. And students could go to the back of the room and work behind a large partition, or even leave the room and sit in the hall (for privacy and concentrate, not discipline).
Students could help each other. A most significant help dyad developed. The most socially maladjusted youth (mentioned above) paired off with a younger boy who had not spoken in school for two years. Soon the younger boy was talking and the video tape contains a very serious and intense dialogue between the teacher and these two boys involved in learning numbers and colors, a friendly competition. After which the older boy whispered to the teacher, "I could have beat him if I wanted to, but I wanted him to win."

Perhaps the most dramatic change in teaching method is found in the teacher's handling of maladjusted, "acting-out" behaviors. Instead of directing and controlling, he decided to let them "act-out"; and he provided a specific time each day called the free-activity period when they could really do as they pleased. The only rules were that they should not hurt each other and should not break the furniture or school equipment. The video tape contains five minutes of acting out. About half the boys raised hell. They jumped, shouted, screamed, wrestled, threw things, played at war, played like animals, shot and fell dead, stabbed, boxed, tackled, sang, piled on each other, ran, fell down, rolled around on the floor, etc. It looked like chaos, except that half the students remained calmly at their desks, singly, and in pairs; and the teacher sat at the back talking quietly to one little boy and completely ignored the acting-out group. When the teacher said, "Time!" the acting-out stopped; and the boys un piled as quietly and as nicely as professional football players after the whistle.

The teacher also involved the group in decision making: "How shall we behave together in class?" "And when I leave the room,...?" The teacher actually left the room, though rarely, and the class maintained itself as though he were present.
The teacher maintained a calm and firm tone when disciplining. He never raised his voice. He used a great deal of physical contact. He constantly touched the students. A firm grasp of the arm, a friendly pat on the head, a hand on the shoulder. In this way he attempted to demonstrate both fond affection and manly leadership.

Finally, the teacher used a special method not typically found in school classrooms. He held "individual therapy" sessions of thirty to forty-five minutes, twice weekly, with each of the students. During these sessions he talked quietly with one student while the rest of the class worked on their own. The one-to-one sessions involved talk about personal problems, interpersonal relations and school work. Here the teacher worked to build trust and confidence, as well as to help the students learn the prescribed subject matter.

Conclusions

No quantifiable evidence is available regarding how much these students learned in terms of language arts, reading and math. No formal tests were given, and no grades. We have only the teacher's general estimate that all the students improved at least a little, and that some seemed to improve quite a lot. The skills the students evinced in the video-taped session in May offer support for the teacher's statement.

Regarding the purposes of this research, carefully quantified data were derived. And these data reveal significant changes in the teacher's behavior pattern and significant changes in the behaviors of the students. The teacher became more indirect, reduced controlling behaviors, and increased (drastically) praise and questions. The students' socially maladjusted behaviors were significantly reduced and, apparently, eliminated for half of the members of the class. Confusion decreased markedly, and response-to-teacher and self-initiated-
responses greatly increased. In general we feel that we can accurately describe the classroom situation video taped in May as very nearly normal or typical. Except for the five minute acting-out period, and the room arrangement, a naive viewer would find in this class session very little, if anything, to indicate that these were socially maladjusted children. It is true, of course, that, in general, their language arts, reading and math skills were lower than normal for this age group.

We conclude that this teacher's methods and his behaviors with his students were very successful in reducing socially maladjusted behaviors as operationally defined in this study. And we also conclude that interaction analysis is a valuable tool for research in classrooms of socially maladjusted children.

Suggestions for Further Research

The findings of this field study are very limited and not readily generalizable. We observed only one teacher and what turned out to be only one class. Interaction analysis should be employed to gather evidence regarding the effects of teacher behavior upon student behavior in as many classrooms of socially maladjusted children as possible with the aim of building a theory of instruction relevant to these unique teaching situations. And we offer the following as a tentative base for exploration:

The teacher should:

- Aim to reduce control - lecturing commanding, criticizing.
- Aim to increase praise and encouragement.
- Aim to increase questions.
- Aim to build interpersonal trust and confidence.
- Use much physical contact with his students.
- Allow the students prescribed periods for acting-out.
- Arrange the physical setting so that all the students are not constantly influenced by the socially maladjusted behaviors of others. Separate them, individually, or in small groups according to their wishes.