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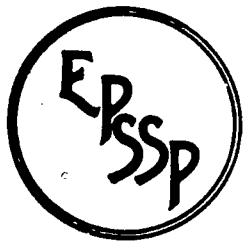
ABSTRACT

This study reports on work activities structures, student social cognitive understanding, and student participation as ecological perspectives from which to describe and analyze the teaching that took place in one elementary school. Detailed descriptions of the ecological features of 10 elementary school classrooms are presented, and an across-teacher analysis is made of the relationships among these features. Chapter 1 provides an introduction to this verification inquiry, part of a larger study, Ecological Perspectives for Successful Schooling Practice. The second chapter provides an overview and summary of the case studies, covering such areas as: (1) questions for the case study analysis; (2) across-teacher summary for the components of the three ecological perspectives; (3) findings for each of the case study questions; and (4) summary and conclusions about successful schooling. Chapter 3 discusses research methodology, including sample (10 teachers and their 219 students), data collection sources (classroom observation, teacher reports, teacher interviews, student interviews), and procedures (preparation of case studies, research phases, across-teacher analysis). Ten case studies, examining individual classrooms and their work activities and student response, are described in chapters 4-13. References, appendices containing classroom materials and classroom maps, and tables presenting study data are included. (CJ)



Ecological Perspectives for SUCCESSFUL SCHOOLING PRACTICE

VERIFICATION INQUIRY

Volume VI

Ecological Case Studies of Classroom Instruction in a Successful School

Alexis L. Mitman
John R. Mergendoller
Beatrice A. Ward
William J. Tikunoff

Report EPSSP-81-15

FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
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EXECUTIVE SUMMARY

The case studies for the ten teachers at Central School were analyzed according to the three ecological perspectives of work activities structures, student social cognitive understanding, and student participation. The competence level of student participation was viewed as the most appropriate outcome in the studies. Observational and self-report data about the structures and demands of the work activities and students' understanding of the structures and demands were examined to determine what features of the classroom were associated with more and less competent student participation.

In the classes where students showed the most competent participation -- by staying on task, interacting with the teacher and other students in appropriate ways (e.g., providing accurate and relevant input to class discussions), and producing a work product of acceptable quality -- several work activity features were observed in combination that were not present in classes where students showed less competent participation. These features included: (1) the greater use of formal grouping arrangements so that students received more supervision and teacher assistance; (2) assignments where students were held accountable for a specific amount of work to be done during the period; and (3) assignments where teachers guided students through the lesson content. It also was noted that certain kinds of instructional and managerial teaching behaviors were found in those classes where student participation was more competent. In these classes, teachers tended to devote more time to verbal instruction and to give a higher quality of feedback. The teachers in these classes also demanded greater student attention and supervised student behavior more closely. These kinds of teacher behaviors were consistent with the work activity structures put in place.

Based on the teacher and student interviews, there is evidence that in the classes where student participation was more competent, the work activity structures and instructional and managerial behaviors of the teachers led to a good mesh between teachers' and students' understanding. The teachers in the classes with the most competent student participation had specific preactive instructional plans that they were able to communicate to students. They also provided more articulate lesson introductions and a tightly supervised instructional environment both of which, in turn, seemed to give all students a clear understanding of the expectations for their work performance and class behavior. In contrast, in classes where students' participation was less competent, teachers seemed less sure of their instructional tactics. Many students, in turn, evidenced ambiguity about what was required and sometimes even misinterpreted requirements. In short, their social cognitive understanding of the work activity structures and demands was poorer.

The case studies for Central School indicate that there was a tendency for the least competent student participation to occur at the higher grade levels (fifth and sixth grades). This is explained

in part by the fact that the teachers at the higher grade levels gave their students much more responsibility for their own learning. Students were allowed to proceed through large blocks of instructional time without teacher guidance and feedback, and they often were not held accountable for getting a specific amount done during the period. Most students were not capable of working productively in this looser framework. Nonetheless, there seems to be nothing inevitable about the relationship between teachers' work structures and grade level. While teachers may reason that students can handle more responsibility by the fifth and sixth grades, the findings from this study suggest that they may do best to introduce students to this responsibility more gradually and to pay closer attention to how students spend their time.

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PREFACE

This volume is one in a series of reports of a multi-faceted study which examined and described the successful schooling practices at a single elementary school in the San Francisco Bay Area. The series reports the work conducted by the Ecological Perspectives for Successful Schooling Practices Project (EPSSP) at the Far West Laboratory for Educational Research and Development. The volumes in the series include:

Volume 1: Overview of the Verification Study

Volume 2: An Analysis of the Activity Structures at a Successful School

Volume 3: An Analysis of Teachers' Ideal Students

Volume 4: An Analysis of Teachers' Rule Systems at a Successful School

Volume 5: An Exploration of Elementary Students Perceptions of Classroom Rules and Teacher Authority at a Successful School

Volume 6: Ecological Case Studies of Classroom Instruction in a Successful School

Volume 7: Successful Schools and Classrooms: A Summary of the Findings of the Verification Inquiry and Implications for the Provision of Successful Schooling Experiences for All Students

The goal of the Ecological Perspectives for Successful Schooling Practices Project is to analyze school settings where successful instruction and educational practices are occurring and describe these settings so that they may be implemented by other educational practitioners. In addition, the EPSSP Project seeks to work in collaboration with school people to improve students' educational experiences and make less successful schools more successful.

The Ecological Perspectives for Successful Schooling Practices Project is one of a series of long-term, innovative efforts to improve the educational opportunities for all children funded by the National Institute of Education, Department of Education. Dr. William Tikunoff and Dr. Beatrice A. Ward are the Co-Principal Investigators. Other professional staff members include Dr. John R. Mergendoller, Project Director; Dr. Alexis L. Mitman, Associate Research Scientist; and Mr. Thomas S. Rounds, Associate Research Scientist.

We wish to thank Dr. Virginia Koehler and Mr. Michael Cohen, of the Teaching and Learning Division, National Institute of Education, for their support of this project and their willingness to

explore innovative ways of approaching the problems that confront educators.

We also wish to thank the principal, teachers, students, and parents of Central School. Their participation and support were essential to the success of this collaborative research effort. Their willingness to inquire into and analyze multiple features of the school and the instructional program made it possible to conduct the in-depth inquiry reported in the volumes listed above. Together, we learned much about successful schooling practices.

Many individuals helped in the preparation of this particular report, and we wish to thank them for their efforts. Jane Danielwicz, Michael Strong, Doug Macbeth, Janice Schaefer, Cecily Weston, and Joanie Boyle assisted with the interviews and the classroom observations, as did Donald Swarthout, a former member of the professional staff now with the Charlotte, North Carolina School District. James Bowie and Barbara Murray prepared this manuscript. To all, thank you.

Beatrice A. Ward
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CHAPTER ONE

INTRODUCTION TO THE VERIFICATION INQUIRY STUDY

The Verification Inquiry, of which the Ecological Case Studies reported herein are one part, is an activity of the Ecological Perspectives for Successful Schooling Practice program. The program is designed to identify, describe, and develop indicators of successful schooling practices by developing an ecological theory of teaching, developing research methods appropriate for studying schooling practices from an ecological perspective, and developing strategies for implementing the successful practices in a manner that attends to the complex contexts that exist in schools and classrooms.

In the traditional view that has long prevailed in education, teaching has been defined, researched, and promulgated largely on the basis of the psychology of individual learning. The study of motivation, feedback, learning style, work rate, and reinforcement, to name but a few, have been approached largely from the perspective of the individual learner. While the contributions of such a view cannot be omitted from any comprehensive statement of teaching, they do not suffice as an explanation of what teaching is or as a guide to the practice of teaching.

In the institution of the school, the teacher instructs a group of students in the classroom, and the student learns in proximity with other contemporaries. Teaching and learning are social experiences, introducing a host of forces beyond the purview of individual learning psychology. As Bossert (1977) observed, "The collective nature of instruction is one of the most apparent but little examined factors of classroom life affecting the teacher" (p. 19). Reliance on the psychology of individual learning also has been inadequate because it "has produced primarily theories and data dealing with questions of learning, and these are considerably different from and less applicable to the classroom than theories and data relevant to problems of teaching (Brophy, 1974, p. 48).

The traditional view, moreover, has been concerned with teaching behavior as the stimulus for individual learning outcomes, assuming direct teacher causality while generally ignoring student response and environmental variables and linkage processes (for example, see Doyle, 1977). As a growing number of critics have pointed out, this is an unmerited and uninstructive assumption.

What is needed is theory which takes into account the group nature of instruction as well as the psychology of individual learning. Such theory must attend to the sociological nature of teaching as well as the interrelationships among the complex set of components that constitute the environment of teaching.

Such an ecological perspective, while relatively new to research on teaching, has been part of the thinking in educational research for some time. For example, researchers have agreed that we need to attend to more "things" in the classroom in order to understand even the simplest phenomenon. Most prominently, the works of Barker (1968) and two of his colleagues, Kounin (1977) and Gump (1967), focused attention on factors beyond the teacher-student dyad. In terms of requisite methodology, Barker (1968), and more recently, Bronfenbrenner (1976), Doyle (1977, 1979a, 1979b), Charlesworth (1976), and Rhodes (1978), among others, discussed procedures and processes whereby ecological research may be conducted.

Based on review of the above work and preliminary investigations undertaken by the Ecological Perspectives staff, the Verification Inquiry was designed to incorporate and test the following parameters of an ecological view of classroom-based teaching and learning.

1. An ecological theory of teaching is meant to connote theory that is grounded in the multiple realities of everyday classroom life as it occurs in a variety of natural settings and is perceived by a variety of participants. Thus, given a particular classroom setting, the theory must be meaningful for teachers and others involved with day-to-day life in that setting. The power of such theory rests with its capability to provide a variety of perspectives useful for analysis of the ecology of classrooms, taking into consideration the multiple elements of classroom interaction and how these interrelate. Further, analysis using perspectives of the theory should provide a teacher with information useful for planning, monitoring, and evaluating instruction -- information which is not included in or provided by traditional theories of teaching.

In order to tap these multiple factors, the following premises for development of an ecological theory seem appropriate:

- First, the forum for conduct of ecological research is the natural environment. This focus primarily is on the classroom and aligns with what Bronfenbrenner (1976) calls "ecologically valid" research. By this he means research that is conducted in settings that occur in the culture or subculture for other than research purposes. Such research maintains the ecological integrity of the setting while conducting the research. In addition, the data-collection methodologies do not alter the natural behavior of individuals in that setting, or alter it to the smallest degree possible, to ensure the internal validity of the research. For a further treatment of this premise see Tikunoff and Ward (1978).

- Second, the focus of ecological data collection and analysis in this natural environment is on environment-behavior relationships. As Doyle points out, ecological analysis requires a two-stage process: (a) defining the dimensions of the environment, in this case the classroom; and (b) identifying teacher and student strategies that are successful and not

successful in that environment. Embedded in this dimension is the notion of a third facet of environment-behavior relationships, reciprocal causality.

- Third, ecological research is concerned with the functional value or adaptive significance of behaviors in an environment. Among these are those mediational behaviors students use to "navigate" or perform within classroom environments (Doyle, 1979a). Such a view of classrooms which focuses on adaptive behaviors in conjunction with the reciprocal analysis of environment-behavior relationships can provide a systemic view of classroom life. If the ecological theory is to be useful to teachers, it will have to provide information that shows how students function given changes in elements within the classroom environment.

2. Development of an Ecological Theory of Teaching requires a multi-disciplinary approach. Thus, theory is grounded in classroom practice while at the same time it is infused with knowledge from multiple disciplines.

For purposes of the Verification Inquiry, three perspectives from different disciplines have been applied. These are: (1) the activity structure perspective taken from the field of sociology, particularly the work of Bossert (1979), Dreeban (1976), and Bidwell (1972); (2) the student participation perspective building from the work of sociolinguists such as Philips (1972) and Mehan (1979); and (3) students' cognitive understandings relative to various aspects of schooling which build from the work of cognitive psychologists and sociologists such as DeSoto (1979), Weiner (1979), Damon (1977), Furth (1978), and Hoffman (1977). Each of these is discussed further later in this report as they apply to the specific research findings reported herein.

3. In addition to developing the proposed Ecological Theory of Teaching, it is necessary to devise ways of implementing its operation in classrooms and schools. Traditionally, this function has been seen as one of translation or adaptation from research into practice. However, findings from the Interactive Research and Development on Teaching (IR&DT) study conducted by Tikunoff, Ward, and Griffin (1979), suggest ways whereby implementation of the theory might be facilitated by the manner in which the research is conducted. Among these are:

- To understand classroom teaching-learning ecologically, it is more productive to inquire into these aspects with the teacher. This partnership serves to provide information which is not otherwise available, such as (a) a teacher's intent, as embodied in the selection and utilization of curriculum and instructional materials, and (b) a teacher's expectations for student behavior. Jackson's (1968) term, observant participators, describes well how the teacher participates in this enterprise.

- Understanding classroom teaching-learning ecologically is both more productive and more complete when (a) individual classrooms are observed for full days at a time across time (in contrast to isolated, drop-in observations), and (b) all classrooms at a given school are involved in observation. The first condition ensures that an isolated, observed event is not unusual, and gives additional perspectives of that event in relation to what else goes on at other times during the day or week or across a month or year. The second provides for observation of the whole school as a social system and allows the analyst to begin to separate "school-wide effects" from "classroom effects." To understand the ecological impact of schooling for a given student, it is necessary to understand not only each of the social-instructional classroom systems through which the student will matriculate, but how these are orchestrated into the "whole" experience. This can be done best when an entire school is involved.

- Participation of teachers in conducting the research adds both to defining constructs and to considering the usefulness of the constructs to classroom teachers. In some instances in the Verification Inquiry, constructs taken from fields of inquiry unusual to education, such as the three listed above, were given concrete classroom-based definitions based on the form(s) in which they were observed in classrooms and the language (terms) teachers used to describe those events. In other instances, "research" terms were explained in more detail to the teachers. In a sense, this represented the development of a working lexicon between teachers and researchers not unlike the process reported by Smith and Geoffrey (1968). In addition, the ability of teachers to utilize the constructs in order to analyze events in their own classrooms and to plan instructional events to achieve the predetermined goals inherent in the events lends credence to their inclusion in the emerging theory.

- The nature of reciprocity in the ways teachers and researchers work greatly contributes to the success of the research. Rist (1970) used the term, reciprocity, to describe how he behaved as a nonparticipant observer in classrooms while conducting his research. Like Rist, reciprocity during the Verification Inquiry has included project researchers offering technical assistance in curriculum matters, lending instructional materials, working with individual students in instruction in the classroom, and offering workshops for all the teachers in particular instructional strategies. In return, teachers have offered their classrooms as data sources, but additionally have given generously of their recess and lunchtime to clarify behavior for the observers, and have participated wholeheartedly in the research enterprise, placing great trust in the researchers.

Within the above framework, the Verification Inquiry was conducted as an in-depth case study in a single elementary school nominated by several educational constituent groups as a successful school. As noted above, the purposes of the Inquiry were to develop an ecological theory of teaching that builds upon the three perspectives listed above, develop research methods appropriate to such ecological inquiry, and develop strategies for improving teaching and learning using the ecological perspectives. More specifically, the Inquiry sought to answer the following sets of questions:

1. What activity structures are utilized in elementary school classrooms? In a single successful elementary school, what differences, if any, occur in the structures that are utilized at various grade levels (K-6)? Are activity structures and teacher behaviors interrelated? If so, in what ways? What effect(s) do activity structure characteristics have upon the ways students behave successfully in classrooms? How do these latter requirements relate to school-level goals and expectations?

2. What are teacher expectations for student performance as represented in the teacher's perceptions of an ideal student in a single, successful elementary school?

3. What rules systems are established in the classrooms in a single successful elementary school? Are these rules consistent with teacher expectations, activity structure demands, school goals?

4. What are students' perceptions of classroom rules and teacher authority in a successful elementary school? What are the implications of these perceptions for successful classroom practice?

5. When instructional events are studied from the ecological perspectives, what relationships appear to produce more successful outcomes for students?

The findings reported in this volume, Volume VI, focus on Question 5. The chapters that follow provide both detailed descriptions of the ecological features of individual classrooms and an across-teacher analysis of the relationships among these features.

CHAPTER TWO

OVERVIEW AND SUMMARY OF THE CENTRAL SCHOOL CASE STUDIES

This chapter synthesizes the observations and findings of ten case studies, one for each of ten teachers at Central School. The chapter first presents the questions that the collective information from the case studies is intended to address. The second section in the chapter presents an across-teacher summary of the theoretically derived components that were used to organize and analyze teacher and student behavior. The third section in the chapter presents findings and conclusions with respect to each of the study questions. The fourth and final section of the chapter presents conclusions about the characteristics that differentiated between more and less successful schooling at Central School.

The next chapter in this volume, Chapter 3, describes the methodology employed in gathering the case study information. The remaining chapters in this volume provide the reader with a greater level of detail. Chapters 4-13 consist of the individual case studies for each teacher. To provide a developmental perspective, the case studies are ordered according to grade level, beginning with a kindergarten/first-grade class and working upwards. The last two case studies, Chapters 12 and 13, deviate from this ordering because they describe classes for the Educationally Handicapped and Learning Disability Groups, respectively, consisting of students from a range of grade levels. To facilitate comparisons, the 10 case studies follow the same outline.

Questions for the Case Study Analysis

The purpose of the case study component of the Verification Inquiry Study was to describe and analyze the teaching that took place in one elementary school according to three different and mutually beneficial ecological perspectives: (1) the perspective of work activities structures; (2) the perspective of student participation; and (3) the perspective of student social cognitive understanding. These three perspectives represent a multidisciplinary approach to studying schooling. Given that this project conceptualized schools and their classes as workplaces, it was felt that the three perspectives would be useful for inquiring into, describing, and analyzing the nature of these workplaces. The critical elements of the three ecological perspectives are summarized below and in relation to Figure 1. The rationale and background for each of the three ecological perspectives is presented in greater depth elsewhere (see Volume I of this series).

