The focus of this study was the differential effects of a bilingual teacher and a non-bilingual teacher on the activity and interaction systems of classes where approximately 80 percent of the children were from bilingual homes. Special emphasis is on the general effects of teacher behavior on learning. Two teachers in an open-classroom school were observed for a year. A narrative of class activities was developed. The analysis of the data described (a) relations between levels of instruction, (b) inconsistencies in curricular packages, (c) visual transmission of teacher norms, (d) time-of-day variables related to teacher-student interaction, (e) ambiguous teacher-specialist relationships, and (f) observer influences on teacher activity and teacher-student interaction. (JS)
A Look at the Residue: The Accidental/Incidental Contribution of Observational Field Research Methodology to the Understanding of the Social System of Woodmound (an Elementary School)

Elwood B. Traylor

University of Texas at San Antonio

Abstract

The observational field methodology of educational research is a pervasive tool which can (1) contribute to the understanding of the school social system and (2) influence the social system variables of groups being observed. Two teachers in an "open classroom" school were observed for a year. A narrative of the activities of the classes was developed. The analysis of the data described (1) relations between levels of instruction, (2) inconsistencies in curricular "packages," (3) transmission of teacher norms visually, (4) "time of day" variables related to teacher-student interaction, (5) ambiguous teacher-specialist relationships, (6) observer influences on teacher activity and teacher-student interaction.

Introduction and Initial Problem

Moving to a new university, whose charge and commitment is to serve its geographical area, prompted the initiation of a research project. The population of the "geographical area" served has a bilingual (Mexican American) proportion of approximately 55%. As an educational psychologist whose responsibilities would include development of programs and courses designed to improve the understandings and skills of pre-service and in-service teachers, and with no experience or contacts with students of this background, it seemed not only appropriate but necessary to acquire some understanding of the nature of the "educational dynamics" of classrooms with high proportion of Mexican-American students.

Omitting the details of the initial research proposal (rationale, setting selection, subject selection, etc.) since these are only incidental to this report, the classes of two teachers, one with and one without bilingual ability, in an elementary school with 80% proportion of Mexican-American students, were observed for a year. While the narrative developed from the observations was to be analyzed to determine differential effects of teacher interaction with students that might be related to differences in bilingual ability of the teachers, the observational methodology seemed to be useful in recording more pervasive data. Particularly it provided information related to broader school social system understandings and to the effect of the methodology on social system variables of the groups observed. These are the issues of this report.

Initial Problem

This paper is "residue" of observational data collected over a period of a year. The focus of the study from which the data relative to this paper were obtained, was the differential effects of a bilingual teacher and non bilingual teacher on the activity and interaction systems of classes with approximately 80% of the children from bilingual homes. The study design was limited and exploratory. The focus was on the general effects of teacher behavior on learning. More specifically was a concern for examining the potential differential effects of two teachers, one with bilingual ability and one without, on 8th grade students the majority of whom came from bilingual cultures. A year observing and describing the social system of the school groups, (the interaction between students, students and teachers, etc.), was expected to provide the broad basis of information necessary for analysis to, hopefully, identify some differences. Further analyses were expected to lead to some hypothesis about relationships which could be specifically tested later.
Theoretical Framework and Method

The conceptual orientation guiding the observations and analysis was the classroom as a social system. Activities, interactions, sentiment and norms of both internal and external systems of the classes were observed and described. The researcher observed in the classes of two teachers on a pre-arranged plan about a half day every day for a school year.

Data Source

The school was an "open area" elementary school with 28 teachers, 10 resource personnel, 15 aides and about 700 students. The two teachers observed had about 30 students. One teacher was bilingual; the second was not. They both taught 5th grade. The students were in a ratio of about 80% Mexican-American (from bilingual homes) to 20% Anglo.

Elaboration

In this context, with continuous access to the classes of two teachers, an open school environment to be aware of other activities in the school, encouragement to attend faculty meetings, countless informal interviews with the administrators and other teachers, and copies of the official memoranda distributed to the staff, considerable data were collected only tangentially related to the dynamics of each of the classes formally observed and the primary problem. Questions were provoked; "Hunches" which, in hind sight, suggested questions potentially useful for more careful examination. Innumerable "events" occurred during the year. These events seemed to have a bearing on the activities initiated by the teachers being observed. Some of the events were external to the class setting; some were within the class. Some of the "events" were functionally derived, i.e. they came out of the regular activity system of the school or school system; some were not "events" from a conventional meaning of the term, but rather conceptual developments derived from efforts to explain the "hunches" made.