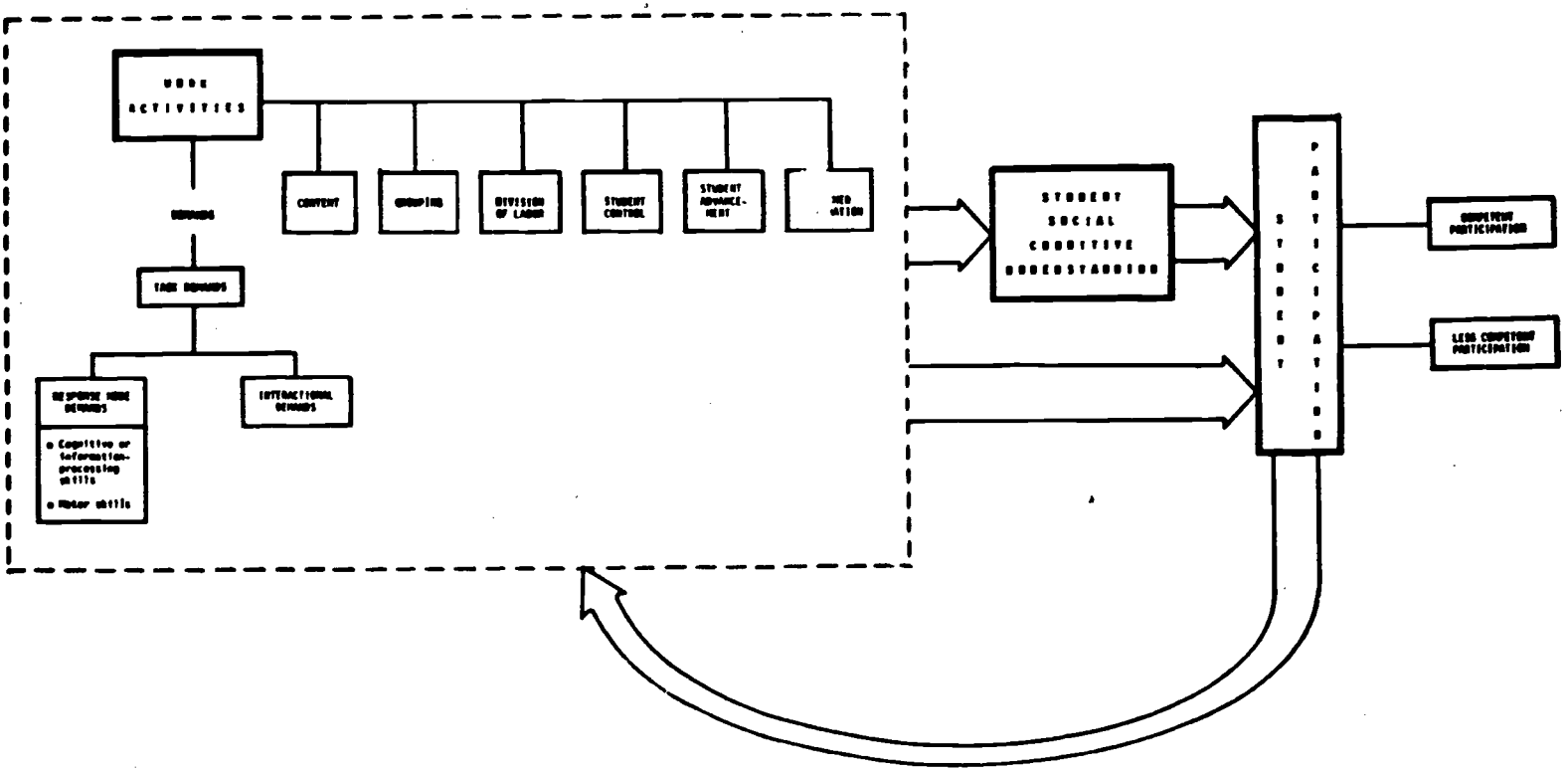

Figure 1. Elements of the ecological perspectives used in the analysis of the teacher case studies

The work activities perspective was used to investigate how each teacher defines the formal structure within which students have to carry out their academic and nonacademic work. Concomitant with these structures are the demands of the work. Six elements comprise the work activity structure. They are adapted from research related to activity structures (Bossert, 1979). The elements are: (1) work content, or the subject matter and related skills and knowledge to be applied and acquired; (2) grouping, specifically the size and composition of the work group(s); (3) the amount and quality of division of labor among members of a group that is required in order to complete the work; (4) available student control in terms of the order in which particular tasks must be completed, the amount of time allocated to an activity, and the selection of the activity; (5) potential student advancement, with or without the teacher's permission, to new material within the same activity or to a new activity altogether; and (6) the nature of the teacher's evaluation of students during the work activity, including the publicness/privateness of its communication and the focus of the evaluation (e.g., an individual or group, an academic product or student conduct).

Demands inherent in work activities include task demands. Task demands, in turn, include response mode demands and interactional mode demands. As can be seen in Figure 1, response mode demands include demands requiring the use of both cognitive (information-processing) skills and motor (physical manipulation) skills. Interactional mode demands include use of those communication skills necessary for working in a group situation, both alone and with others.

The student participation perspective was used to assess the competency with which students carried out their academic and nonacademic work. Student participation is deemed to be of two sorts -- competent and less competent. This categorization assumes that students who respond appropriately to work activities will evidence expected behavior and, thus, will be perceived to be competent participators by others, particularly the teacher. Conversely, those who do not evidence expected behavior will be labeled less competent. Student participation, then, can be viewed as one type of outcome measure that is very immediate to the classroom situation.

The social cognitive understanding perspective was employed to obtain data on the extent to which students comprehended the requirements of the teacher and what their own behavior was like, the premise being that a clear understanding of teacher requirements would facilitate competent student participation. While students' social cognitive understanding can be viewed as an outcome in its own right, it was viewed as a mediating variable in the context of this investigation. In other words, it was thought that data on students' social cognitive understanding would be most informative when viewed as an indicator of the extent to which students were capable of participating according to the teacher's intent.

Applying the three ecological perspectives to every teacher in one school provided a unique opportunity to study not only the individual behavior of different teachers, but also the cumulative schooling experience offered by that one institution as a whole. While the study was not longitudinal in the sense of studying the experience of individual students through the grade levels, the study did capture the configuration of the different classroom structures and instruction that were present at one point in time. Also, because most of the teachers at Central School had taught there for many years (averaging 8.4 years), it seemed likely that many individual students had (or would) experience a sequence of instruction across grades very close to that presented in the case study descriptions.

This view of an entire school made it possible to answer each of the following five study questions both in terms of discrete information and in terms of if and how the answers changed across the seven grade levels (K-6):

(1) What were the composite requirements of participation made upon students in classroom instructional activities, and how did these change o r grade levels?

(2) What qualities of classroom activities, as defined by the work activities structures and social cognitive understanding perspectives, were associated with the outcome of competent student participation, and how did these change across grade levels?

(3) What other qualities of the class milieu, not specified in the model, were associated with the outcome of competent student participation, and how did these change across grade levels?

(4) What interrelationships among activities structures, student participation, and social cognitive understanding facilitated: (a) students' development and use of cooperative behavior; (b) students' acquisition and use of independent learning skills; and (c) students' development and use of discussion skills? Did these interrelationships change across grade levels?

(5) To what extent was there a match between teachers' and students' perceptions of what was to happen (and actually did happen) in the classroom activities? Did the extent of the match change across grade levels?

The first three questions reflect basic and initial concerns of the Verification Inquiry Study. The fourth question reflects student outcomes that were of specific interest to the faculty of Central School. In other words, in the collaborative approach taken to working with the Central School teachers, they themselves proposed a question about what facilitated cooperative behavior,

independent learning skills, and discussion skills. The fifth question reflects a concern that developed during the course of the case study observations. This concern is addressed most explicitly in the five case studies done during the latter half of the school year (referred to as Phase II case studies; see Chapter 12). This question extends the social cognitive understanding perspective by inquiring into the perceptions of the teacher as well as the student.

Before addressing each of the five study questions in detail, the large quantity of case study information will be introduced by presenting an across-teacher summary of information for each of the major components that stems from the three ecological perspectives (see Figure 1).

Across-Teacher Summary for the Components of the Three Ecological Perspectives

The data relating to the work activities structures perspective, the student participation perspective, and the social cognitive understanding perspective are summarized in turn.

Work Activities Structures Perspective

This perspective is the most delimited, consisting of six separate components (see below). For convenience, task, motor, and interactional demands also will be considered under the work activities heading inasmuch as these demands are integrally related to the structures set by the teacher.

Content. The content of the observed activities varied across teachers, including both academic (e.g., reading, handwriting) and nonacademic (e.g., weaving, record-listening) activities. In every class, at least one of the ongoing activities involved improving or applying the basic skills of reading and writing. At the earlier grade levels (first through fourth), these basic skills were approached directly, through reading, spelling, and language arts lessons. At the later grade levels (fourth through sixth, excepting Teacher W's Learning Disability Group [LDG] class), the observed activities required students to apply reading and writing skills while working on a different subject-matter task (e.g., social studies). Content also was more unidimensional at the later grade levels, i.e., with all students working on the same content assignment for the duration of the period. In contrast, at the earlier grade levels, students often were involved in several different content assignments, either in a simultaneous or consecutive fashion.

Grouping. The teachers at Central School used a variety of grouping arrangements. In the kindergarten class of Teacher M, all students in the class participated in three different, consecutive activities and then split into groups for a final "Centers" activity.

In the classes of Teacher N (first grade),[1] S (second grade), and O (third-fourth grade), students were assigned to different groups for the entire event, each group working on a different assignment. In the classes of Teacher R (fourth grade), U (fifth grade), and T (sixth grade), there was one group, consisting of all students in the class, working on the same assignment. Thus, there was a general trend for teachers at the early grade levels to use multiple grouping and for teachers at the later grade levels to instruct the whole class as a group. The exception to the two basic grouping arrangements (whole class and assigned groups) occurred in Teacher Q's fifth-grade class, where students were given the freedom to choose to participate in anywhere from one to four different activities during the event. Thus, groupings were self-selected by students and continually fluctuating.

In the Educationally Handicapped (EH) and Learning Disability Group (LDG) classes of Teachers V and W, respectively, grouping arrangements were consistent with the special needs of the students. The class sizes were smaller to begin with (12 or fewer students), and the teachers closely supervised and led small groups of students through different consecutive activities.

Division of Labor. With few exceptions, there was no formal division of labor among students for the activities observed in the classrooms at Central School. In other words, the vast majority of activities did not require that students work together in pairs or small groups to complete a single product; instead, students were expected to complete individual products. While formal division of labor was not the norm, informal collaboration among students was. Teachers encouraged their students to seek assistance from one another in completing their individual products, sometimes emphasizing that students should take their inquiries to each other before approaching them (the teachers). Support of informal collaboration among students -- "using each other as resources" -- seemed to be a common philosophical thread uniting all teachers at Central School.

The few instances of formal division of labor were observed in the classes of Teachers N, Q, and W. In Teacher N's class, eight students in one reading group were paired, and each pair was instructed to read separately the voices of two different characters in a story to one another. In Teacher Q's class, students had the option

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[1] In this report, teachers' grade levels refer to the grade level of students they taught for the observed work activities event. Both Teachers M and N had kindergarten/first-grade combination classes. However, since Teacher M was observed teaching only kindergartners, and Teacher N was observed teaching only first-graders, only these respective grade levels are referred to in this report. Similarly, Teacher U taught a fifth-/sixth-grade combination class, but was observed teaching only fifth-graders during the event.

of working in pairs to complete a single product for two different activities. In Teacher W's class, two students were paired together for a spelling test, with one student giving the test tc the other student.

Student Control. Viewing all the activities that were observed in the classrooms of the ten teachers, students exercised some degree of control in a majority of the activities (16 out of 27). Students had the least opportunity for exercising control in the classes of Teachers M (kindergarten), N (first grade), and V (an EH class of first- through third-graders). This made sense from the standpoint that younger students require more direction and need to gradually learn how to take proper advantage of control opportunities.

In the higher grade-level classes, where student control options were more prevalent, the options typically were of two kinds. The first kind of option entailed control over the content of the assignment. For instance, if students were asked to write a journal entry, story, or essay, they had control over the content because they could create the content or choose the content topic from a specified set of alternatives. The second kind of option entailed control over the pacing of the assignment. In other words, students often were given control over the amount of in-class time they devoted to an assignment. The amount of time could vary from student to student, both because some students could complete an assignment more quickly than other students, and because some assignments were to be completed over an extended time period (several days or weeks), thus giving students control over what portion to work on during a given day.

Student Advancement. Students in the classes at Central School could advance within an assignment, without required approval from the teacher, for approximately half of the activities that were observed. For the remaining half of the activities, students were dependent on the teacher to advance, usually because the teacher was leading the lesson and taking students step-by-step through the lesson material.

The balance of teacher-dependent and teacher-independent activities was not distributed equally across teachers. Students were dependent on the teacher (and, sometimes, also on teacher aides) for the majority of their class activities in the classes of Teachers M (kindergarten), N (first-graders), V (an EH class of first- through through third-graders), and W (an LDG class of fifth- and sixth-graders). For the remaining teachers (S, O, R, Q, U, and T) the reverse was true. Teachers M and N's structuring of activities so that students were dependent on them and their aides to advance makes sense in that young students just starting school probably attend and work best when closely guided by a teacher. Likewise, the students with learning handicaps and disabilities in the classes of Teachers V and W also probably benefitted from continual teacher direction and supervision.

While being able to advance within an assignment without depending on the teacher was fairly common, being able to advance to a new activity without teacher approval was not. The option to advance across different activities without teacher approval was present only in the classes of Teachers S (second grade), R (fourth grade), and Q (fifth grade), and even then, this option did not necessarily apply to all students in all the class activities.

Teacher Evaluation. The data from the observed work activities events indicate that all ten teachers used similar methods of evaluation, with no systematic variation across teachers. In the great majority of activities, teachers did non-verval monitoring of students and made evaluatory comments -- both positive and negative -- to individual students and groups of students about their performance and behavior. These comments usually were public (i.e., they could be heard by other students) and informal (i.e., they were not an aspect of the teacher's formal grading system).

Task Demands. The task demands for the different work activites varied greatly according to the activity content. Nonetheless, many of the activities called for similar cognitive skills, and, as expected, more complex skills were required at the higher grade levels. At the early grade levels, many of the activities demanded that students focus on relatively discrete segments (e.g., letters and words) and apply the skills of recognition and memorization. The ability to read some simple words was expected by first grade. By the fourth grade, many of the tasks required that students be able to generate several sentences of writing and that this writing reflect some higher-order reasoning (e.g., the ability to identify examples of concepts). While students were encouraged to try writing at the earliest grade levels (typically in personal "journals"), serious academic writing was not expected until later.

Motor Demands. Similar motor skills were required in the classes of all ten teachers at Central School. The most commonly called-for skill was the small-motor coordination necessary to hold a pen or pencil and write. This skill had to become increasingly refined as students made the transition from printing to cursive writing. Other commonly needed motor skills were visual coordination and the ability to sit in a relatively fixed position for long periods of time.

Interactional Demands. The teachers at Central School generally shared the value that being able to interact frequently and successfully with other people was important. This value was evidenced in part by the interactional demands of the work activities they assigned. When students were part of a teacher-instructed group, they were encouraged to participate and expected to listen to the teacher and participate in turn. While most seatwork assignments were individual, and students were required to work without disturbing one another, at the same time, a modicum of social interaction was expected. This was because teachers wanted to see informal cooperation

among students take place. Formal cooperation among students was necesary only in those few instances where there was a formal division of labor (see Division of Labor, above).

Student Participation Perspective

In the model that summarizes the components of the three ecological perspectives, student participation is depicted as an outcome that splits into two strands of competent and less competent participation. In the case studies for the ten Central School teachers, the competency of students' participation was assessed by selecting two or four "target" students in each class and closely observing and recording each target student's behavior during the given event. While observing the behavior of a few students in a class is not sufficient for making generalizable statements about the behavior of all students in that class, it nonetheless was felt that this in-depth look at particular students would provide trustworthy indications about the participation of many students in a class, especially since students rely on each other as feedback sources for work and behavior.

Viewing the individual student descriptions (which appear in the case studies under Student Response) from all the classes together, it is apparent that a range of student participation behavior took place across classes. Many students were competent participators in that they were attentive and on task throughout the event. These students accomplished their assignments according to the teacher's specifications. Other students' participation behavior can be viewed as "less competent," because these students spent a good portion or all of the event socializing or working on an inappropriate assignment. These students failed to produce the required work product, produced a product of very low quality, or already had completed their product.

Variation in the degree of competent student participation can be attributed both to individual differences among students in their ability and motivation and to differences among classes in how the teachers structured the work and reinforced the work through their instruction and management. The relationship between student participation and class differences will be discussed in greater depth in the following pages (under Study Questions 2 and 3). Here, it suffices to say that in some classes, all of the observed students were competent participators. In other classes, there was within-class variation, with some observed students being less competent participators and others being more competent.

Social Cognitive Understanding Perspective

Students' social cognitive understanding is shown as one component of student response in Figure 1. It receives special emphasis as one of the three ecological perspectives because it is assumed that a student's social cognitive understanding of the teacher's

work activities and demands mediates the relationship between the observed activities/demands and the student's participation behavior. In other words, it is assumed that each student filters and interprets the available information on the teacher's structures and demands and, thus, forms his or her own internal guidelines about what is required and permissible behavior. These internal guidelines can vary from student to student, thus leading to different forms of response and participation among students.

Students' social cognitive understanding is the most difficult of the three ecological perspectives on which to gather empirical data. Because it is impossible to monitor the internal workings of the mind, it is necessary to rely on students' reports of their own understandings. In this study, these self-reports were gathered by interviewing each target student following the observed events. With few exceptions, most of the interviews focused on soliciting each student's understanding of the ongoing activities, e.g., by asking the student about what he/she was supposed to do, what made a good assignment, and how the teacher would evaluate the work.

A review of students' self-reporting during the interview, described under the Student Response sections of the case studies, indicates several general findings. First, it was generally the case that students at the earliest grade levels (e.g., kindergarten and first grade) had difficulty communicating their perceptions, while students at later grade levels had little or no difficulty. By second grade, some students were able to describe the requirements of their assignments in fairly articulate terms.