Emerging Problem

The specific hypothesis suggested is: the observational field methodology of educational research is a pervasive tool which can (1) contribute to the understanding of the school social system and (2) influence social system variables of groups being observed.
Findings

The Social System of Woodmound

Articulation between levels

Sometimes it might be better if the "left hand does not know what the right hand" is doing. At least, in terms of effects on students' learning it may not be best for the elementary teachers to be too aware of practices and expectations of the teachers in the middle school. A limit or qualification of this statement probably should be: when elementary teachers plan carefully for individual differences in student learning, when they are working with students having a wide range of academic achievement, when a major concern is to provide flexibility to help individual students show progress in learning, and when the middle school is organized to attend to students collectively according to general achievement, then this realization can have an effect on the feelings and practices of the elementary school teachers; and when the practices and expectations of teachers at the different levels are incongruent, the effect will be one of depressed morale, modification of goals, and changes in practices for these teachers at the lower level.

Expected learning outcomes in arithmetic for 5th graders were detailed by the sixth grade teachers. Specifically the 5th grade teachers were told what skills students were expected to have when they entered the 6th grade. At Woodmound the primary attention of the teachers (as perceived by the observer) was the development of reading and language arts skills. This is not to imply that no or little concern was given arithmetic. On the contrary, evidence of concern for the development of arithmetic skills could be documented (for instance the effort of teachers on screening students for groups and the Individually Prescribed Instruction sections as well as administrative support through budgetary provision for materials and teacher aides). However, if one were to arrange instructional content on a scale of priorities, reading would probably be highest.

In April, prior to the teacher work day, the Woodmound staff had just finished considerable testing for achievement. In part this was to help in evaluation of instructional efforts but was also to provide data to be used in placing students for the next (Fall) term. Fifth grade teachers and school administrators were using these results to make recommendations for placement of students moving to the middle school. The general screening was to assign students to basic, regular or "honors" sections of 6th grade mathematics. The array of activities, common to the system at Woodmound was initiated
in relation to the recommendation of students for this next year assignments. Student performance on specific skills of arithmetic were noted from test data; the "reliability" of these findings were improved (in the eyes of the staff) by adding teacher opinions based on their evaluation of the students through regular class activities; tentative recommendations were made based largely on (1) the level of (by grade norms) individual arithmetic skills on test materials and (2) agreement by the teacher that the child's "in class" performance confirmed their scores. (It should be noted the amount of time invested by the Woodmound teachers in this activity. Their willingness and enthusiasm for this task was a reflection of their expectancy that the student assigned to this appropriate level would be comfortable in his assignment--able to perform adequately and make progress.)

While the Woodmound staff was organized with some flexibility in regard to movement of students from group to group based on individual student performance (or through Individually Prescribed Instruction program) the middle school apparently was not. The arrangement of students into sections of basic, regular and honors was apparently an illusion of diversity. The work day meeting included statements of the "expectancy" of student performance by the middle school teachers. A common level of initial performance for all groups was assumed. The "variability" was apparently to be attained during the 6th grade by having different expectancies for student achievement within groups. Less would be expected in terms of "how far we go" by the groups; the honors groups would apparently do "more of the same" when compared to regular classes. No provision was to be made for students whose initial performance was advanced beyond the skills necessary for success at the 6th grade level ("Review would be good for them"). No provision would be made for re-assignment either for errors of initial screening or unusual progress during the year (a "lock step").

The meeting created frustrations for the Woodmound fifth grade teachers. The practices of "group" rather than "individualized" student treatment, seemed to violate not just educational theory but was incongruent with the organizational practices they were using. Their efforts as screening, re-assigning and diagnosing seemed futile.

In addition to the usual comments of the Woodmound teachers relative to their dissatisfaction with the conference, changes were detected in the practices of Woodmound teachers for the rest of the year. Considerably more attention was given to arithmetic tasks. The focus of this attention was to bring all students to the expected "minimal level" as described by the middle school teachers. (And, incidentally, not much attention was given to extending the skills of those advanced beyond sixth grade skills.) The observer noted that the activity system of Miss Gerlo now

1. The teachers observed during the year are referred to as Miss Locap and Miss Gerlo.
included time at the beginning of the day devoted to "practice" on individual arithmetic skills -- being able to recite multiplication facts -- and the "board work" now regularly included arithmetic problems. (Prior to the meeting the "board work" was devoted to language skills.) Students were observed spending more time working on the self instructional materials related to arithmetic. One teacher in an IPI arithmetic section, had students who were performing at a low level of arithmetic skills stay in class during recess to improve their performance.