A second finding was that there was variation within some classes in terms of how aware target students were of the requirements of the assignment and their own behavior. The existence of such differences is consistent with the differences in student participation that were observed within a single classroom (see previous section). These differences suggest that students' social cognitive understanding probably is one mediating factor between work characteristics and participation. There were other classes where understandings of the assignment were similarly clear or confused across all students who were observed and interviewed. In these cases, the teacher's manner of setting up the work activities structure and demands may have been influential enough so as to have elicited very similar responses from students. Again, the relationship between class differences and differences in student understanding will be explored in greater depth under the study questions below.

A third finding indicated by the student interviews is that, in general, students were less able to comment on some aspects of their assignments than others. For instance, students usually had little difficulty in describing what they did or were supposed to be doing on their assignments during class time. In contrast, students seemed to have more difficulty in describing the purpose of

their assignments or what the teacher would do with their papers once they were turned in. These latter inquiries apparently called for more abstraction than many students were capable of, even at the higher grade levels.

A fourth trend that emerged from the interview data concerned the target students' expressed views about what constituted a "good" assignment. At the earlier grade levels, the students indicated that the "goodness" of an assignment was determined by the teacher's reaction to the assignment. In other words, they said that if a teacher gave a good grade or wrote favorable comments, then the assignment was good. By the fourth grade, some target students seemed aware that there were more universal standards by which an assignment would be judged, e.g., that one had to present enough examples, spell correctly, and write clearly. By the fifth and sixth grades, most target students referred to such standards, and a few students even implied that they had set their own internal standards regardless of those encouraged by the teacher. Thus, students at the higher grade levels were less reliant on external feedback and seemed able to make judgments about their own work by referring to a set of standards that they learned through accumulated experience.

In sum, the student self-report data indicated that there were some developmental trends in the level of students' understanding. Other variations in students' understanding seemed related to the level of abstraction required by the interviewer's questions and, more important, to differences in class environments.

Findings for Each of the Case Study Questions

Five major questions for the case study component of the Verification Inquiry Study were outlined earlier in this chapter. The remainder of this chapter is devoted to synthesizing and presenting the case study data that are pertinent to each of the questions.

QUESTION ONE: What were the composite requirements of participation made upon students in classroom instructional activities, and how did these change over grade levels?

In the classes that were observed, both formal and informal aspects of the work activities converged to create the composite requirements for student participation. The most obvious of the formal aspects were the content and task demands of the assignments. The content and task demands of the assignment determined what level of experience and thought were required to complete the assignments. As already indicated, most assignments at the earlier grade levels required that students use basic skills in a direct and discrete fashion, sometimes applying them to several different assignments during one period. At the later grade levels, students often were required to apply the basic skills to different subject areas;

these assignments typically required students to work with more abstract and complex concepts.

The formal aspects of grouping and division of labor also served to create participation requirements for students. In order to carry out work in the social environment of the classrooms, students had to know the grouping arrangement for the class and whether or not their work was to be singly or jointly produced. At the earlier grade levels, grouping arrangements tended to be more complex, with teachers sometimes having several groups working on different assignments simultaneously. In these cases, students were required to know to which group they were assigned and on which assignment of several they were to work. Teachers apparently used the same grouping on a repeated basis so as to avoid the confusion of constantly changing groups. Since the great majority of activities called for no formal division of labor, students typically were required to produce their own individual products.

The formal aspects of student control and student advancement determined how much self-responsibility students had. In all but the kindergarten, first-grade, and EH classes, students frequently were required to exercise some control (over content or pacing). In other words, these students often had to decide what specifics to focus on and how much in-class time to devote to their work. In all but the kindergarten, first-grade, EH, and LDG classes, students were required to take responsibility for advancing within the activity without teacher feedback and approval. In other words, in the majority of class activities, especially at the higher grade levels, the teacher's role was not that of a director, but one of a monitor and resource person. As students matured, they were expected to be able to proceed on their own through the lesson content.

While there were few instances where students were supposed to work together on a formal basis, there were, nonetheless, many informal demands for classroom interaction that helped shape the nature of students' participation. All teachers at Central School appeared to agree that students could benefit by using one another as resources in doing assignments. Thus, for most of the observed events, there was an implicit expectation that students should communicate with one another and seek help from one another. Once students started communicating with their peers, they often encountered additional participation requirements. For instance, friends working together often influenced each other with regard to how to do an assignment, where to do an assignment, and what off-task things to do besides the assignment. In short, students spent considerable effort trying to please each other in classroom environments that encouraged informal social interaction. Finally, students also had to deal with informal interaction requirements calling for restraint and consideration of others. Students were required to work without disturbing others and to acknowledge the need for fair distribution of resources -- both material and interpersonal. These interactional requirements may have been the most difficult for students to deal with because they were implicit and, to some extent, at odds with one another. For example, students often faced the situation where

they were required to produce their own work product without disturbing the progress of other students; yet, at the same time, they had to rely on other students for assistance, in preference to asking the teacher for help, and to respond to other students' needs and social expectations. Thus, students had to balance delicately a set of divergent interests.

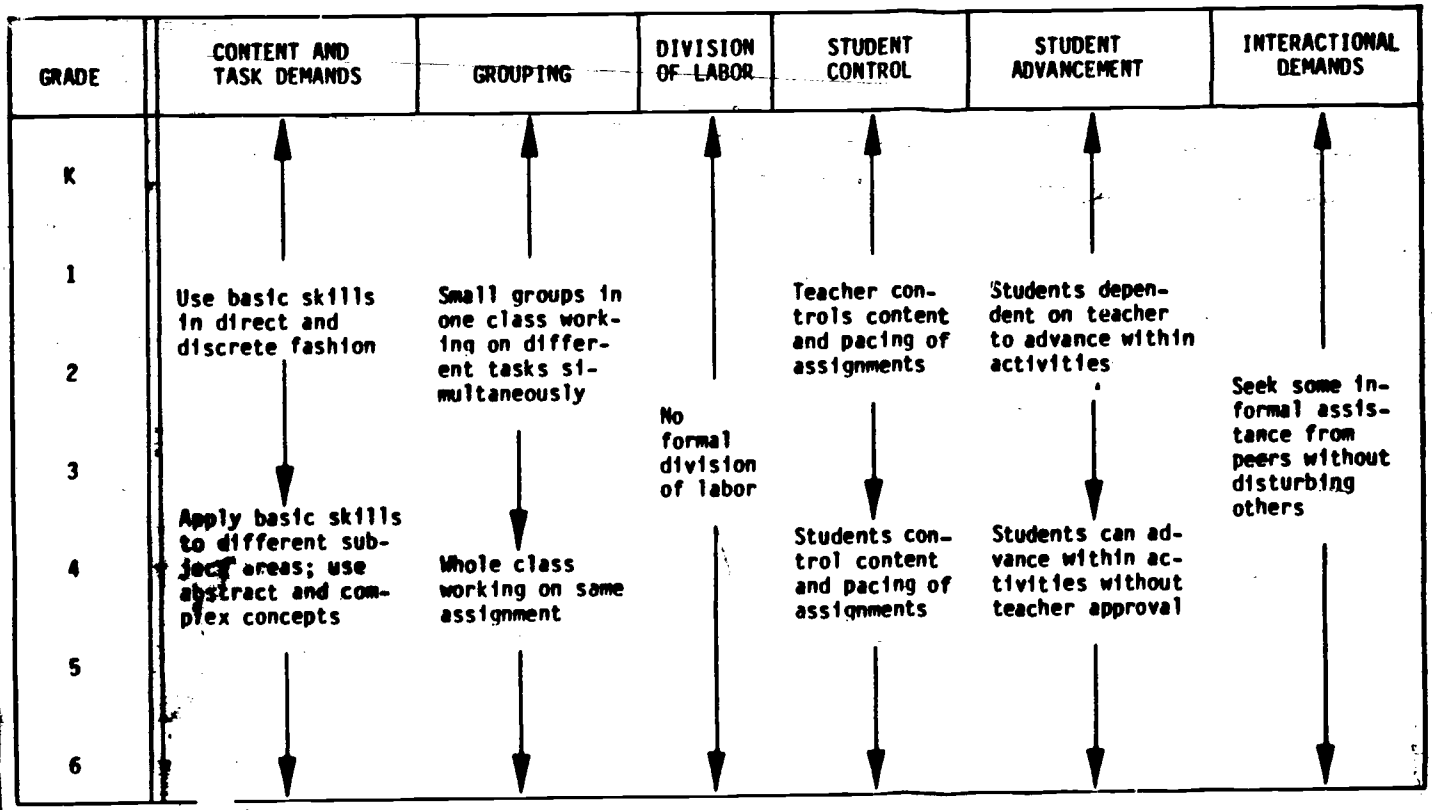
In sum, in order to participate in instructional activities, the students at Central School had to deal with a multiple and sometimes complex set of formal and informal requirements. These requirements are summarized in Table 1. The formal requirements had to do with the structure and task demands of the work activities. Of these, the content and task demands of the work activities involved requirements that clearly were developmental, with students having to progress to more complex applications of skills through the grade levels. The grouping component of the work activities also changed across grade levels, with students having to deal with more multi-grouping requirements at the earlier grade levels. The other formal structures of the work activities -- division of labor, student control, and student advancement -- were similar across most all grade levels at Central School. Students usually were required to produce their own work product, to exercise some control over the content and pacing of the assignment, and to advance within the assignment without teacher approval. The interactional requirements of the classroom were largely informal and also relatively fixed across grade levels. While students were expected to work on their own and maintain social order, they also were expected to use one another as resources in doing their work.

QUESTION TWO: What qualities of classroom activities, as defined by the work activities and social cognitive understanding perspectives, were associated with the outcome of competent student participation, and how did these change across grade levels?

In order to evaluate the relationship between the work activity structure components and the competence of students' participation, it was necessary to reach some consensus about the general participation level exhibited by target students in each class. Reaching such consensus was a task that called for judgment on the part of the investigators. Judgment was required because the kinds of participation data available varied from class to class. For instance, in some classes there were work samples or recorded descriptions of students' oral answers to teachers' questions. In other classes, students worked silently and no work samples were available for examination. In short, the quality of students' performance in each class had to be determined from one or more criteria, including student work samples, student oral performance, and student task behavior during group lessons and seatwork assignments. The major data source for all classes was observed student behavior. If students appeared to be attentive to the teacher or their seatwork (as opposed to being off task) for most of the event, then their participation was judged to be competent. The class-level judgment about student competency was based on the percentage of students

Table 1

Participation Requirements for
Students: Trends Across Grade Levels



displaying competent behavior. This percentage was weighted heavily by the target students because they were the major source of information about students. For instance, if there were four target students in a class, the class would be judged to have competent participation if three or four of the students displayed competent behavior and there was no contradictory evidence from other nontarget students. If two students displayed competent behavior, then the class was judged to have partly competent participation. If only one or none of the target students displayed competent participation, then the class was judged to have less competent participation. In sum, it was not possible to judge the competence level of student participation in each class according to a simple formula. The investigators had to use their judgment on a class-by-class basis, taking into account differing kinds of available information on student performance and differing amounts of information on target and nontarget students. Readers are invited to make their own judgments about the competence of student participation by reading the case studies.

Given the above criteria for competent participation, the classes of Teachers M (kindergarten), N (first grade), R (fourth grade), V (EH), and W (LDG) were judged to have fostered the most competent participation among students. As the individual case studies for these teachers indicate, students in these classes spent most of their class time attending to the lessons, participated appropriately in the lesson discussions when it was expected, and produced work products that met the teachers' requirements. In the classes of Teachers S (second grade) and O (third-fourth grades), students were judged to have shown only partly competent participation behavior. In Teacher S's class, for example, only one of the four target students focused continually on her spelling work. The remaining target students accomplished some work that met teacher requirements, but they also spent a substantial portion of the period engaged in social interaction not related to their tasks. Evidence of the least competent participation behavior was found in the classes of Teachers Q (fifth grade), U (fifth grade), and T (sixth grade). In the classes of Teachers Q and U, for example, several target students spent the entire period in an undirected fashion, getting virtually nothing accomplished. In Teacher T's class, every student produced a work product after initial procrastination, but these products fell short of the teacher's requirements. Given this general classification of classes, it was then possible to consider the perspective-linked differences across groups of classes that may have contributed to the observed participation differences. Also, it was possible to identify factors that apparently did not influence the competence level of students' participation. The influence of the various components will be considered in turn.

The content and level of the task demands of the various work activities observed across the ten classes apparently had little influence on the degree of competent participation shown by students. All classes had one or more activities that required practice in or the use of reading and writing skills. Furthermore, most of the activities seemed to match the developmental level of the students involved. There was only one instance in which the task demands of

the assignment probably exceeded what students were capable of, and thus frustrated student efforts at understanding and participation. This occurred in Teacher W's class, where students were required to analyze historical pictures and infer what the values, architectural style, and technology of the portrayed societies were. The difficulty of this task probably was not the single factor that resulted in poor student participation in Teacher W's class, however. Additional factors will be suggested under the third study question.

The grouping component of the work activities may have had some relationship to the quality of student participation. In the three classes with the least successful student participation, there were no formal grouping arrangements. Of the five classes where students showed the most competent student participation, all of them used small groups for at least some portion of the event. It is unlikely that the mere existence of grouping contributed to more competent student participation, because grouping called for more complex logistics. Rather, the closer supervision of students (by the teacher and aides) that usually accompanied small grouping arrangements may have been key. This possibility is given greater consideration below.

It is difficult to determine what impact, if any, division of labor had on student participation. This is because there was little variation across classes on the division of labor component; no division of labor characterized almost all the work activities. Only Teacher Q's class, judged to be one of the least successful, used a substantial amount of division of labor. In this case, division of labor appeared to foster off-task behavior. Student partners spent a lot of time socializing and negotiating over how and when to do the task.

The student control component of the work activities appeared to have a mixed relationship with student participation. Here, it was necessary to consider what, if any, particular things students had control over. The earlier summary of the student control component indicated that students often had control over the content and pacing of their assignments. Examining control over content alone, it appeared that this aspect of control was not related to the competence level of students' participation. In four of the five classes that were judged to have the most competent student participation, at least one of the activities entailed control over assignment content. The same was true for the three classes judged to have the least competent student participation.

In contrast, control over pacing did appear to have some relationship with the success of students' participation. Of the five classes judged to have the most competent participation, only Teacher M's class offered students control over pacing for one activity. This was the Language Arts activity where students who did not finish their self-made booklets during the period had the option of working on them later in the day or at home that night. In the two classes judged to have only partly competent student participation, and in the three classes judged to have the least competent student participation, control over pacing was an option

for at least one activity in each of the classes. In the classes of Teachers S and O, there was no specified amount of work that students had to complete during the spelling (workbook), weaving, or third- and fourth-grade language arts activities. Thus, students could accomplish very little and still be acting within the legitimate boundaries of the work activities structures. In the classes of Teachers Q and U, students were working on assignments (Indian Project, Animated Cartoon, and Social Studies Packet) that were to be completed over an extended period of days or weeks. This arrangement seemed to foster a lot of off-task behavior since students could procrastinate for long periods of time and were not held accountable for work completed on a daily basis. In Teacher U's class, one target student actually had finished the whole Social Studies assignment at home in one-third of the allocated time. This student spent the entire observed event in off-task behavior, disturbing others as a consequence. In Teacher T's class, students had the option of completing the assignment during the period or later in the day. Again, this arrangement may have contributed to some of the low productivity that was witnessed.

In sum, while giving students control over content seemed to have little effect on the level of students' participation, giving students control over pacing seemed to have a largely detrimental effect. Students, given control over how much in-class time to devote to their work, often seemed to take advantage of the situation and spent a lot of the period in off-task behavior, including socializing. It also may have been the case that control over pacing gave rise to a lot of ambiguity for students, and that this led to more variation among students in their social cognitive understanding of the task requirements. Students simply may not have been able to understand the task well enough to set up effective pacing schedules for themselves, even at the higher grade levels.

The work activities structure component of student advancement appeared to have a systematic relationship with the quality of students' participation. Except for Teacher R, the classes judged to have the most competent student participation presented students with activities all of which made students dependent on the teacher (or aide) for advancement within the activity. In practice, this meant that the teacher engaged in a recitation lesson with the class or instructed and closely supervised a smaller group of students. In short, the teachers of more successful classes guided their students through the lesson content, making certain that each segment was completed. Teacher R, the exception among the more successful classes, in fact, also ended up devoting a lot of time to instructing and monitoring students. Teacher R interrupted the class several times during the lesson to give more detailed explanations of the procedures and task. She devoted the entire remainder of the period to monitoring and assisting students, meaning that students received a lot of direction and supervision. In the five classes where student participation was judged to be partly competent or the least competent, most or all of the activities did <u>not</u> require that students depend on the teacher to advance within the activity. Instead, students could advance through the content of the activity

without the teacher's approval. While not inevitable, in practice the students in these classes received less teacher direction and supervision. At the most extreme, students in Teacher Q's class not only could advance within the activities without teacher approval, but also could advance across activities without teacher approval. In essence, then, Teacher Q relinquished almost all her responsibility for seeing that students allocated their time effectively, both in terms of quantity and quality. In sum, student participation appeared most competent in classes where students' progress through the activity content was guided by the teacher. In cases where this guidance did not occur, students' understanding of the task may have suffered.

Earlier in this chapter, it was noted that all teachers at Central School engaged in similar kinds of evaluation during the work activities event. Thus, the type of teacher evaluation did not appear to be a factor that contributed to differences in the competency of students' participation. The quantity of teacher feedback may have been related to student participation, but this was a function of the closeness of teacher direction and supervision (student advancement).

Finally, the motor and interactional demands of the work activities did not seem to contribute to differences in the level of students' participation. These demands were similar across all classes. It probably was the case, however, that variation in the components of student control and student advancement affected the amount of time in which the demands for peer interaction could be played out. A high frequency of peer interaction seemed to contribute to off-task behavior.