These changes in practices of teachers were observed AFTER the work day meeting. The changes were perceived to be the result of this meeting. This influence of the expectations of 6th grade teachers, in another building, became important determiners of the instructional decisions made by the fifth grade teachers. The fifth grade teachers had little (no) effect on the activity system of the 6th grade teachers. (No suggestions were made relative to flexibility of 6th grade programs to accomodate the varying levels of ability.) As indicated earlier, the response of the fifth grade teachers included disappointment, frustration and discouragement. These reactions seemed natural.

Several questions are suggested including: why is there apparently a superiority-inferiority role in regard to establishing norms for instructional goals between the units (schools)? To what extent will the information received by fifth grade teachers during the "work day" session effect planning for future years? What will be the effect on students performing considerably "above grade level" of repeating skills? And a more basic question, why should one assume that the position taken by the sixth grade teachers is "right"?

A brief, one page, memorandum circulated by the Central Office to the 5th and 6th grade math teachers after the work day meeting was really a statement for 5th grade teachers. It indicated particular "vocabulary" entering 6th grade students should use, some expressions and procedures expected, and included the statement: "Teach the students how to work the processes and then teach them why it is done that way. The Middle School teachers insist that students comprehend the "how" easier than the "why". (Underlining and rotations are part of the memo). The memorandum had the effect of endorsing the position of the middle school teachers.

One might argue that the orientation of the elementary teachers--attempting to identify the performance level of students and organizing instructional practices to meet the level of the students--was supported by educational theory (and common sense?). It did require an unusual amount of teacher time which they were willing provide. Student progress seemed to provide them with enough satisfaction to continue their efforts. However, with the realization
of the "minimum standards" needed when students entered the middle school, the efforts in planning for individual differences are in question. It now appears that changes will result in goals and practices of the teachers at Woodmound. Emphasis will be placed on insuring all students attaining a minimal (and uniform) level of achievement of specific arithmetic skills.

Inconsistencies in curricular "packages"

The problem of "labels" and their meaning became an important focus at Woodmound. As a part of regular observation schedule, an Individually Prescribed Instruction class in arithmetic was included. Miss Locap had two IPI and one "regular" arithmetic class. Interest in comparing her role in the different classes was generated by some indicators of similar practices. However, the question of looking more carefully at differences between IPI class was stimulated by some in-school decisions that were being made.

Essentially, in the early Spring, the question of continuing the IPI program was raised. The need for an early decision was prompted by requests for budget allocations for the next year. The IPI program required an extensive amount of materials (pre-tests, practice exercises, post-tests, etc.). If the program was to be continued, allowance for the cost must be made early.

One dimension of the process of assembling information to support the decision to continue the IPI program was a comparison of IPI students with regular arithmetic class students on arithmetic achievement tests. These results were not conclusive.

Concurrently, two influences suggested some productive information might result from a slight variation of my observation plan. A colleague of mine in personal conversations advance persuasive arguments for "curriculum" as the vehicle for improvement of learning. Succinctly, the argument proposed, a careful planning of objectives clearly and precisely stated, followed by appropriate materials and activities, and required in an order consistent with "learning principles" was the greatest hope for improvement of learning in the classroom. As applied to our work at Woodmound, the IPI arithmetic program seemed to be a "curriculum package" that, if conceived well, should advance student learning in a progressive, systematic fashion.

At about the same time "The Risk of Appraising Non-Events" (Charters and Jones, 1973) was read. This suggested to me that while "ideally" the IPI was a package of pre-tests, prescribed activities, post-tests, prescribed

2. Dr. Thomas Cleaver, Professor of Curriculum and Instruction at The University of Texas at San Antonio.
activities, etc., that satisfy the criteria for efficient and effective learning, the IPI's effectiveness may be tempered by the "delivery system" of teachers. It might well be that by taking all the students in IPI (three different teachers) and comparing their achievement with students from regular classes, the comparisons might not compare the programs as much as the teachers.