Table 2 summarizes the answer to the second study question. The table shows that the competence of students' participation seemed to be affected little by the work activity components of content, task demands, division of labor, evaluation, motor demands, and interactional demands. For several of these components, there was insufficient variation across classes to make sound statements about the possible absence or presence of a relationship. The work activity structure components of grouping, student control, and student advancement did appear to have systematic relationships with student participation. Classes that had the most competent student participation were characterized by greater use of formal grouping arrangements and assignments where students had no control over pacing and were dependent upon the teacher to advance within the assignment content. Conversely, classes that had the least competent student participation were characterized by the use of large groups or whole-class instruction and by assignments where students had control over pacing and could advance within the assignment without teacher direction and supervision. Because all of these features tended to covary together, it is difficult to speculate whether less competent participation was associated with one, two, or all three of these factors -- or even an interaction among them. Findings also suggested that the component of students' social cognitive understanding may have been tied to student control and student advancement,

Table 2

Observed Associations Between Competence Level of Students' Participation and Work Activities Structure and Demands

WORK ACTIVITIES STRUCTURE AND DEMANDS	OUTCOMES	
	MORE COMPETENT STUDENT PARTICIPATION	LESS COMPETENT STUDENT PARTICIPATION
Content and Task Demands	No relationship observed because little variation across class on appropriateness of content	
Grouping	Some use of small groups during period	Little or no use of small groups during period
Division of Labor	No relationship observed because almost all teachers had no division of labor	
Student Control Over Content	No relationship observed	
Student Control Over Pacing	No student control over pacing; students held accountable for accomplishing given amount during period	Student control over pacing; students not held accountable for accomplishing given amount during period
Student Advancement	Students dependent on teacher (or aide) for advancement within activity	Students can advance within activity without teacher approval
Teacher Feedback	No relationship observed because all teachers used similar kinds of feedback	
Motor Demands	No relationship observed	
Interactional Demands	No relationship observed, except as affected by Student Control and Student Advancement elements	

such that in classes where students had control over pacing and could advance without teacher approval, students also had a generally poorer understanding of the task and what they needed to do to complete it successfully. This, in turn, would have led to less competent student participation.

As a final point, it is noteworthy that the classes with the least competent student participation represented the higher grade levels (fifth and sixth grades). The teachers in these classes encouraged their students to take considerable responsibility for their own learning. This is not surprising from the teachers' standpoint. Perhaps in the teachers' judgments, they felt their students were ready for such responsibility after the earlier years of experience received at Central School. Nonetheless, observations of students in these classes suggested that only a very few high-ability and strongly motivated students could handle this responsibility appropriately. This was the case even for the classes (Teachers Q and T) where observations took place at the end of the year, when students may have been exposed to similar work activities structures and instruction on previous occasions. Teachers simply may have been expecting too much too soon even at the end of the school year. Given this, it probably is the case that the kind of teacher control that was related to competent student participation at the earlier grade levels also would have increased the likelihood of competent student participation at the higher grade levels, had it been employed.

QUESTION THREE: What other qualities of the class milieu, not specified in the model, were associated with the outcome of competent student participation, and how did these change across grade levels?

An examination of the ten case studies indicates that there were other aspects of the observed classes, not specified in the ecological perspectives, that probably influenced the competence level of students' participation. The most salient of these aspects was teacher behavior. For convenience, the specific kinds of teacher behavior that seemed important can be grouped into two categories: teacher instructional behavior and teacher management behavior. These facets of teacher behavior were mentioned indirectly under the second study question, partly because they were intertwined with how the work activities structures were executed. Teacher behavior will receive more explicit consideration in the following.

The case studies indicate that there was variation among teachers in terms of the quantity and quality of their instruction. In general, in the classes where students showed more competent participation, teachers appeared to devote more time to instructing and also were capable of giving clear explanations and feedback. While this teacher behavior was linked with teacher-dependent student advancement in the observations, effective instruction by the teacher and teacher-dependent student advancement need not necessarily coexist together. Furthermore, it is not clear which of the two factors typically precedes the other. It may have been the teachers'

desire to do a lot of verbal instruction that led to their selection of activities where student self-advancement was limited rather than vice versa. In any case, students appeared to participate more successfully in classes where the teacher's instruction was frequent and direct.

In the three classes where students' behavior appeared to be the least competent, the teachers engaged in relatively little instruction. All three teachers began the events by briefly reviewing what the students were to do. These explanations were without much substance in the classes of Teachers Q and U since the major activities were ongoing and had been assigned on a previous date. In Teacher T's class, the explanation was substantive but still very brief. The remaining time periods in the classes of Teachers Q, U, and T were characterized by little, if any, follow-up instruction. At most, the teachers provided feedback to those students who sought them out.

The best way to illustrate the importance of teachers' instructional behavior may be to contrast two teachers who gave students an assignment with similar work activity structures yet whose students participated at different levels of competence. Such was the case for Teacher R and Teacher T. Both teachers assigned their students a relatively unfamiliar task and expected students to complete the task on the same day. Both teachers also required students to complete their own individual work products -- while encouraging some informal student cooperation -- and allowed students to advance within the activity without teacher approval. Both assignments required that students be able to understand and illustrate abstract concepts. What most distinguished the two observed events was the instructional approach taken by the teachers.

Teacher R, anticipating that the task would be difficult, broke the instruction into two segments. First, she told students to select and read a newspaper article and gave them half an hour to do this. When the half hour was up, Teacher R called the class together again and explained the clustering exercise. She gave examples of how to do the clustering on the chalkboard. Students then spent the remainder of the period filling out the clustering worksheet. When Teacher R wasn't instructing, she was actively monitoring student progress by walking around the room. When students asked for help, she made an effort to explain what they should think about or do. In short, Teacher R was responsive to students' instructional needs. While she clearly valued student cooperation (by letting students negotiate in groups for their articles), she also indicated that she wanted to be the main resource person for students rather than have students rely solely on one another.

Teacher T instructed students in a different manner. He briefly explained the entire assignment at the beginning of the period. While he made some attempt to check students' understanding of the concepts during this presentation, he did not provide illustrations of how the task should be carried out. He then told students to

work on the assignment for the remainder of the period. Like Teacher R, Teacher T walked around and monitored student progress during the seatwork portion of the event. Teacher T's feedback often was of poor quality, however; sometimes he simply responded to students' inquiries by saying, "It's up to you." Even when it became apparent to Teacher T that students were not carrying out the task in the appropriate way (they were making up stories to go with the historical pictures rather than analyzing the pictures), he made no attempt to give the class additional instructions. It is not surprising, then, that many students in Teacher T's class expended little effort on the assignment and produced work of poor quality that did not meet the teacher's specifications.

The teachers at Central School also varied in terms of their managerial behavior. Here, managerial is used to mean those kinds of teacher behaviors intended to keep students on task and that do not necessarily relate to the particular assignment at hand. In those classes where students' participation was judged to be most effective, teachers exhibited good managerial skills. When instructing students, they demanded student attention and were quick to call out the name of any student whose attention had drifted. In those classes where students' participation was judged to be least effective, teachers exhibited a much more casual attitude about keeping students on task. Their monitoring was less intensive, and they were observed to tolerate a greater degree of off-task behavior. One of the teachers, Teacher U, devoted her time during the event to conferencing with individual students rather than monitoring students. The teacher's involvement in a completely different activity may have been a signal for students to do the same.

In sum, both the instructional and managerial behavior of teachers appeared to impact the competence level of students' participation. Students whose participation was more competent were in classes where teachers gave more and better instruction and demanded more task engagement. These qualities of teacher behavior probably fostered better understanding of the teacher's activity requirements on the part of students. Also, these qualities of teacher behavior did not appear to be tied to the work activities structures or the grade level of the class. Instead, variation in these kinds of teacher behavior seemed to reflect individual differences among teachers in teaching skills.

QUESTION FOUR: What interrelationships among activities structures, student participation, and social cognitive understanding facilitated: (a) students' development and use of cooperative behavior; (b) students' acquisition and use of independent learning skills; and (c) students' development and use of discussion skills? Did these interrelationships change across grade levels?

This question was posed by the teachers of Central School because they valued cooperative behavior, independent learning skills, and discussion skills as student outcomes. Each one of these outcomes

will be considered in turn. The resulting suggestions for facilitating these student outcomes is summarized in Table 3.

In the classes that were observed, cooperative behavior could take place on either a formal or informal basis. Since there were few instances of formal division of labor, teachers' work activities structures did little to encourage formal cooperative behavior. However, teachers apparently tried to encourage informal cooperative behavior by instilling students with the philosophy that they should be friends and ask each other for assistance in doing their assignments. It already has been suggested that efforts to encourage informal cooperation during work activities often were not successful. Many students took advantage of the permission to interact with one another and spent the interaction time socializing rather than focusing on the task. Permission to interact so freely may have blurred students' understanding of the task and, in turn, produced less competent student participation. Examples of this can be seen in the case studies of Teachers S and U.

Based on the few instances of formal division of labor and what was learned about competent student participation in the previous study question, it is possible to speculate on what might foster more desirable kinds of cooperative behavior. The instances of formal division of labor that were observed in the classes of Teachers N and W seemed to exemplify successful cooperative behavior. In these classes, the cooperative behavior was framed by formal division of labor, by explicit role differentiation, and was limited to a specific component of the event activities. The class of Teacher Q, on the other hand, illustrates how formal division of labor by itself will not necessarily yield productive, cooperative behavior. In this class, division of labor was optional, there was no explicit role differentiation, and there were no time constraints, so that students could spend the entire period with their partners in an undirected manner.

In short, if the teachers at Central School want to foster cooperative behavior that is compatible with competent student participation, they should encourage this cooperative behavior in a formal, explicit framework. They should specify who is to work together, who is to do what part, and exactly what is to be accomplished. Further, there is no reason to believe that these guidelines should change across grade levels.

Independent learning was the second student outcome that Central School teachers wanted to foster. The previous results on student control seem most pertinent to this concern. These results indicated that giving students the independence to select the particular content of their assignments was workable. Giving students the independence to allocate their own time appeared to be much less successful, with many students having great difficulty focusing on the task, and only a few students being able to stay on task despite the commotion around them (see Mickie in Teacher Q's class). No teacher gave students complete freedom to "go off and learn anything you want to on your own." This probably would have been an unrealistic

Table 3

Suggested Steps for Facilitating Three Student Outcomes of Cooperative Behavior, Independent Learning Skills, and Discussion Skills

COOPERATIVE BEHAVIOR	INDEPENDENT LEARNING SKILLS	DISCUSSION SKILLS
- Establish formal, explicit task structure that requires cooperative behavior - Specify who is to work with whom - Specify who is to do what part - Specify what is to be accomplished by each participant and students collectively	- Establish specific assignment where independent learning skills are to be used - Specify amount of work to be accomplished during in-class period of time - Specify general objective students must work toward - Allow students to independently select and research particular topic(s) or sub-assignment(s) - Teach students appropriate skills for finding and using best available resources	- Plan for discussion period within context of recitation lesson - Select topic related to the experiences of all children - Teachers increase awareness of their own verbal behavior - Encourage participation of all students

teaching goal. In short, if teachers want to give their students some skills at independent learning, these skills probably need to be encouraged within the parameter of a specific assignment where there will be less misunderstanding of what is required. Students should be given a specific amount of in-class time to work, but be given the freedom to select and pursue the particular topic or sub-assignment. In order to pursue many topics, students will need to know what the best resources are. The observations suggest that fellow students are not always good resources. Instead, teachers need to teach their students how to use other resources effectively. Again, there is no reason to believe that these guidelines for independent learning should change across grade levels.

The third student outcome the Central School teachers wanted to foster was discussion skills. It is difficult to comment on this outcome because very little student discussion during lessons was observed. When teachers were instructing groups of students, they tended to use a recitation format, stopping occasionally to direct questions to students. The best example of a group discussion took place in Teacher N's class, when the teacher and students took time during the Sammy's Supper Reading Lesson to discuss various kinds of food. In this case, the topic of the lesson related to the experiences of all children -- i.e., there was something that every student could have a say about. If teachers want to have more discussion take place, it seems that they should plan lesson topics that relate to students' experiences and interests. They also should be aware of their own verbal behavior to the extent that they make time for discussion and encourage all students to participate.

QUESTION FIVE: To what extent was there a match between teachers' and students' perceptions of what was to (and actually did) happen in the classroom activities? Did the extent of the match change across grade levels?

The five teachers whose classes were observed during the second half of the school year (Phase II) were interviewed at the beginning and end of each event to tap their perceptions of the event. Since the other (Phase I) teachers were not interviewed, the case studies for the Phase II teachers -- Teachers N, Q, R, S, and T -- provide the best available information for answering this final study question.

A review of the Phase II case studies indicates -- not surprisingly -- that teacher and student perceptions events were most compatible in those classes where students' participation was most competent. This relationship between matched perceptions and competent student participation is to be expected for at least two reasons: (1) Student understanding is considered to mediate between task structures and student participation; and (2) Teachers themselves need to clearly perceive a task before they can assign it.

Teachers N and R taught classes where student participation was judged to be most competent. In the pre-event interviews with these teachers, they both were able to explain not only the nature of their assignments, but also how they would present the material. Teacher N, for example, was able to specify that the first portion of the Sammy's Supper lesson would be spent reading the story as a group, and that the second part would be spent in partner reading. Teacher R had determined that her Cluster Writing Activity should be presented in two instructional segments. In short, these teachers had very specific preactive plans for instruction. Furthermore, these teachers were able to communicate their plans to students. Students did not have to interrupt these teachers during the lessons to ask what to do. Post-event interviews with students in Teacher R's class (those in Teacher N's class were not available for interviews) indicated that all four target students had a good grasp of the assignment. They all understood that the lesson involved reading an article and clustering the facts in the article according to certain concepts. Follow-up interviews with Teachers N and R indicated that both were satisfied with the outcome. Teacher R described her class as "lethargic," but also said that her students "knew what to do."

In the classes of Teachers S, Q, and T, where student participation was judged to be only partly or less competent, teachers' intentions, teachers' perceptions, and students' perceptions were not as clear. In the pre-event interviews, these three teachers described the nature of the activities, but they did not specify much by way of instructional tactics. When these teachers introduced the activities to students, they similarly did not provide great detail, examples, or guidelines for approaching the task. Observations and interviews with students indicated that many of them were not sure what to do or else had misinterpreted the task. One boy in Teacher S's class, for example, thought that all ABC Order Cards should be checked by the teacher, and he influenced other students to do so. This boy was wrong. Teacher S indicated in the post-event interview that her Nutrition Packet lesson was hampered by constant interruptions by students from the ABC Order Cards group. Students interviewed in Teacher T's class reported that the purpose of the activity was to tell about the pictures, but this was not the purpose. When Teachers S, Q, and T were interviewed after their observed events, only Teacher Q indicated that she was satisfied with how things had gone, saying it was "typical" and there was "no crisis." Teacher S acknowledged that there were too many instances of interruptions and off-task behavior in her class, and Teacher T admitted that his students had misunderstood the lesson completely.

The above analysis is summarized in Figure 2. The figure indicates that the perceptual match between teachers and students is not independent of how teachers structure and instruct their lessons. Students seem to understand an activity best when the teacher presents it in terms of discrete instructional tasks and makes this presentation explicit and illustrative. When a teacher makes this kind of presentation, there is less likelihood that students will translate the purpose of the task incorrectly or take advantage of

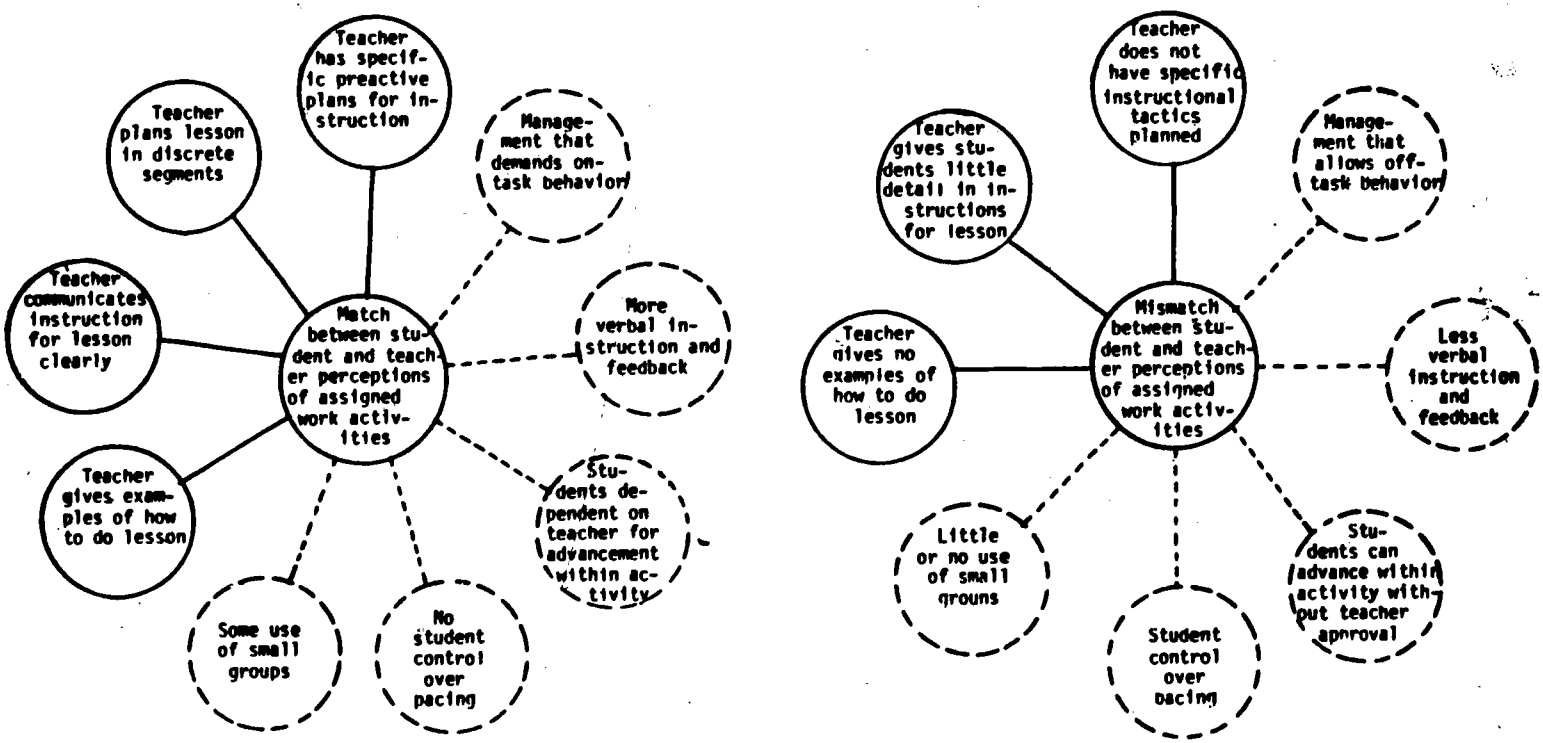


Figure 2. Factors associated with match and mismatch between student and teacher perceptions

NOTE: Factors outlined with solid lines indicate features of teachers' lesson presentations identified to specifically affect the level of perceptual match. Factors outlined in dashed lines represent those features of classrooms already identified as being linked to more competent student participation.

a situation because expectations are not clearly established. In short, after a teacher clearly defines for himself or herself the way an assignment should take place, there are many steps that he/she can take to be sure that students come to share this understanding. There is no evidence that the skills for fostering this perceptual mesh need to change across grade levels.