As indicated, other teachers than the one observed (Miss Locap) were involved in the IPI program. My "contract" was not with the other teachers. However, by accident, on one occasion the behavior of another IPI teacher was noticed. Perhaps because of the intensity of verbal behavior in regard to student control and the contrast to Miss Locap it appeared significant. Other brief "bootlegged," observations showed noticeable differences in the "social environment" of the class. Intensity of teacher remarks, nature of verbal reassurance, punitive-reward nature of activities (stay in at recess to catch-up vs. what would you like to do next?) all suggested that the label "IPI", in order to understand its meaning adequately, had to include, in addition to its "curriculum", the nature of its delivery system. Teachers implement the curriculum. The context of the initiating and sustaining activities varied according to the teacher. While no "hard" data are available about the differential effects of these "delivery systems" and the performance of learners, one could expect some to exist. It could be manifest in the affective reactions of children; it could be manifest in the actual achievement. A body of literature exists relating to "teacher behavior" and its effect on student sentiment (some on student achievement). It could be argued, on the basis of our observations, that even in carefully planned and structured curriculum packages, variations in the curriculum exists. The source of some of the variation exists in the way the materials are "delivered"; the behavior of the teacher.

In addition to variations related to aspects of teacher approach, actual "activity" differences exist. The IPI arithmetic activities are packaged that include diagnostic, practice, achievement, and review materials sequenced according to level of skills. One would expect, since the materials are the same, that each teacher follows the same procedure and sequence of materials depending on the level of skill attainment of the child. However, it was observed that Miss Locap exercised some "individual differences" in regard to sequence. At times the criterion for assignment of the next "package" of exercises was based on student interest. The student was given the opportunity to select the activities they wanted at times.

To illustrate: Minnie had just finished (taken the test and scored acceptably) the prescription for a level of division. After a conference with Miss Locap, the comment
made was "what would you like to do next?" The student thought for a while, eliminating some alternatives, and decided on a block of activities related to "time." When asked to explain this action . . . since it was not what a student would normally do in the regular sequences . . . the response was "Minnie has been working for several days on these skills and is a little tired of this sort of thing. She needs a break; a chance to do something more interesting for a while. We'll come back to these other skills soon."

This episode captures the general orientation of Miss Locap. It would appear that the tightly structured curriculum package of the IPI program was routinely "tempered" with Miss Locap's interpretation of the level of student interest. When perceived as desirable for the individual student, variations were made in the sequence of activities. The general guiding objective was still congruent with the goals of the program but flexibility was introduced in the sequence.

Another type of difference in the delivery system of the teachers in this program should be noted. As a general feature of the IPI setting there was considerable "one to one" contacts between the teacher (or the aide) and a student. The contacts were "legitimately" related to checking assignments, correcting and explaining, prescribing next tasks, etc. In Miss Locap's classes this was done in a context that included considerable "reinforcing and supporting" behavior. Many smiles, verbal reassurance, and personal physical contacts were evidenced. "You're doing fine, good work, you've got this down now" with accompanying smiles, hand on shoulder or around shoulder: always accompanying routine checks. Rarely were criticism given. Incorrect answers were treated with "you remember how to do this; take this paper and work this with me." At this point the procedures related to the solution of the problems were recalled and the correct procedure was supported.

The verbal support and interpretation of arithmetic tasks led occasionally, to elaborated behavior. This setting, in Miss Locap's class, led to remarks, reactions and comments about personal questions, problems in other classes, friends, etc. What could have been a ritual of mechanical attention to arithmetic skills and their acquisition was in fact a very personal, student-teacher relationship. The effect of the "delivery system" of the program (teacher behavior) should be examined to see the nature of the effect.

**Transmission of teacher norms visually**

Woodmound was an "open area" school. There were modifications from the classic open school in that storage units, bulletin boards, chalk boards and file cabinets were arranged to make a "room" for most of the classes. In every case, however, one side was unobstructed and the partitions were
about head high. There was really "no place to hide" in the sense that all activities were public. Teaching style and student control techniques were all open to be observed.

Generally it was noted that similarities existed between teachers in such practices as grouping students for activities; assigning and checking homework; general housekeeping procedures, etc. When reference was made to these similarities in the field notes, the possibility of contagion was proposed. Looking at references to other teachers' behavior even similarities of verbal expressions were noted. The kinds of behavior reprimanded, reactions to the behavior, and threats made all seemed to come from the same "how to" manual.