Summary and Conclusions About Successful Schooling At Central School

The case studies for the ten teachers at Central School were analyzed according to the three ecological perspectives of work activities structures, student social cognitive understanding, and student participation. The competence level of student participation was viewed as the most appropriate outcome in the studies. Observational and self-report data about the structures and demands of the work activities and students' understanding of the structures and demands were examined to determine what features of the classroom were associated with more and less competent student participation.

The approach taken in this study is a complement to the more traditional "process-product" research on teaching. The purpose of the approach was to explore the possible influence of some classroom structural features and student mediational processes on student learning in the classroom. As Doyle (1977) points out, the role of classroom structure and student mediation is not addressed in process-product research. Yet these two factors are of great importance. Classroom structure is important because teacher behavior does not operate in a vacuum but rather as a shaping force and consequence of a complex class environment. This environment includes "hidden curricula" (Jackson, 1968) and "tacit rules" (Mehan, 1979). The student who wishes to succeed in class cannot simply respond to teacher behavior at face value but instead must adapt strategies for negotiating and interpreting this complex environment. Student mediation is important because a teacher's instructional behavior can only influence student outcomes if it first activates those student responses (e.g., attention, comprehension) that are prerequisites for learning.

The results of this study indicate that in the classes where students showed the most competent participation -- by staying on task, interacting with the teacher and other students in appropriate ways (e.g., providing accurate and relevant input to class discussions), and producing a work product of acceptable quality -- several work activity features were observed in combination that were not present in classes where students showed less competent participation. These features included: (1) the greater use of formal grouping arrangements so that students received more supervision and teacher assistance; (2) assignments where students were held accountable for a specific amount of work to be done during the period; and (3) assignments where teachers guided students through

the lesson content. It also was noted that certain kinds of instructional and managerial teaching behaviors were found in those classes where student participation was more competent. In these classes, teachers tended to devote more time to verbal instruction and to give a high quality of feedback. The teachers in these classes also demanded greater student attention and supervised student behavior more closely. These kinds of teacher behaviors were consistent with the work activity structures put in place.

In the case studies for Central School, there was a tendency for the least competent student participation to occur at the higher grade levels (fifth and sixth grades). This is explained in part by the fact that the teachers at the higher grade levels gave their students much more responsibility for their own learning. Students were allowed to proceed through large blocks of instructional time without teacher guidance and feedback, and they often were not held accountable for getting a specific amount of work done during the period. Most students were not capable of working productively in this looser framework.

Altogether, the teaching behavior associated with more competent student behavior for the sample of classes in this study overlaps greatly with the definition of "direct instruction." This overlap is apparent from Good's (1979) definition of the concept of direct instruction:

> When I use the term direct instruction, the image I have is active teaching. A teacher sets and articulates the learning goals, actively assesses student progress, and frequently makes class presentations illustrating how to do assigned work. Direct instruction does not occur when teachers do not actively present the process or concept under study, when they fail to supervise student seatwork actively, or if they do not hold students accountable for their work. (p. 55)

There is growing consensus that direct instruction characterizes instructionally effective teachers, where effectiveness is defined by increased gains in student achievement measures. The research base for this conclusion consists largely of process-product studies (for reviews, see, for example, Berliner, 1980; Rosenshine, 1976; Stallings, 1980). In this study, it is notable that even though a more immediate index of student outcomes was used (i.e., in-class particiation), as well as a more descriptive and exploratory methodology, the results were quite compatible with the process-product literature.

Good (1979) also indicates that classroom management skills are necessary for effective teaching. Drawing on process-product literature, he profiles the good manager as follows:

> The teacher who can structure, maintain, and monitor learning activities has a decided

> advantage in teaching basic skills over teachers who, whether due to lack of managerial skills or because of their personal philosophies, assign managerial supervision to young children. (p. 54)

Again, this description is supported by the findings of this study.

While this study's results support the process-product literature on teacher effectiveness, the results depart from the process-product paradigm by illustrating how some aspects of the teachers' behaviors were integrally associated with their work activities structures. In other words, the findings also partially support Bossert's (1979) view that social interaction in the classroom (i.e., teacher and student behavior) is determined by the social organization of the learning environment.

In this study, the classes where more competent student participation was found were in some ways similar to the two recitation-dominated classes described in Bossert's (1979) study. Both sets of classrooms were characterized by greater use of teacher recitation, more teacher control, and more student dependence on the teacher for advancement. However, there were also ways in which the classes with competent student participation in this study did not fit Bossert's profile of the recitation-dominated class. First, the same classes with more teacher control also had more small-group arrangements. Teacher control was not relinquished in these classrooms because the groups usually were supervised and guided by other adults assuming the role of instructor. This kind of arrangement may be common in the earliest grade levels (Bossert observed third- and fourth-grade classes). Second, the assignment of single or multiple tasks to students was not directly linked to the degree of teacher control. In fact, in one of the classes where the least competent student participation was obscrved (Teacher T's), all students worked on a single task at one time. In this instance, the teacher exercised little control, despite the whole-class, single-task nature of the assignment. Third, the negative peer relationship consequences associated with more teacher control observed in Bossert's study did not occur. While teachers in this study often evaluated students publicly, they did not encourage the formation of an academic elite, they seemed sensitive to the demands of all kinds of students, and they all espoused a cooperative rather than competitive philosophy

In sum, while this study indicates the importance of work activity dimensions in defining the kinds of teacher and student interaction that takes place, the patterns of work activity dimensions observed in this study differed from those found by Bossert (1979). Also, this study suggests that there were instructional and managerial skills of teachers that played an important role in the class, and that these skills were independent of work activity structures.

Based on the teacher and student interviews, there is evidence that in the classes where student participation was more competent, the work activity structures and instructional and managerial behaviors of the teachers led to a good mesh between teachers' and students' understanding. The teachers in the classes with the most competent student participation had specific preactive instructional plans that they were able to communicate to students. They also provided more articulate lesson introductions and a tightly supervised instructional environment both of which, in turn, seemed to give all students a clear understanding of the expectations for their work performance and class behavior. In contrast, in classes where students' participation was less competent, teachers seemed less sure of their instructional tactics. Many students, in turn, evidenced ambiguity about what was required and sometimes even misinterpreted requirements. In short, their social cognitive understanding of the work activity structures and demands was poorer.

This study's findings on the role of student understanding are important for several reasons. First, the results represent a new direction for student perception research. To date, most studies of student perceptions have focused on perceptions of academic ability (e.g., Weinstein, Middlestadt, Brattesani, & Marshall, 1980; Entwisle & Hayduk, 1978) and how features of classroom structure affect these ability perceptions (e.g., Rosenholtz & Wilson, 1980). This study was not concerned with students' perceptions of ability but rather their perceptions of the work they were supposed to carry out and what they accomplished. Second, the student understanding findings underline the potential of the classroom ecology and student mediation paradigms advocated by Doyle (1977). The findings showed that in the context of the classroom environment, students often were faced with complex and ambiguous information, and that some students constructed different meanings from the same information. Third, because this study supported the general effectiveness of the techniques of direct instruction, the student understanding findings permit an examination of why -- from the students' perspective -- direct instruction works. In this study, it appears that direct instruction worked because it facilitated student attention to the teachers' directions and comprehension of the task demands. Teachers employing the techniques of direct instruction gave their students directions that were more organized and exemplary, and, thus, more likely to eventuate in the students' own organized representation of the task. With this organized representation in place, students probably were better able to sort and select follow-up cues. Once students knew what they were supposed to do, the teachers' direct instructional behavior seemed to maintain student attention and reinforce proper task behavior.

CHAPTER THREE

METHOD

This chapter presents an overview of the sample, data collection sources, and procedures for the case study component of the Verification Inquiry Study. A more detailed account of the data collection procedures, including their development, is presented in Volume I of this series.

Sample

The sample for this study consisted of ten teachers at Central School and their 219 students. An eleventh teacher, Teacher P, declined to participate in the data collection for the case studies because he did not want to commit his time to any additional activities beyond his instructional responsibilities.

Of the 219 students in the sample, 30 of these students served as target students during the observations. Two target students each were observed in the classes of Teachers M, O, U, V, and W. Four target students each were observed in the classes of Teachers N, Q, R, S, and T. These target students were selected according to several criteria. The first criterion was that the students have parent permission to be interview participants in the study. The majority of the Central School seventh-grade students met this criteria, with 72 percent having permission, 6 percent being denied permission, and 22 percent not having their permission slips returned. The other selection criteria were imposed on an observation-by-observation basis. For any given observation, the observers selected target students that: (1) were likely to be interacting with the teacher during the event (sometimes it was possible to obtain this information from the teacher beforehand); (2) equally represented males and females; and (3) had not been observed on previous occasions (i.e., an attempt was made to rotate through the list of available students).

It is worth considering whether any bias about student ability could have been introduced by observing students who were likely to interact with the teacher. This bias would be possible in classes where the teacher worked with some groups of students to the exclusion of others. Simultaneous small grouping occurred in the classes of Teachers M, N, S, O, and V. In the classes of Teachers M and S, groups were formed to be heterogeneous with respect to student ability. In the class of Teacher N, grouping was based on ability, but observations focused on students in the average and below-average groups. In the classes of Teachers O and V, where students from

more than one grade level composed the class, grouping was based on grade level, not ability. In sum, then, it seems reasonable to conclude that the selected target students did not overrepresent any particular ability group.

Central School was located in a suburban community approximately 50 miles north of San Francisco. Central School served a population that was largely white and middle class. Fewer than 4 percent of the students at Central School had a minority group identification. The school itself was selected because of its reputation as an "innovative" and "successful" school based on the nominations of state, county, and other educational experts.

The students at Central School evidenced above-average performance on standardized achievement measures. The grade-equivalent scores[1] for Spring 1979 showed that, on average, third-graders had a score of 4.3 on Reading and 4.4 on Math. Similarly, fifth-graders had an average score of 6.4 on Reading and 5.8 on Math. Relative to other elementary schools in the district, Central School achievement performance was at the median.

The ten teachers who participated were well experienced, having taught school for an average of 14.4 years. The teachers had been at Central School for an average of 8.4 years. Three of the ten teachers were male.

Data Collection Sources

The case studies descriptions were based on several sources of data. The most important data source was the classroom observations. Teacher perceptions of students and their instruction were gathered through the use of teacher reports and teacher interviews. Students' perceptions of instruction were gathered by interviewing students. Each of these data sources is described below.

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[1]The use of grade-equivalent scores reflects the reporting preference of the district, not the authors. These kinds of scores are commonly misinterpreted and, therefore, their use is ill-advised. In the example above, the third-grade score of 4.3 on reading should not be interpreted to mean that third-graders were performing at a level slightly above that of the average fourth-grader. This comparison cannot be made since the content of a fourth-grade reading test would be different from that of a third-grade reading test. It is possible that if the Central School third-graders took a fourth-grade reading test, their scores would be below 4.0. What the score of 4.3 does indicate is that relative to the average third-grader in the state (or nation) taking a test with third-grade content, the average third-grader at Central School scored better.

Classroom Observation

The observational data on classrooms consisted of narrative, descriptive protocols. For each observation, a protocol was made that focused on the teacher. For each observation, there also were protocols that focused on two or four target students. Selection of the observation dates are described under Procedures below.

The observational protocols were made according to developed guidelines for narrative, naturalistic observation. While they were in the classroom, trained nonparticipant observers took extensive handwritten notes on the sequence and quality of class events including teacher-student and student-student interactions. Once they left the classroom, they used these notes and dictated the protocols onto an audio cassette. Sometimes, the observers also recorded their informal impressions of students and teachers as addenda to the protocols.

Observers also made maps of the classrooms they visited. The maps indicate the floor plan in the classrooms and the location of the teachers and students. The maps for the described events appear in Appendix B.

Teacher Reports

For half the case studies, teachers were asked to make self-reports on the instructional events that were observed. This was accomplished by giving teachers a list of questions and having them respond to the questions on their own, talking into an audio-cassette recorder. The list of questions asked teachers to comment on what they wanted to and actually did accomplish, what sorts of skills and behaviors were required of students, and how students had performed.

One other kind of teacher report also was useful in compiling the case studies. At the beginning of the school year, all teachers were asked to report their impressions of all of their currently enrolled students. Again, teachers tape-recorded these open-ended impressions on their own.

Teacher Interviews

The five teachers who did not record their own reports of the observed events were interviewed by investigators before and after the events. In the pre-event interviews, teachers were asked to describe the activities that were planned for the period and to comment on the skills students would be required to use. The teachers also were asked about how they expected the class to perform. In the post-event interviews, teachers were asked to give their impressions of how the activities had gone and how particular students had performed. The interview data were recorded in note form and later translated into typed narrative form by the investigators.

Information from other teacher interviews also was referenced in compiling the case studies. During the 1978-1979 school year, the first year of the Verification Inquiry Study, participating teachers were interviewed about their curricula and conceptions of the "ideal" student. These interview data sometimes helped to illuminate the activities and teacher behaviors observed during the event.

Student Interviews

Open-ended interviews were conducted with the target students in the participating classes following the observed events. There were some missing data. Of the 30 target students designated across all classes, eight were not available for an interview. However, only in the class of Teacher N was it not possible to interview any of the target students. In this instance, the observed event was followed by a special assembly for which all students wanted to be present.

The student interviews took two different tacts. In half the classes, the interviews focused on gathering student perceptions about classroom organization. In the remaining classes, the interviews focused on gathering student perceptions about the event and their own performance. All interviews were tape-recorded and then transcribed.

Procedures

The case studies for each teacher were based on one observed event that took place during the 1979-1980 school year. Five of the ten teachers (Teachers M, O, U, V, and W) were observed during November and December 1979. These months were referred to as the Phase I period of data collection. The other five participating teachers at Central School (Teachers N, Q, R, S, and T) were observed during April and May 1980. These months were referred to as the Phase II period of data collection. The procedures used during the two phases differed in some respects. Thus, the procedures for each phase will be detailed separately below. The final section in this chapter describes how the case studies were prepared and across-teacher findings were generated.

Phase I Procedures

Observational data for each Phase I teacher were gathered for four different events (typically, two different events on two different days). The observations for all Phase I teachers were scheduled within a two-week period during late November and early December, 1979. In an attempt to observe normal activities, no special criteria were used for selecting the observation days within the two-week period. Investigators did check to be certain that no unusual activities (e.g., field trips) were scheduled during the

planned visits. While teachers were notified of the visits, there was no suspicion that they carried out their activities in an atypical manner.

In order to write the case descriptions, the authors focused on one of the events. The selection of which event to use was guided by the desire to have the most complete data possible and to describe activities which were typical for the given teacher.

For Phase I data collection, two trained nonparticipant observers were in the room on each visit. One observer focused on the teacher. The other observer focused on two target students, taking separate notes on each one. When the event ended, the two target students were interviewed by the observers about their perceptions of the classroom organization. The teachers made their own tape-recorded reports of the events later on the same day that they were observed.

Phase II Procedures

Each Phase II teacher was observed for one single event, and this event served as the basis for each respective case study. The event was selected in a way different than that used for the Phase I observations. While the Phase II observations also took place within a limited timeframe (April and May, 1980), teachers were given the opportunity to suggest an occasion that they thought would be interesting for observation. Three of the teachers, Teachers N, Q, and S, indicated that the observers could pick any day because they did not intend to plan anything special. The remaining teachers, Teachers R and T, suggested that the observers visit on days when they did plan to give special assignments. It is noteworthy that Teacher R's lesson was judged to be fairly successful while Teacher T's was not. Thus, while a view of the typical curriculum may not be captured in the case studies for Teachers R and T, there is no reason to believe that the special nature of the lessons themselves affected students' understanding and participation.

For the Phase II data collection, three observers were present in the room. One observer focused on the teacher. The remaining observers each focused on two target students. The observers interviewed the four target students following the event. In Phase II, these interviews focused on students' perceptions of their own behavior during the event and the particular assignments. In Phase II, an effort also was made to collect more direct data about teachers' perceptions of the events. This was done by having one of the observers interview each teacher both before and after the event took place.

Preparation of Case Studies

Each case study was written separately. The first step to writing each case study was to gather and read all the data potentially relevant to the observed event. The introduction to

each case study was based on general knowledge of when the event took place, any general impressions of the teacher noted by observers, and any teacher interview data indicating the teacher's background and educational philosophy.

The Overview section of each case study was based largely on the teacher-focused protocol describing the event. More detail about the general proceedings during the event also was available from the student-focused protocols. The Phase II case studies referred to the teacher's intent for the lesson in the Overview. Information about teacher intent was available from the pre-event teacher interview.

The next section of each case study presented the elements of the work activities structure and demands. This section was prepared largely by direct inference from the protocols of the event. In some cases, observers also made brief notes for many of the elements as part of the teacher-focused protocol. Last, some teacher-report and teacher-interview data often helped confirm and extend understanding of the work activities elements. This was especially true for the element of teacher evaluation, where it usually was possible to describe not only the way the teacher evaluated students during the event, but also the teacher's overall evaluation of the event following the observation.

The final major section in the case studies consisted of a description of the response of each target student during the event. The description for each student was prepared by collecting and synthesizing information on the student: the protocol for that student, teacher, and observer impressions of the student, teacher evaluations specific to the student, and the student interview.

Across-Teacher Analysis

The across-teacher findings, presented in Chapter Two of this volume, were based on a systematic comparison of the case study information. In some instances, the case study information already was in a form amenable to direct comparisons. For instance, in analyzing the across-teacher trends in work activities structures and requirements, it was possible to rely to a large extent on the tables summarizing each teacher's work activities structures. Similarly, for the work activities demands, it was possible to cut-and-paste the relevant section from each teacher's case study onto single sheets to facilitate comparison of just these data. For other study questions, it was necessary to go back to the case studies and extract the information essential for the comparison. For example, in answering Question Five about the mesh between teacher and student perceptions, notes were taken for each Phase II teacher that capsuled the teacher's intent and the consistencies or inconsistencies in each target student's behavior and self-reported understandings. The across-teacher comparison was then based on these notes:

CHAPTER FOUR

TEACHER M - KINDERGARTEN

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

This chapter describes a single event in Teacher M's kindergarten class in terms of its work activity structures, task demands, and student responses. The description is a synthesis of descriptive observational, teacher self-report, and student self-report data.

Teacher M had taught kindergarten at Central School since the school opened in 1967. For the past two years at this school, she taught a combination class of kindergarten and first-graders, often combining teaching efforts with Teacher N, who taught a K-1 class in the adjoining room. Teacher M taught second grade prior to her employment at Central School.

Interviews with Teacher M indicated that she was articulate and able to give rationales for her teaching arrangements. While Teacher M said that she felt that a fairly fixed routine was desirable for kindergartners, it was apparent that she tried to accommodate the needs of individual students within this framework. Teacher M also said that she tried to encourage a social atmosphere among students because it benefits their language development. Teacher M indicated interest in and familiarity with the backgrounds of her individual students, saying that she often ends up teaching the children of her personal friends.

Teacher M was observed and interviewed on November 29, 1979. The work activites event that was observed occurred from 9:15 a.m. to 10:15 a.m. Four separate activities followed one another during the event: (1) Spanish; (2) Big Book; (3) Film; and (4) Centers Time. The last activity, Centers Time, actually consisted of five simultaneous sub-activities to which different students were assigned. Two students, Stan and Cathie, were observed during the work activities event.

Teacher M tape-recorded her impressions of the lesson later in the day. During this recording, the teacher focused almost exclusively on the Language Arts sub-activity that she took charge of during Centers Time. Teacher M's general reflections about individual students and her curricula, which were recorded earlier in the year, also helped elucidate the event of November 29. The two target students also were interviewed later in the day.

Overview of Work Activities Event

Spanish

The Spanish lesson was brief (lasting approximately five minutes) and was taught by the mother of one kindergartner. All students were present and seated in a circle configuration on the floor. The Spanish teacher began the lesson by telling the students how to say "Merry Christmas" in Spanish and then went on to cover several words indicating spatial relationship, such as the Spanish words for "front" and "behind." Teacher M, who initially refrained from participating in the lesson, soon told the Spanish teacher, "I think it's too hard." The Spanish teacher spent another minute on the spatial words and then ended the lesson by having the students count to 12 and say good-bye in Spanish.

While it was desirable that all students repeat the Spanish words with the teacher, participation was voluntary. At the end of the lesson, Teacher M offered a general evaluation of the class's performance, "See, we're good at those [words]. We'll have to work some more on the other words." Evaluations of individual student performance were not observed.

Big Book

As the name suggests, Big Book is a physically giant-sized book. It is placed on a table so that all students can see the pages. Published by Sullivan, there are four books in the series, and each book has an accompanying tape cassette. Teacher M described Big Book as having "really good stories" that the children love. She added that the voices on the tape truly communicate the different story characters. She viewed Big Book as an excellent introductory "language experience" that teaches all the letters of the alphabet, sounds, and new vocabulary. She said that each time she uses Big Book she tries to cover three or four pages and stop after each page to read and discuss it with the students. During this observation, three pages were covered.

All of the students were seated on the floor at the foot of the table for the Big Book lesson, and Teacher M was seated in a chair so that she could easily regulate the tape cassette and lead the lesson. The teacher covered each of three pages by first playing the taped dialogue corresponding to the page, asking the class to recite the lines, and then asking questions about the story content. As with the previous activity, each student could choose whether or not to participate in the group reading of each page. The teacher made some positive remarks to the class about their participation; her only negative remark was directed at one boy who was misbehaving. The Big Book activity lasted for approximately five minutes.

Film

The film shown was entitled "About Ripples" and ran for about 12 minutes. The subject was American children visiting other children around the world. The teacher introduced the film to her kindergartners by saying that they would see a very good film about children from Africa, China, and other countries, and that these children would be doing things like playing games or eating with chopsticks.

Students were seated on the floor to watch the film. First, there was "countdown" for the start of the film, where Teacher M led the students in counting from ten to one backwards. (The teacher later commented that she did this to encourage students to learn numbers.) Once the film began, students were expected to sit quietly and watch it. The teacher did not watch the film; instead, she spent the interval preparing the center activities with several aides and parents who were there to help. When the film ended, the students applauded. There was no discussion of the film and no evaluation of students except for a few behavioral directives which occurred before the film began.

Centers Time

The teacher viewed Centers Time as an opportunity for students to get more individualized attention and to experience a variety of instructional experiences on a rotating basis. Teacher M acknowledged that students could not choose their assignment during Centers Times; instead, she assigned students to Centers Time activities so that the student groups were fairly heterogeneous. Teacher V added that she purposely planned a "free activity" period later in the day so that students could choose their activities.

During this observed activities event, Teacher M assigned each of her kindergartners to one of five sub-activities during Centers Time: Cooking, Banner, Math, Pattern Blocks, or Language Arts. Students participated in their respective center groups for approximately 30 minutes. The first four sub-activities are described briefly, because the nonparticipant observations and the interviews did not focus on these. The fifth sub-activity, Language Arts, was the focus of data collection and will be analyzed in more detail.

(1) Cooking - The six students assigned to Cooking Center were guided by the mother of one target student (Stan). Students in this group spent their time rolling out cookie dough and cutting out turkey-shaped cookies.

(2) Banner - Seven children were assigned to Banner Center. Led by the mother of another student, this center was set up so that students could produce banners by ironing pressed leaves in between sheets of waxed paper.

(3) Math - The teacher aide was in charge of this group. The six students in this group were assigned to work in a new math workbook called Going Places Math Book.

(4) Pattern Blocks - The mother who taught Spanish earlier and a student aide (a sixth-grader) were in charge of the seven students assigned to this group. The Pattern Blocks could be put together to make pictures of cats and ducks.

(5) Language Arts - Teacher M taught the Language Arts group. Six students were assigned to the group, including the two target students, Cathie and Stan. This Language Arts period was divided into two segments. First, Teacher M read a book, Harold and the Purple Crayon, to her group and led a brief discussion ("brainstorming") period. The book tells the story of a little boy who uses a purple crayon to draw things that then become real. Second, the teacher had each student make his or her own booklet filled with purple crayon drawings and a narrative which the teacher wrote out as each student dictated it.

Later in the day, Teacher M articulated several intended purposes of the Language Arts lesson:

> I planned to use the book as motivation or as a story starter. I also wanted to introduce the technique of brainstorming to the group to have them realize there is not only one answer possible for a situation. Another purpose of this activity was to help children realize that reading is just "talk written down," as one little boy said. In other words, I wanted them to make a connection between what they said or dictated to me and the words I wrote in their books.

The teacher expected the students to listen attentively while she read the book and hoped that most of them would participate and share ideas during the brainstorming session. When students turned to making their own booklets, the teacher wanted them to produce their own pictures and story narratives independently. She also wanted them to try reading their booklets to her when they were finished. Behaviorally, she wanted the students to work by themselves when making their booklets and to wait patiently for her assistance. The teacher's public evaluation of the students' work was informal and invariably favorable.

The Elements of the Work Activities Event

Table M.1 summarizes the elements of Teacher M's observed work activities event. Each element is described in more detail below.

Table M.1

Teacher M's Work Activities Structures During
Three Class Activities and One Centers Activity

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Spanish	All kindergartners	No formal division of labor; students independently attend to lesson	No student control	Dependent on teacher to progress to new words	Observational scan of students; comments made to the group about performance
Big Book	All kindergartners	No formal division of labor; students independently attend to lesson	No student control	Dependent on teacher to advance in book	Observational scan of students; comments made to the group and individuals about performance and behavior
Film	All kindergartners	No formal division of labor; students independently attend to film	No student control	Dependent on the film	Infrequent observation of students; no comments made
Language Arts (Centers)	6 students selected by teacher to assure heterogeneous ability	No formal division of labor; students encouraged to collaborate during brainstorming discussions but to work independently when making booklets	- Pace of assignment - What to draw and say in booklet	Dependent on teacher during reading of book; can progress on their own when making booklets but dependent on teacher to write down their dictation	Comments to group and individuals about performance and behavior; scan of story booklets

Content

The work activities event consisted of four consecutive activities:

(1) Spanish
(2) Big Book
(3) Film
(4) Centers Time (Language Arts)

While five sub-activities occurred simultaneously during Centers Time, observations focused on the elements of the Language Arts Center activity. (Please see Table M.1.)

Grouping

All of Teacher M's kindergartners participated as one group during Spanish, Big Book, and Film. A group of six teacher-assigned students participated in Language Arts Center. Teacher M indicated in an earlier interview that she assigned students to Center activities so as to achieve groups that were heterogeneous with respect to ability.

Division of Labor

None of the activities required collaboration among students. During the first three activities, students individually attended to the information source (teacher or film). During Language Arts, students individually attended to the teacher while she read the story and then were encouraged to speak out and exchange ideas during the "brainstorming" discussion. When making their story booklets, the teacher wanted students to create independently their drawings and narrative. The teacher noted after the class that at least three of the students were copying from each other; she accepted this informal collaboration.

Student Control

Students had no control options associated with the Spanish, Big Book, or Film activities. When making their booklets in Language Arts, students had control over what to draw and say on each page. They also had a choice about the amount of in-class time to devote to the booklet. One student wanted to take his booklet home to complete, and the teacher consented.

Student Advancement

During the first three activities, Spanish, Big Book, and Film, students were dependent on the teacher (or film) to advance. Because all three activities involved students attending to an oral

or audio presentation with no follow-up assignment, there was nothing for the students to work on independently.

In the Langauge Arts group, students were similarly dependent on the teacher during the first portion of the lesson when the teacher read Harold and the Purple Crayon. When making their own booklets, students could independently advance to new pages when doing their drawings. They depended on the teacher to write down their narratives, however.

Teacher Evaluation

Teacher M's evaluations during the Spanish and Big Book periods were informal, public, and expressed her approval of student participation. There were several times during Spanish, Big Book, and Film when the teacher also lightly reprimanded several students for their inattentiveness. For instance, she rhetorically asked two students during Big Book, "Can you sit quiet? I'm going to ask you to leave. Can you sit quiet?"

During Language Arts, the teacher again engaged in informal and public evaluation. Most of this evaluation took the form of implicit approval of students' participation and booklets through asking the students questions and showing interest and complete acceptance of their work. During the follow-up interview, Teacher M elaborated on student performance:

> I feel that the lesson was successful because the children seemed to enjoy the book very much and were eager and anxious to write their own stories. During the brainstorming session, they were each able to come up with a variety of ideas on where Harold might go on a trip or what he might eat if he were hungry, etc. Although we will be doing a lot more brainstorming in the future, I think they got the basic idea. I also think that the children in the group are beginning to understand that I am writing down exactly what they say, and when they finished their books, we went back over the pages one by one. Some could remember what they said and some could actually read each word.
>
> In general, the group performed well -- each at their own level or ability. Stan found the task easier than other children, but his vocabulary and language development is more advanced than the other kindergartners. In fact, he can read. Chico's artwork is more mature than many of the other students. They liked the activity. They all seemed motivated. Daniel, who is very shy and quiet, found the task somewhat difficult

> and asked to take his home. I particularly included him in the group because he is practically nonverbal in the classroom. Some were not able to connect their ideas into an actual story, but had separate ideas on each page. Reading a story is a more advanced skill.
>
> Diane, Cathie, and Cheryl enjoyed the process, but did a lot of copying, and they are really not reading yet. Chico's drawing is great, but he is very low risk and afraid to make a mistake. If things don't go exactly right in his opinion, he cries.

When asked how she evaluated students' work, the teacher said:

> My evaluations were based on the appearance of the drawings, the connection to the words, and whether the product was actually an adventuresome story. I did compare the students to each other and I also based my evaluation on previous experiences with other children of this age in creating stories.

Behaviorally, the teacher said that the only problem was that the students were:

> . . . not being patient while waiting for their turn for me to write down their dictation. They called out and distracted the others.
>
> I feel that the students violated the rule because they have to wait too long sometimes for me to get to them. As I have said earlier, kindergartners are typically still in the egocentric stage and want what they want right now. They can only think in terms of what they need -- not put themselves in the other's place. It was really not a big problem.

Task Demands

The task demands varied according to the particular activity.

Spanish. The Spanish lesson required students to listen to the new words and internalize their pronunciation.

Big Book. The Big Book lesson required students to listen to the tape of the story, follow along in the book, and recognize words.

Film. The Film activity required students to look at and listen to the film.

Language Arts: The Language Arts lesson required students to listen to the story, to think of a story for their booklets, and to create pictures and a narrative for their story. Also, students were required to recite their finished story to the teacher, either by memorizing it or reading it.

Motor Demands

The Spanish, Big Book, and Film activities required that students be able to sit still and pay attention for several minutes at a time.

The Language Arts activity required that students be able to draw using a large purple crayon.

Interactional Demands

In all the activities, the students were expected to attend quietly when the teacher was making a presentation or showing the film. During the group discussions that took place for Big Book and Language Arts, students were expected to participate in turn and learn from each others' ideas. When making their booklets in Language Arts, students were expected to come up with their stories independently and to wait patiently for the teacher to come to them. There were no complex procedural demands during the entire work activities event. Students went from one activity to the next routinely with little need for explanation.

Student Response

Two students were observed during most portions of the work activities event. These students also were interviewed later in the day about their general impressions of class and the behavioral rules they should follow. The responses of each student during the work activities event are summarized below. Additional perceptions of the observer and Teacher M are included when relevant.

Stan

When the observation began, Stan was sitting on the floor with the other kindergartners. When the Spanish teacher began her lesson, Stan was distracted by his neighbor, Blythe, who had fallen forward so that she was lying on her stomach. Stan then initiated two rounds of play with her, lightly slapping her, and climbing halfway up her back to sit on her. Neither Teacher M nor the Spanish teacher reprimanded Stan. The observer noted that this "roughing" by Stan seemed unusual, speculating that it might be associated with the presence of his mother in class today.

When the Spanish teacher ended the lesson by having the students count to 12, Stan did not participate; he sat on his knees and watched those around him. He then laid down on his stomach with his head propped up by his hands and his elbows on the floor, imitating BTythe and one other boy.

The observation next picked up when Teacher M was introducing the film. Stan was sitting with his knees tucked under, playing with his fingers. When one girl got up to get a drink at a nearby fountain, Stan watched her. He apparently was not attending to the teacher's introduction.

When the film countdown was recited, Stan did not participate. Once the film started, Stan watched it with an intent gaze. His mouth was open. Twice some girls next to Stan started a conversation. Stan glanced over at them but was not distracted further. Part way through the film, Stan leaned back on his arms, stuck his feet out, and gave a long stretch. Several students around Stan became distracted and fidgety. Stan continued watching the film, not interacting with other students. Near the end of the film, Stan sat forward and began pulling at his right shoe. He continued to sit holding his right foot in his hand until the movie ended.

Stan continued to sit on the floor as Teacher M began calling out the names of the students assigned to the various centers. He was stretching again when the teacher called out the names of those going to Language Arts, where he was assigned. As the teacher finished the list of names, Stan called out to her, "What about Richard?" The teacher made a response to Stan that could not be heard by the observer.

Stan went over to the Language Arts table. He was the last to arrive and sat in the remaining empty seat. Stan picked up his purple crayon and began to color the newspaper that covered the table. He stopped as Teacher M approached the table to introduce the lesson. She told the group that she was going to read them a new book, Harold and the Purple Crayon, and that they would make their own adventure stories once she finished reading. She added that each booklet would be entitled with their own names -- for example, "Chico and the Purple Crayon."

Stan then asked if they had to use their own names. He had a difficult time getting out the words for this question. The teacher waited patiently for Stan to complete his sentence. She then responded that if they wanted to make up somebody for their stories, they could.

Teacher M asked the students to leave the table and sit on the floor nearby so she could read them the story. Stan and several other students then tried to sit immediately next to the teacher on the floor, but the teacher asked them to sit in front of her so they could see the book. They moved accordingly. Teacher M proceeded to read the story. Stan seemed very interested in the story throughout the reading.

When finished with the story, the teacher said, "Before we go to your books, I want you to do brainstorming. Does anyone know what that is? You think of ideas." After she explained more about brainstorming, the teacher began to go around the circle and asked, "Where would Harold with the Purple Crayon go?" When the teacher came to Stan, the fourth student, he shrugged his shoulders, and there was a long pause. He said nothing but started to smile. The teacher finally said, "That's okay" and went on to address the group: "Okay, you know where you're going, but suppose you got really hungry. What could you eat?" As the teacher was about to come around to Stan for the second time, a girl from another center walked up to the teacher as if to ask her a question. The teacher turned her head to look at the girl. At this point, Stan reached out with his hand and grasped the teacher's jaw, moving her head so that it rotated back to face him. The teacher indicated no displeasure at this, and she finished her exchange with the girl anyway. Teacher M then turned back to Stan, and he gave his answer to the question: "Harold could eat sandwiches."