Early in the semester a new teacher indicated considerable disapproval of the practice of giving "licks" to students. Her disapproval included statements like "I'll never do that." Well, before the year progressed, the teacher not only gave "licks" to repeated offenders but also used the same verbal justification I had heard before. "Since Johnny got licks for this before, it's only 'fair' that you get licks too."

As teachers moved temporarily to another station for conferences with colleagues or to get materials, the students in their home stations often got restless -- stood up, poked others with pencils, talked loudly back and forth -- (it should be noted that this behavior often was not different from their behavior when the teacher was there). The teacher, after allowing time for the noise to escalate, usually called the class to order from where they were. Their voices were loud enough to be heard by the students in spite of the distance and the noise in the classroom. While early in the school year new teachers felt this was not appropriate -- bothers other classes, calles attention of others to an undesirable situation -- in a few weeks they too were doing it.

Teachers frequently imitate behavior in response to situations that develop . . . a kind of unplanned, spontaneous behavior. The responses are not in their "lesson plans" since the situations developed unpredictably. What response does one make to these spontaneous situations? Probably they draw on their behavioral repertoire and respond as they have in the past. But when there is no equivalent experience, they imitate. In an open area school the models are easy to observe. And over a period of time, the similarities of teacher responses to classes of student behaviors become accepted as the way.

The Cumulative Effect of Stress

While we were impressed with similarity between teachers behavior, the difference within a teacher's behavior, at the beginning of the day and the end of the day was also noted. Most observations were scheduled during the mornings. Occa-
sionally, and usually on Fridays, the afternoon was observed.
(The IPI arithmetic class of Miss Locap was observed in the
morning; afternoon observations provided the opportunity to
describe the "regular" arithmetic class of Miss Locap. This
provided opportunity to note differences, if any, in teaching
behavior.)

It was during the last period of the day when an accumula-
tion of noise, interruptions, and general disorganization
was noted. While trying to record the interactions between
Miss Gerlo and her students the sounds of the typing class,
the instructions and commentary of three different teachers,
the noise from the blowers overhead as well as the shifting
and restlessness of the class all merged to make it next to
impossible to hear the group being observed. (Actually my
notes show that I could follow the recitation of two dif-
ferent classes--questions and comments of teachers; occasionally
the responses of students.)

Several features of the class with Miss Gerlo were noted.
One had to do with the spiraling of the intensity of verbal
behavior in a sequence of question-answer-comment-question.
A student would ask a question; Miss Gerlo would ask her to
repeat (MG's voice louder; the student would respond louder;
Miss Gerlo would answer louder; another student's reaction
would be still louder.) It seemed as if noise begat noise.

In this context, it was also noted that the nature of
the interaction between teacher-student changed. No more
of the friendly reminders to "Keep up with the questions,"
"Keep your place in the book," or "to attend to the work in
the room" --instead infractions of expected behavior brought
sharp, immediate, serious replies. Many of the same behaviors,
by the same people had been recorded in the morning. But the
response was different. When Mario dropped the pencil he
was using to check Lupe's work, the response was one of
feigned patronizing. "Is the pencil too heavy Mario"
accompanied with a smile. At 2:15 Mario again dropped the
pencil. "Come on Mario, pick up that pencil immediately."
No smile, serious.

The conditions present "the last period of the day"
seemed to account for different responses by the teacher.
Our initial reaction was that over a period of the day
stress accumulates. The stress causes the teacher to re-
pond differently. And the nature of the teacher's response
helps to contribute to the stress. That is, a critical or
punitive response from the teacher causes stress on the
student(s). Their responses will likely be more aggressive
or withdrawn. These patterns, of course, are incongruent
with behavior expected by students in a classroom; therefor
they are more likely to provoke additional critical responses.

While our notes did not attend in a careful systematic
way to the question of "time of day" and "stress," we did
notice and record the frequency of critical to supportive
responses by the teacher. A student is more likely to get a critical comment for an action in the last period of the day; the same behavior earlier might be passed off with a gentle anecdote having humorous overtones.