The teacher asked the Language Arts students to return to the table. Stan sat down, took a blank booklet, and started drawing immediately. Stan soon said, "I've got a picture already." The teacher came over to Stan and asked, "Okay. What's going on?" (It was difficult to interpret Stan's picture.) Stan then told her the first line of his story, and she proceeded to write it in his booklet: "I was walking down the beach." Before going on to the next student, she told Stan to take his purple crayon and make an adventure with it. Stan continued to draw. Soon he called out to the teacher, "I'm on the next picture." The teacher went on to assist one other student before going to Stan. He then gave her the second sentence, "I am on top of the mountain and the sun is shining." After Teacher M went on to help the other students, Stan called out, "Do we get to bring these home?" The teacher said, "Yes, you can take it and read it to your parents, to your brother." Stan then initiated a round of student talk by saying, "My brother is nine." Other students then remarked on the age of their siblings.

After Stan finished his third drawing, he turned around in his chair and began to watch the first-grade class on the other side of the opened partition. His book and crayons were lying on the table. Eventually, he called to the teacher as she approached, "[Teacher M's name], I'm ready." Teacher M then came over, knelt along side Stan, and began talking with him. The teacher wrote on Stan's third page, "This is me in a motorboat." The teacher then closed Stan's booklet and wrote the title on his cover saying, "This is Stan and the Purple Crayon." At this, Stan's face broke into a very large smile.

Teacher M went on to other students, and Stan started drawing another picture in his booklet. This time he was standing -- not sitting -- as he drew, and his drawing movements were more lethargic. When he stopped drawing, he continued to stand at the table and looked around at the other neighboring students. Stan then

walked over to watch Teacher M help another student. As the observation ended, Stan moved back to his chair, sat down, and again began to watch the first-grade class in the adjoining room.

In informal notes, the observer remarked on aspects of Stan's behavior during the observation period. It was noted that even though Stan's mother was a parent aide during the work activities event, Stan appeared to be very independent of her. It was noted that Stan was able to attend to the various activities for long periods of time relative to most students. The observer also noted that: "Stan and the teacher seem to have a very warm and productive relationship in which he very much orients to her, especially at the work table, and she very much orients to him, to those occasions when he has something to say."

Teacher M may have been exceptionally attentive to Stan because she viewed him as an exceptional student. When describing her students, Teacher M referred to Stan as "possibly the brightest boy in the class . . . he has learned to read on his own and has a fabulous speaking vocabulary, huge backlog of information; he's been to Holland and has traveled extensively. His concept development is terrific." About the specific Language Arts lesson, Teacher M expressed a very positive impression of Stan's participation and work:

> I thought his participation was great. He said he couldn't think of an answer during the first round of brainstorming, but I think he was pulling my leg. He has lots of ideas, but just wanted to see what I would do if he didn't contribute. He smiled and responded in a delightful way during the story. He was eager to write his own book and was one of the first to finish. His ideas were clever and his drawings and story were better than average compared to the other kindergartners. He was actually able to read his book and the words on each page after it was complete. We didn't teach Stan to read here at school. He just learned on his own -- at home and at school. Of course his parents have been reading a great deal to him ever since he was little.

While Teacher M enthusiastically acknowledged Stan's academic ability, she viewed Stan as being "emotionally unstable."

> He's very hostile and gets great pleasure out of teasing other children. He hits them, knocks down their blocks, etc. His parents say that they have the same problem at home. They feel that he is jealous of his older brother.

When Stan was interviewed in the afternoon, after the work activities event, he was quite verbal. He said that playing was the best thing about kindergarten, and that stories were the best kind

of work, "because you get to see pictures." He said that Teacher M was "nice" because "she does a good thing . . . she puts things in order nicely -- puts everything in a nice place." When asked about the behavioral rules in the class, Stan went on to articulate five rules: (1) Students should not throw dirt balls; (2) Students should not do bad things; (3) Students should not wreck things and fight; (4) Students should not hurt each other; and (5) Students should not get mad. When asked about the last time he got in trouble, he reported:

Stan: . . . I was just walking through a thing that somebody made, and then when I saw it, I jumped over it, but part of it was wrecked.

Interviewer: When you jumped?

Stan: Yeah.

Interviewer: Uh-huh. Did you mean to do that?

Stan: Well, uh, when I jumped, I was looking at something else, and then it got ruined.

Stan then indicated that Teacher M did not reprimand him for this accident.

In sum, Stan participated in the work activities according to the task and behavioral demands. Relative to other students, Stan seemed able to attend to the lesson material for longer periods of time and to work more quickly. Stan did not interact frequently with other students; he was relatively aggressive in seeking attention from the teacher.

Cathie

As the observation began, Teacher M's students were beginning to seat themselves for the Big Book activity. (Cathie was not observed during Spanish.) Cathie was at the back of the group with her coat on. She turned and walked to the coat rack, hung up her coat, and walked back. When the teacher started the Big Book tape, Cathie sat down behind the other students with no one seated to either side of her. Cathie listened to the first part of the story. When the teacher asked them to read back this part of the story, Cathie did not join in. She sat kneeling, hands in her lap. The teacher then asked the students whether they knew what one picture represented. Several students replied, "fan." Cathie did not. The teacher soon started and stopped the tape again, asking, "Okay. What's the new word?" This time Cathie was one of the first students to say "fan." When the students were asked to read the next lines of the story, Cathie joined in: "I am a fan. I am a fat man."

When the film started, Cathie was seated backwards in a chair. As the film continued, she slid down off the chair onto the floor. She continued to hang on to the chair, using it to prop her chin. No other student was in close proximity. Throughout the film, Cathie remained quite attentive. She was distracted a couple times by the preparations that aides were making for centers. Once she sat on the chair again, only to get up again and sit down on the floor. On the whole, however, Cathie kept a fixed gaze on the screen. She did not interact with any other students.

Cathie clapped lightly, along with other students, when the film ended. She then stood up, looked around the room, and walked over to a table to watch aides who were working with art materials. Meanwhile, the class collected around Teacher M to receive Centers assignments. Cathie looked over to the group and then walked over to and around its periphery. She watched another girl go to the drinking fountain. Finally, Cathie knelt down to join the circle in a position that was to the right side of Teacher M. The teacher began to read the names of students assigned to the various centers. When the student to the left of Teacher M received her assignment and walked off, Cathie stood up and sat down in this student's place. Cathie soon was assigned to the Language Arts group.

Cathie sat on her knees, holding a crayon in her hand, as Teacher M read Harold and the Purple Crayon for the Language Arts lesson. Cathie listened very attentively. When the teacher introduced the brainstorming, Cathie remained attentive. When the teacher asked, "Where would Harold with the Purple Crayon go?", Cathie took her turn and responded, "He could take a walk in the forest." When the teacher went on to ask about what Harold might eat, Cathie contributed "ice cream."

When the students in Language Arts were seated and working on their booklets, Stan was the first to receive help. Teacher M came next to Cathie. With a smile, Cathie looked up at the teacher and said that she had more drawing to do. Teacher M responded "Okay" and went to another student. Cathie continued to draw, frequently looking at Cheryl's drawings. When the teacher next came around to Cathie, Cathie asked her to write the first sentence down. Teacher M then turned to help another boy.

Cathie said, "My brother is eight" as soon as Stan said the age of his brother. Cathie continued to draw at a steady pace. When Teacher M approached again, she said, "Okay, Cathie. Excuse me? What? In a canoe?" Teacher M then wrote on Cathie's page: "This is me in a canoe." Before moving on to the next student, the teacher asked Cathie, "Where are you going? What happens next?" Cathie began drawing on the next page.

Cathie did not finish her booklet before recess. Cathie worked on her booklet during a work activity event later in the day, and Teacher M helped her complete it at this time.

The observer and Teacher M had similar informal comments about Cathie. The observer described her as "solitary" in large group activities, but more interactive as the day progressed, particularly in smaller group activities. Teacher M described Cathie as quiet, reflective, and patient. She added that Cathie did good work at centers, but that she [the teacher] had a difficult time judging the extent of Cathie's progress in language development. The observer noted that Cathie's behavior on the playground was active and noisy. Teacher M commented that on the playground, "Cathie loves to have the boys chase her around and usually does choose to play with a group of boys -- she has an older brother, so this may be the reason why."

Cathie did not verbalize much when she was interviewed after the work activities event. She could think of no class rules and said that she never got in trouble. Several questions later, she said that the hardest thing about going to school was "keeping out of trouble." She described Teacher M as "nice."

In sum, Cathie was attentive during the work activities event. She became increasingly verbal as the morning progressed, although she did not interact with other students very often. Relative to some students, she required more time and assistance in completing her booklet.

Conclusions and Implications

The observed work activities event indicates that Teacher M ran her class activities in a well-coordinated way. This coordination was facilitated by Teacher M's practice of planning for all her activities, materials, and student groupings at the end of the previous day. Students also seemed prepared for the course of events; transitions from one activity to another were smooth and routine.

Teacher M was able to accomplish her instructional goals during the work activities event. She covered the content that she planned to, and students learned material that furthered their general academic and social skills. During Language Arts, all students were able to finish at least two pages in their booklets. At least two students completed their booklets during later periods, indicating that they had both the motivation and option to do so.

Teacher M's class also seemed successful from the standpoint of interpersonal behavior. Students did not cause major disruptions and were attentive most of the time. Students also appeared to have favorable feelings toward Teacher M. In her teacher report, Teacher M expressed complex and what appeared to be objective views of each of her students. While she seemed to enjoy interacting with some students more than others, she was accepting and positive toward all students. Her activities seemed designed to encourage the participation of every student.

CHAPTER FIVE

TEACHER N - FIRST GRADE

AN ECOLOGICIAL ANALYSIS OF A WORK ACTIVITIES EVENT

Teacher N and his first-grade students were observed on Thursday, May 1, 1980. The observed work activities event was a reading period lasting from 9:15-10:15 a.m. The following chapter describes the work activities structures, task demands, and student responses that were observed during the event.

Teacher N taught a combination kindergarten and first-grade class in a team with Teacher M. As the result of a mutually agreed upon system, Teacher N spent most of his time working with the first-graders, and Teacher M spent most of her time working with the kindergartners. Both teachers had separate rooms in the pod divided by a partition that students could circumvent when they moved back and forth between the two teachers.

Teacher N clearly stated his general goals for students both in the academic and social realms. Academically, Teacher N wanted his students to "take charge in some way of their own learning process" and to develop a positive emotional attitude about learning. In reading, Teacher N was especially concerned that students learn to overcome any emotional blocks they might have about reading.

> I start them off by just reading. I have books that they can read without help, that anybody can read. And after they have experienced that they can read, they can reproduce the print accurately, it becomes the sort of thing like -- 'Well, gosh, reading's not too bad! It's really kind of easy!' Because there's that big emotional block they hear from siblings and parents.

Socially, Teacher N wanted his students to learn skills for successful social interaction (e.g., how to problem solve and resolve conflicts) and also to gain a sense of class identity.

> I think that's one thing I really stress very strongly -- a group identity. A class -- we are people, and we have a certain way of being who we are, and we're different. My class is different than Teacher M's class because of our characters -- because we're different people. And so the children feel pretty good about their class -- a little class identity. That

seems to help them develop a social contract among themselves.

Three different first-grade reading groups were formed for Teacher N's work activities event. (For convenience, the groups will be referred to as Groups A, B, and C, although Teacher N himself did not use labels.) Each group had a different set of assignments. Teacher N was interviewed before and after the observation of the event about his expectations for the lesson and his final assessment, respectively. Other interviews with Teacher N, conducted earlier in the year, provided additional information about Teacher N's perspectives on individual students and instruction. Also, four boys were observed during the work activities event. Because of scheduling conflicts, it was not possible to interview these students following the event.

Overview of Work Activities Event

Teacher N began the period by calling out the reading group assignments for each of the 23 first-graders who were present that day. Each student was assigned to one of three groups. According to the teacher, these groups were fairly stable and were based on his informal assessment of reading ability. Group A (our label) consisted of seven students whom the teacher viewed as being the most successful readers. Group B consisted of eight middle-ability students. Group C consisted of eight students who had the most difficulties with reading.

In addition to the teacher, a teacher aide and substitute teacher were present to help supervise the reading groups. Teacher N planned to spend half the period instructing Group C and the other half instructing Group B. These two lessons by the teacher were observed in detail. The specific activities for each reading group are described below.

Group A -- Read and Write Books

Supervised by the teacher aide, students in Group A spent the entire period working on books entitled Read and Write Books. There are several books in this series, and each one provides students with a story skeleton. Students are asked to take the skeletons and elaborate on them by writing their own personalized stories. The role of the aide in the group is to direct students to the task, to make sure that students understand the task, and to help students with any writing or spelling that they can't do. During the work activities event, students worked individually on their own stories, and some informal collaboration and socializing took place.

Teacher N expressed no concern about Group A's progress during the work activities event. Apparently, Teacher N had

little reason for concern since the students in this group had a high level of skill and motivation.

Group B -- "Sammy's Supper" Reading Lesson

Students in Group B spent the first half of the period planning for a magic show that was scheduled to occur after recess. This preparation involved reading the book Abracadabra and practicing some of the tricks described in the book. The substitute teacher supervised this group. Teacher N did not interact with this group until he called them together for a reading lesson halfway through the period.

During the pre-lesson interview, Teacher N said that he wanted the students to read a book entitled The Three Little Pigs. He planned to have the students first read the book individually and engage in in a general discussion about the book, and then work in pairs reading the book to one another. The actual lesson deviated from these plans in two respects. First, as Teacher N started the lesson, he realized that Group B had already read The Three Little Pigs. He therefore selected another book in the series entitled Sammy's Supper. Second, rather than start by having students read the book individually, Teacher N read each page of the book out loud and had students repeat after him. A general discussion of the story took place as this reading proceeded. Students finished the lesson as planned by reading the story in pairs.

Five copies of Sammy's Supper were available for the lesson (presumably one for the teacher and one for each pair of students), and Teacher N asked a student in the group to get the books. The student gave the books to Teacher N, and the teacher immediately began to explain the lesson: "I'm going to read a page out loud. Then you read it back to me. It's going to be fun." Teacher N held one copy of the book on his lap so that he could read it and show students the pictures at the same time. The teacher then started the lesson, quickly establishing a pattern where he would read a sentence in the book, pointing to each word as he read, have students repeat the sentence, and then invite student comments about the story. For example, when they got to a picture in the story showing Sammy eating ice cream, Teacher N had them read the corresponding sentence, and then he asked the students if they ate ice cream. One student said, "Yes, I do." This started a brief exchange about ice cream and the favorite flavors of the students.

Once the teacher and students finished reading Sammy's Supper together, Teacher N told the students that he wanted them to read through the book one or two more times with a partner. The teacher called out the names of the students that he wanted to work together and then handed a book to each of the resulting four pairs. The teacher indicated that he wanted one student in each pair to read the part of Sammy and the other student to read the part of the mother. Teacher N also told them that if there was

sufficient time, students in each pair should switch roles and read the book a second time.

Each of the four pairs of students selected their own spot on the floor. Teacher N partially monitored the students as they interacted. Even though several students seemed to spend most of their time chatting, Teacher N did not redirect them toward the task. When one student approached Teacher T and told him, "We read it with no problems," Teacher T replied, "Okay. You have time to switch. Read it again." The reading partners broke up when recess time approached.

Teacher N described the purpose of the Sammy's Supper lesson as follows:

> I wanted the children to get in touch with the silly, whimsical nature of the story and to realize that it had rhyme. I wanted them to problem solve using predictation skills, not phonics. Also, the students were supposed to enjoy the book, to be aware of the patterning of the words, and to cooperate well during partner reading.

Group C -- Magnet Board Reading Lesson

Students in Group C spent the first half of the work activities event participating in a reading lesson with the teacher at the magnet board. The teacher used matching picture-and-sentence materials for the lesson. Teacher N indicated that there were several purposes to the lesson:

> Students are to use the pictures to predict sentences. This is to reinforce the idea of reading using pictures first -- reinforce the idea that print mirrors pictures. Also, students will be asked to problem solve words -- to distinguish two words with the same sound -- and to learn the new sounds of "J," "V," "Y," and "Z." Students can use as many reading strategies as possible.

Observation of the lesson suggested that the primary object was to predict and then remember what sentence went with what picture. Thus, for example, when the teacher put up a picture of a rooster holding a rocket, students were supposed to say, "The rooster has a rocket." If necessary, Teacher N helped students arrive at the correct sentence. Once students arrived at the right sentence, Teacher N put up the sentence on the board and pointed at each word as students repeated the sentence. Teacher N presented ten picture-sentence pairs in this manner. Then he said, "Okay, I'm going to mix them up." Teacher N proceeded to present several sentences without the pictures, and he asked the students to read them. Some of the sentences were not in the previous group, and students had to rely completely on reading skills rather than memory.

This finished, Teacher N said, "You've done such a good job, we're going to do some more. We've done all that you know. Let's try some new ones now." This time, Teacher N put up pictures and sentences where the objects started with the letters "J," "V," "Y," and "Z" (e.g., "The valentine is by the vase."). After the students did one sentence for each letter, Teacher N announced, "Let's go get the studybooks."

The students in Group C walked over to their cubbyholes and brought back their studybooks. Teacher N said, "Okay, we're going to work at the table closest to the computer. Turn to page 35. That's a page that's black with a blue stripe." The students sat down at the table, and Teacher N made certain that they all found the correct page. He then continued with his directions: "What you're going to do is read the words and then choose the right picture."

Teacher N surveyed the students in the group to make sure they were on the right track for the assignment. He then told the students that they could go anywhere to work on the assignment. Three students remained at the table, while four others sat down on the floor nearby.

Teacher N began to monitor the work of individual students at the table, giving hints when students had trouble and affirmative feedback when students were successful ("That's right" or "That's correct"). He then sat down on the floor amidst the other group members and began looking over their work. Between helping students, he announced to the group, "We're going to stop on page 36."

The teacher continued to check the progress of students on the floor. When he noticed that the students were having similar difficulties with one item he said, "Let's read this example together." The teacher proceeded to read the item and explained the distinction between the letters "B" and "Y."