Who supports whom? (ambiguity of teacher-specialist relations)

In our observations at Woodmound we were impressed with many things. An open area school encourages "flexibility" and after some initial "culture shocks" the researcher accommodated to the routines of interactions between faculty during the day, students moving from area to area, sub groups of students being assigned to an "isolated" area working with aides or "quasi independently".* In this setting school personnel came and went unobtrusively. "Attention" was not called when another adult came into an area, assembled a group of children initiated some activity, and then left. Events like this occurred so frequently it seemed natural.

One morning when arriving at Miss Gerlo's class a "new" adult was at a table with 5 or 6 students. The class was attending to some board work tasks. It appeared to the observer that all the students were working on the same task--answering questions written on the board from information contained in a textbook. The students were writing answers and asking clarification type questions. There were also some comments volunteered from students that were essentially "elaborative" comments--personal experiences related to the content.

During this activity the behavior of Miss Gerlo (the regular teacher) and the "other adult" was recorded. Essentially Miss Gerlo operated as usual--moving from table to table to help, answering questions from individuals, "small talk" in response to comments made by students, repeating directions related to the form of the written material, gentle rebuffs to individual students, proding of others.

The table with the "other adult" seemingly participated in the same activity. She (other adult), instead of Miss Gerlo, did most of the same things for the students at "her" table. She went to the board near the table to give illustrations, suggested form or style and attended to the general supervision of the work of these children. General informal comments between this "adult" and the children at her table either was non existant or so minimal that it was not observed--she kept on the "task".

At the close of the "period", or perhaps better, at the end of the time allocated to that activity, the "other adult" left; Miss Gerlo then initiated another activity and the group started. Upon questioning, it was learned that this was the LLD (Language and/or Learning Disabilities) teacher. She

*While an environment for movement and interaction was present, it should be noted that some classes operated in traditional ways. For some teachers the lack of walls and discrete physical limits for their classes was no inhibitor in having a self contained class. They were "in" but not "of" the world of open schools.
periodically "worked with" the LLD children. Later in the school year while observing the same group one boy was noted. He was a "functional isolate". This classification was used because as the other students worked on regular class activities in their groups, this boy sat at a small table, usually alone, working on materials different from the others. The explanation included: the work the boy did was assigned by the LLD teacher; he would consult briefly with the teacher, get assignments (presumably explanations), return to Miss Gerlo's room to do the prescribed work; and go to lunch, recess, etc. with the other students in this group. Miss Gerlo felt little (if any) responsibility for monitoring the boy's academic performance.

At another time the observer was recording typical class activity when another "adult female" came to the class area. When observed, Miss Gerlo had the class stop the ongoing activity. The group was then "turned over" to this person. (Later it was learned she was Miss Rodsor, the counselor). The students were asked to sit in a circle and some group interaction activity was described and initiated. The activity was still in progress when the lunch pass came. Usually, when the lunch pass came all activity stopped and the class went to lunch. Passing classes to lunch this way made efficient monitoring of the number in the cafeteria. However, since this activity was in progress, another group went to lunch. It was learned, and later observed, that periodically (not always according to schedule) Miss Rodsor came to several classes and had group sessions. The purpose of these sessions was not clear to the observer and Miss Gerlo suggested that at times she learned from the students something of what the activity was but only by inference was she able to determine counselor objective. There was apparently no effort to explain the purposes of the activities.

Other "intrusions" were made from time to time in the observed classes. However, these were principally pre-arranged and systematic. Aides, on a more or less regularly planned basis, would come. In Miss Gerlo's class, a woman came daily to work with one group in reading activities. Aides helped Miss Locap in the IPI arithmetic class. However, in the case of the aides, their involvement had the following characteristics: the time of their appearance was prearranged; the nature of their activity was fixed; and the regular teacher was the director of these personnel. This seems reasonable for "para professionals". The "professional" (regular teacher) determined the needs of the students, planned activities to meet these needs, instructed aides to implement the activities and was able to monitor the activities as they proceeded.

However the case of the role of the "specialists" on the class activity system is of interest. The "support" personnel observed in this setting were other "professionals". They were characterized in important "different" ways. First,
they carried different "titles". In a sense the title of "reading consultant", "guidance counselor", "special education consultant", suggests the nature of the relationship between the person occupying the role and the regular classroom teacher. Second, the person occupying the "support" role usually had additional educational preparation and additional credentials in the form of "certification". The nature of the relationship between these "special services" personnel and the regular classroom teacher needs to be examined critically. Issues related to effective learning, efficient utilization of professional talent and the broad phenomenon of "morale" are involved.

At Woodmound the "support" personnel observed includes a counselor, a reading specialist, a special education teacher and a nurse. In every instance these personnel had responsibilities to schools in addition to Woodmound. This meant in part, they were not present at Woodmound except according to a schedule. In practice the schedules were flexible. Apparently demands of other schools or the central office could affect their presence. Some days when scheduled for Woodmound they might not show. Some days when an activity was planned with a particular teacher, it might not be initiated or it would be initiated at a different time.

Two observations are made in regard to the relationship between "specialist" and teacher. One, a "priority" issue. The other a "flexibility" issue. Apparently, the specialist had priority over the teacher in arrangement of activities. For instance, if the counselor arrived late, she felt it appropriate to carry out her plans for utilizing a particular class and the teacher "adjusted" her class activity schedules to accommodate. The classroom teacher had to be "loose" or flexible. Of particular and unusual interest was the activity of the nurse. At Woodmound there is apparently an annual effort to control "head lice" frequently found in the students. When this "check" took place, the nurse was in charge of the school--functionally. Classes were called, students examined, prescriptions given to students found to be contaminated, students were returned to classes, etc. Arriving at school at 12:30 one day, the activity was still in progress. At this point, the regular instructional activity for the classes being observed was postponed until completion of the examination. Some effort was made on a sporadic basis for reading work, group work, considerable outside play activity, etc. But the regular schedule was not implemented until about 1:00--an hour and 15 minutes left in the school day.

It should be noted that reaching students after treatment, and examination continued for almost a week. Students were called over the loud speaker to report to the examination room. Not unexpectedly, students left whatever activity they were involved in when called. Also, all students were
aware of all the referrals. The social effects on students with their peers is of interest, since a student with "lice", at least temporarily, carried a stigma.

This activity highlights observations made earlier. Priority was given to nurse activities as opposed to instructional activities. In fact, the examinations were given in the room used for IPI arithmetic. Other arrangements had to be made during the examination period. (Arithmetic was cancelled on examination day; other days, 30 children were arranged into half the room.) In addition, the responsibility of helping students adjust to this activity was the teacher's. Fear, ridicule by peers, and embarrassment were not uncommon.

Several children were diagnosed as having "language and/or learning disabilities". Within the context of state supported practices, these children were assigned to regular classes instead of separate self contained classes. They would meet with the LD specialist, receive some instruction, assignments, and return to the classroom. At times the teacher was given special instructions to follow in helping the student. At times additional information about the student was requested from the teacher. As the year progressed, the reading consultant and the special education teacher retreated from working with the teacher in the classroom to working briefly with the student (15-20 minutes) and sending instructions to the teacher.

Jokingly one afternoon after school (perhaps it wasn't a joke) one teacher, checking the special instructions given them from consultants for six different students remarked to four of her colleagues: "another year I won't make any referrals--I don't have the time for all this help."

Effects of Methodology on Groups Observed
Observer influences on teacher activity and student-teacher interaction

What's it like to have someone looking over your shoulder? Not just an occasional peek but a day by day, continuous "hard" look? Intensive observation accompanied by extensive writing, recording a "play by play" of the sequence of activities, number and nature of interactions was initiated in each of two teacher's classes almost daily for a period of 8 months. For the observer, the setting was ideal. The privilege of being privy to a continuing instructional account has provided data to gain understanding of the social system of an instructional group. Eventually these data may be able to provide some additional understanding for scholars and practitioners about the learning process of children and the relation of some of the contextual variables to such learning.

But what of the effect of the observer on the dynamics
of the learning setting—and perhaps on learning itself? A casual inspection would suggest that several variables are potentially subject to observer influence. The teacher is certainly one. If the teacher's behavior is an independent variable on student learning, and if data are being collected to examine the relation of teacher behavior to the students behavior (learning), then does the observer, attempting to collect data in a "naturalistic" setting "corrupt" the variable being studied? Simply stated, does the teacher do things differently when she is being observed and when those observations are being carefully and continuously recorded? There is evidence that an observer can have an effect on the performance of the one being observed. Our field notes support the suspicion of the effect.

From notes:

12:30. The classes this morning were interrupted to provide the nurses with chance to inspect students for lice. Kids have been on an "extended informal schedule" (a lot of playground activity, etc.) It looks like the regular schedule will start now with 5th period. I'll observe Miss Locap's arithmetic class and 6th period I'll go to Miss Gerlo's.

Miss Gerlo walked past Miss Locap's area and in noticing me asked "Are you going to be here today?" "yes, I'll see you 6th period." "I'll have to go do some lesson planning."

While it is difficult to determine the validity of this comment and to what extent it was made in jest, one observation should be made. The general "routine" for the last hour in Miss Gerlo's class was to check boardwork and other work done during the day. Last period activities were dependent on earlier activities. This day the plan for 6th period was a challenge to the instructor's ingenuity. The addition of an observer could provide complications. The remark could have been in jest, but it could have reflected an unusual pressure the instructor had to accommodate to because of the observer.

Other references of observer influence on teacher's behavior were recorded. Remarks made by Miss Locap when the observer came at an unscheduled time include "You blew my mind. When you came in today my plans changed." To the observer the sequence of activities had a planned "flow" and without Miss Locap's comment I would not have been aware of any change. Again, I'm not certain that a change took place or if one did, to what extent, and more importantly, perhaps, why?

Other instances could be cited to suggest that the teachers in this study were influenced by the observer. Other influences may have occurred. For instance, in the pre-planning activity of the teachers was there greater planning, more extensive, etc? Both teachers indicated that during observations, more group work, writing, student presentation and less teacher presentation, explanation—
lecture--occurred than at times when observations were not scheduled.

What about the students in the groups observed? Were they effected by the pressure of an observer? Some researchers suggest that students accomodate rather quickly to the presence of an observer in the class. Our data have only fragmentary relevance to this question.

An appeal to the field notes from Miss Locap's Individually Prescribed Instruction Arithmetic class indicate something of the effect. Procedurally in this class students work from assignments determined by their performance on arithmetic skills. When a student has attained a level of skill through his "prescribed exercises" he takes a test to determine if he should continue or move to other activities. During this class, students individually take their work to Miss Locap or an aide, have it checked, corrected, explained, etc. In attempting to learn the nature of their verbal interaction, the observer on occasion positioned himself immediately adjacent to Miss Locap. The student would bring his work to the teacher, comments were made, student would return to his seat. Again for gaining insight to nature of this interaction the setting was ideal for the observer. But what of the students?

In checking the names of students bringing work and the frequency of the contacts with Miss Locap while the observer was there, different patterns emerge. The total number of Miss Locap-student contacts were essentially the same as when the observer was in a far corner of the room. However, the particular student and frequency of specific students changed. Essentially one could argue that the observer was a discriminative stimulus that encourage (or inhibited) interaction with others. One might wonder about long term effects on students.

An observation of Miss Gerlo's sixth period class bears on this "observer's" effect, but differently. One Friday, a small, self contained, cassette tape recorder was brought. One particular boy became very interested in it, its use, etc. He positioned himself to be able to notice the needle on the side of the instrument indicating recording level. A record of his behavior during the hour suggested a kind of "onstage, limelight" behavior. To what extent this interfered with his compliance with class norms would be of interest.

Conceptually we would suggest that an observer in the class does have an effect on the class. The effect can be benign or not. The effect can be direct on either the teacher or student or both; or the effect can be indirect on teacher through student or on student through teacher.

It would be instructive to examine these possible effects more carefully and systematically. In addition it would be useful to raise the overall question of why?
Summary

The observational research methodology was employed in a study of teacher-student relationships in two elementary school classrooms. In addition to data relative to this study, the methodology provided information about the social system of the school and the classes observed.

First, the expectancies for student achievement of middle school teachers influenced the instructional goals and practices of the elementary teachers. Second, "labels" are potentially mischievous. The IPI arithmetic classes, while appearing to be the same, had important differences—in terms of both the "climate" of instruction and the sequence of activities. Next, it was suggested that practices for teaching and student control were transmitted visually between teachers. Teachers in a sense became "models" and their practices were appropriated by other teachers; this appropriation occurring even when the practice was initially not valued. Time of day was seen as a variable influencing teacher-student interaction. An explanation of the "accumulation of stress" over the day caused different interactions.

Fifth, the relation between teachers and "support personnel" were described as ambiguous with elements of the relationship contributing to negative feelings by the teachers to the "specialist". Finally, the effects of an observer in the classroom for extended periods of time was to have teachers plan activities with more student visibility.

References