Teacher N stood up and continued to monitor the students as they finished. After looking at every studybook, he remarked to the students that they all had missed the top item: "Well, they tricked us on the top one. The zebra does have a jacket. We have to change it to show that it does." Following this, Teacher N reprimanded Tommy, a boy who had just returned from a long trip to the bathroom only to start talking to another boy at the table. In a matter-of-fact voice, the teacher said, "You didn't come back to finish your assignment. You came back to talk to Steve. Now you'll have to finish your assignment during silent reading."

Teacher N then directed Group C to their next task. "Okay, put your work away. Get your Read and Write Books and go work with [the substitute teacher]." The students in Group C spent the remainder of the period working on the same set of curriculum that Group A had. Teacher N switched to instructing Group B, as already described.

The Elements of the Work Activities Event

Table N.1 summarizes the work activity elements for the three reading groups. Because only the teacher-instructed portion of the period was observed for Groups B and C, the table focuses on this portion only. The work activity dimensions are described in more detail below.

Content

Each of the three reading groups was given a different assignment designed to build reading skills.. These three activities were:

(1) Read and Write Books (reading and writing stories);
(2) Sammy's Supper Reading Lesson (reading a book);
(3) Magnet Board Reading Lesson (matching pictures and sentences).

Grouping

The three first-grade reading groups reflected Teacher N's decision to divide the class equally into homogeneous high, middle, and low groups. According to Teacher N, these groups were used on a regular basis, and there had been little change in membership over the course of the year. The high group, Group A (our label), consisted of seven students. The middle and low groups, Groups B and C, respectively, each had eight students.

Division of Labor

For the Read and Write Books and Magnet Board Reading Lesson, there was no division of labor. Students in these groups carried out their assignments individually. The first portion of the Sammy's Supper Reading Lesson also did not require division of labor. Students simply listened to Teacher N read the story and participated in group recitation and discussion as individuals. The second portion of the Sammy's Supper Reading lesson was the one instance where division of labor was required. Teacher N paired students and asked them to read the book to each other. The teacher further specified that one member of the pair read the part of the mother and the other member read the part of Sammy. While the teacher did not specify which pair member was to read what part, his instructions did require explicit role differentiation.

Table N.1

Teacher N's Work Activities Structures for Three Reading Groups

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Read and Write Books	7 students, (Group A), selected by teacher for similar high ability in reading	No division of labor; students individually fill in workbooks	Particular content of story they are writing	Students may advance within activity, but often require frequent feedback from teacher aide	Observational scan of student behavior by teacher
"Sammy's Supper" Reading Lesson	8 students, (Group B), selected by teacher for similar average ability in reading	No division of labor for group reading of story; explicit role differentiation when students do partner reading	No student control	Students dependent upon teacher to advance in group reading of story; can advance on their own in partner reading	Observational scan of students; comments to individuals and group about behavior and performance
Magnet Board Reading Lesson	8 students, (Group C), selected by teacher for similar below-average ability in reading	No division of labor; students individually attend to lesson and fill in workbooks	No student control	Students dependent upon teacher to advance during group lesson; can advance on their own in workbooks	Observational scan of students; comments to individuals and group about behavior and performance

Student Control

The reading lessons that the teacher carried out with Groups B and C did not allow for student control. The teacher selected the curriculum for these lessons, and there were no options about working on other assignments during the lesson periods. On the other hand, students in Group A, working in the Read and Write Books, did have some control. Because the assignment involved elaborating on a story "skeleton," each student had control over the way the story developed, being able to insert content of his or her own choosing.

Student Advancement

Students could advance without teacher approval within all three activities to a certain extent. In the Read and Write Books, students could advance as quickly as they could think up their story and get it written down. However, since most students could write very little, students in practice depended on the teacher aide to help them write out each sentence. For the Sammy's Supper Reading Lesson, students depended on Teacher N for the group presentation, but could advance on their own (with another student) in partner reading. This was readily apparent since some pairs of students finished reading through the story before others. For the Magnet Board Reading Lesson, students also were dependent on the teacher for advancement during the initial group presentation. Afterwards, given their studybook assignments, students could advance on their own. Since this assignment involved checking boxes and not actual writing, the teacher's feedback was not an essential ingredient for knowing what to do next.

Teacher Evaluation

During the work activities event, Teacher N gave no evaluatory feedback to Group A. Teacher N occasionally looked to see how students in this group were doing, but intervention was unnecessary. After the event was over, Teacher N simply commented to an observer that he was very pleased that Group A had been able to spend the entire reading period on one activity.

Teacher N's evaluatory approach for both Group B and Group C was the same. Here, the teacher not only observed student behavior, but also gave verbal feedback to individuals and groups about their behavior and performance. The majority of this feedback was positive -- for instance, the teacher told Group C that they had done so well that they were going to do some more, and told a student, "That's right." When the teacher discovered students having some difficulties, especially in the Magnet Board studybooks, rather than give explicit negative feedback, he tried to indicate that students should try thinking over something again. In short, Teacher N's approach was

predominately one of offering encouragement and helpful advice. The only negative remark during the event came when Teacher N reprimanded Tommy during the Magnet Board Reading Lesson.

Following the work activities event, Teacher N indicated that the Sammy's Supper lesson for Group B had gone well. While he viewed certain students as better participants than others, he noted that all students were engaged in the lesson. Turning to Group C, Teacher N summed up his impressions of the group by saying:

> All students were involved, responsive, and enthusiastic. They predicted words and used confirming strategies. The noise level showed that they were confidently approaching the task. They took cues from each other and used a variety of reading strategies.

Teacher N also commented that he was pleased that a sort of group solidarity had developed during the presentation with students helping each other to decode words.

Teacher N said the following about Group C's participation in the studybook portion of the lesson:

> They didn't really work together, although they looked at each other's papers and made the same error on page 36. They gave each other minimal help . . . All the students did fairly well except for Tommy, who took himself to the bathroom and talked to Steve. Tommy "distracted himself out."

It is not clear from this statement how Teacher N viewed peer assistance. While it was not a part of the formal structure of the task, informal conversations with Teacher N nonetheless indicate that he expected it and valued its occurrence.

Task Demands

The task demands varied according to the particular activity.

Read and Write Books. Students in this group had to be able to recognize and comprehend the words in the workbooks. Furthermore, they had to be able to create compatible ideas for filling in the story and to translate these ideas into a form suitable for writing.

"Sammy's Supper" Reading Lesson. During the group presentation, students were required to listen to and comprehend the teacher's directions. They had to be able to repeat words after the teacher spoke them. For the partner reading component of the lesson, students were asked to read the words in Sammy's Supper. While verbal memorization may have helped some students, reading skills were necessary to go through the whole book. They also had to differentiate

roles within the story in order to read the statements of Sammy or the mother as per the role assigned to a particular partner.

Magnet Board Reading Lesson. Students had to be able to comprehend the teacher's directions and explanations during the group presentation at the magnet board. Students had to understand that the sentences reflected the pictures. Furthermore, students had to be able to recognize and name the objects in pictures and also recognize the letters in words -- at least to the point that, combined with their knowledge of the picture, they could guess what some of the words might be.

Motor Demands

Working in the Read and Write Books, Group A had to be able to sit still for a long period of time and hold a pencil to write. When Group C worked in their studybooks, the same motor skills were required. When the teacher presented the group lessons for Group B and Group C, students were required to sit still and follow the teacher's visual guides (i.e., moving his hand under the words). When students in Group B did partner reading, each pair of students had to arrange themselves so that they both could see and turn the pages.

Interactional Demands

In the Read and Write Books groups, students had to work by themselves and solicit the teacher aide's help without disturbing others. Students in the Sammy's Supper Reading Lesson had to attend quietly to the teacher's lesson and participate in unison or in turn. When these same students switched to partner reading, each student had to cooperate with one other student and agree upon a place to read and a way to read the book (e.g., who read which part). Students in the Magnet Board group also had to attend to the teacher's lesson and participate in turn. When these students turned to work in their studybooks, they had to work so as not to disturb others.

Student Response

Jeff, Albert, Todd, and Brian were observed during the work activities event. Jeff and Albert were assigned to Group B; Todd and Brian were assigned to Group C. While it was not possible to interview these students following the work activities event, some additional information about the students was available from audiotapes prepared by Teacher N which described his impression of these students.

Jeff

As Teacher N began reading Sammy's Supper to the group, Jeff sat looking at the teacher. Jeff mouthed the words as the teacher read them. When the teacher asked students to repeat the sentences, Jeff's voice was the loudest, overriding the soft coaching voice of Teacher N. The teacher initiated discussions about the various kinds of foods mentioned in the story at several points. When they got to a part in the book that said, "Sammy is going to eat something red and yellow and round," several students called out, "pizza." Then one student called out, "I had pizza last night." This was followed by Jeff saying, "But I had pizza for breakfast today." This provoked several comments from the teacher and other students about whether a person can really have pizza for breakfast.

Jeff attended to the teacher as the reading continued. The teacher eventually suggested that students repeat the sentences without his help. Jeff's voice still predominated as the students spoke the sentences. During another discussion of one part of the book, Jeff began to talk out of turn. Teacher N reached over and touched Jeff on the shoulder. This was enough of a signal to make Jeff stop.

When Teacher N finished the story, he gave the partner reading assignment and paired students together. Jeff was paired with Barb. The two walked over to the folding doors in the room and sat with their backs against the doors. Jeff and Barb appeared to take turns reading through the book for the rest of the period. Just before recess was called, Teacher N walked over to chat briefly with them about their reading.

Teacher N recorded no impressions of Jeff when he recorded his impressions of students at the beginnings of the year, apparently because Jeff transferred into the class midway through the year. Immediately following the work activities event, Teacher N commented that Jeff had "done everything I wanted" during the lesson. This seemed to be a deserved assessment since Jeff's participation was enthusiastic and well focused.

Albert

Albert was a student whose behavior did not call attention to himself during the group reading of Sammy's Supper. He attended to the teacher and mouthed the words as the teacher read. When students repeated the sentences, Albert joined in at the appropriate times.

Albert was paired with Roger for the partner reading. They opted to sit underneath a small table in front of the teacher's desk. Albert began to read the part of both Sammy and his mother. Roger simply listened to him read. Albert soon stopped reading because he was distracted by a boy standing nearby. When Albert turned back to

the book, he and Roger started quickly flipping through the remaining pages. They weren't focusing on the pages, and Albert started speaking in a stilted voice, making up words to mimic the story. After spending about three minutes doing this, Albert started reading with Roger near the end of the book. They both read the words in unison. Having gone through the book once, Albert closed the book and slid the book across the floor several paces away from the table. Then one of them said, "Let's read it twice." Albert and Roger both got out from under the table to retrieve the book. They went back under the table with the book and started talking. Without ever opening the book, they continued talking until the period ended.

Because Albert transferred into Teacher N's class after the school year had begun, the teacher had no beginning-of-the-year impressions. By midyear, Teacher N's cumulative impression of Albert's academic and social skills was quite favorable.

> Albert is new to first grade. He was in kindergarten at our school for the entire year and then went to another school. His mother was not pleased with the curriculum and his feelings about school, and then transferred him back into Central School at the beginning of the second quarter. Albert is a very quiet boy. He works very slowly and methodically. He does very high-quality work. He listens and follows directions very well, but also needs much direction and encouragement to follow through. Albert is well liked by the other children in the class. He has many successful relationships, particularly with other boys. He occasionally will do little things to tease kids, but that's generally the exception.

When interviewed after the work activities event, Teacher N had little to say about specific students in Group C. He classed Albert as one of the students who had been engaged in the lesson.

In sum, Albert was a cooperative participant for the majority of the lesson. During the group presentation, Albert's participation was limited to group recitations. Albert became more social and animated in the context of partner reading, where he spent some of the time off task with his partner.

Todd

As Teacher N began the Magnet Board Reading Lesson, Todd sat at the back of group. He kept his eyes on the teacher and the board. After several turns, the teacher put up a picture of a seal and a saddle. Several students made incorrect guesses about what the matching sentence was, with most of them saying, "The seal is holding a saddle." Teacher N said, "This isn't 'holding' (pointing to the verb). If it were 'holding,' it would have an 'H.'

What else could it be? The seal is . . . ?" Todd then said, "I know what he's doing -- he's riding, he's pretending that he's riding it." This not being correct either, Teacher N said, "Okay, let's take a look. What could this word be? Let's try to make some words up." Several students continued to guess words, and one called out, "You tells us [Teacher N]." Teacher N finally indicated that the word was "carrying."

Todd moved up to the front of the group, apparently in an effort to see the board more clearly. Todd turned around to survey the back of the room while the teacher read a sentence. Teacher N then called Todd's name to get his attention. When the teacher next asked students to repeat a sentence, Todd joined in a soft voice. The teacher looked closely at Todd as if to make certain that he was really speaking.

Continuing to recite sentences, Todd again moved closer to the front of the room. A boy to his left started to playfully wrestle with Todd. Todd said, "Don't." When Teacher N put up another picture on the board, Eric and several other students guessed, "The bike is in the street." The teacher went on to explain that the straw, and not the bike, was the key word for the sentence. Todd again was bothered by the boy on his left. He poked the boy in return.

When the group lesson ended, Teacher N instructed students to get their studybooks and report to a particular table. Todd walked slowly over to get his studybook. Other students were already at the table when Teacher N called out "Todd -- we're going to work over here." Todd went over to one side of the room to get a chair. He carried the chair over to the table and sat down.

Teacher N began to give directions for filling out the studybook exercise. Todd looked over at Brian who had begun reading the studybook sentences out loud. Todd then looked back at the page open before him and made a mark by one sentence. He quickly hid the mark with his hand, as if to prevent someone else from seeing it, and looked up at the teacher. Todd then looked over at Brian's book again, hitting his pencil on the table top and making a loud noise. Todd marked a second answer in his book and scratched his head.

Brian turned the page of his studybook, and Todd looked over at him. Teacher N walked over to Todd's vicinity and repeated the directions. He then told Todd, "I want you to really try and not look at Brian's page." The teacher looked more closely at Todd's partially completed page and said, "What letter starts the word 'shirt?'" Apparently, Todd was confused because he expected the word "shirt" and instead the correct word was "jacket." The teacher went on to tell Todd to try to find an "S" or a "J." Todd then read the next sentence and looked up at the teacher who had moved on to another student.

Todd continued to work for several more minutes in his book. He then called out, "I'm done." Brian looked up and said, "Let's see." Todd held up one page for Brian to see. Brian pointed to the first question and said, "That's right." Todd then turned toward Teacher N and asked, "[Teacher N], is this all?" Teacher N replied, "We're going to stop on page 36. Did you finish it?" Todd didn't answer. Apparently, he had filled in this page.

Teacher N sat down with Bill and Brian to go over their answers. Todd got up and went over to join them, sitting on the floor in front of the teacher. Todd handed Brian an eraser. The teacher continued to focus on Brian and Bill's studybooks, putting his arms around both boys. Todd sat on the floor and erased the incorrect answers he had discovered from listening to the conversation. Todd then held his book up for the teacher to see, asking if he was right. Teacher N did not answer Todd and instead finished reviewing Brian and Bill's work.

When Brian and Bill got up to leave, Teacher N said, "Okay, Todd -- let's take a look and see what you did." The teacher proceeded to check all of Todd's work. He reserved his feedback to the end and then said, "Very good. Absolutely great." The teacher then reminded Todd that it was time for him to go to the office for an appointment with the school psychologist. Todd dropped off the studybook and left the room for the remainder of the period.

Teacher N viewed Todd as a student with limited academic abilities, but as having a pleasing personality and social character. At midyear, Teacher N described Todd as follows:

> Todd has a wonderful attitude. He works hard at school and is very eager to please. His skills are quite weak, but that doesn't seem to interfere with his social successes. He can be competitive, particularly with other boys like Brian and Steve. I've been working with him on his sense of competiveness, and it seems to be improving. He's at the pre-reading level. He needs language development, and I think his language has grown considerably since he's been in first grade.

Following the work activities event, Teacher N implied that Todd probably was the one student in the group who had the most difficulties: "Todd was not catching it, but doing maximally for him."

In sum, Todd was a student who did make an effort to participate in the lesson activities. While he may not have been as verbal as other students in the group, he was attentive and occasionally ventured an answser. That Todd wanted to perform well seems evident from his effort to learn the correct answers (by looking at other students' work, by listening to the teacher correct other students' work, and by seeking the teacher's feedback).

Brian

Brian sat quietly as the teacher started putting pictures and sentences up on the magnet board. When the students started repeating the sentences in unison, Brian joined along, at first hesitating slightly. When they got to a sentence reading, "The girl is in the garden," Teacher N asked about the sound in the word "girl." Brian and several others responded with a "grr" sound. The teacher said, "Okay" and put up the next picture.

Several turns later, the teacher put up a picture of a lion holding a letter. Students in the group at first had problems guessing the verb, "holding," and the noun, "letter." Several students said "card" rather than "letter." When Teacher N indicated that there was no "C" in the sentence, Brian offered the word, "letter."

Brian paid attention as Teacher N went through more sentences. He recited along with the group at the appropriate times.

Teacher N finished the group presentation by going over sentences using words beginning with "J," "V," "Y," and "Z." As a warm-up, the teacher asked the students to generate some of their own words starting with these letters. When he asked for "Y" words, Brian offered, "yolk." When he asked for "J" words, Brian suggested "Jason" and "Johnson."

Teacher N went through the remaining sentences. Apparently distracted, Brian turned around to look at the area behind the group. Teacher N leaned over and touched Brian on the leg, saying, "Let's take a look at the words -- Okay, Brian?" Brian turned back to the board and pulled his pant legs down over his boots.

Teacher N gave the studybook assignment to Group C once they moved to the table. Brian started working on the first page of the assignment. He did not acknowledge Todd, who looked at his answers several times.

When Brian had finished part of the second page, he started talking to Bill and a couple other students. Bill was completely done, and Brian asked Bill if he could see his (Bill's) work. Bill showed Brian his book.

Teacher N and Bill moved off to the side so that the teacher could check Bill's work. Brian watched them go, and then he turned back to his own book. He stood the book up on end, read the remaining sentences out loud, and marked his answers. He got up and walked over to the teacher with his studybook. Teacher N then started correcting Brian's work along with Bill's. The teacher indicated that Brian's first answer was wrong. Brian tried to cross out the answer, but then borrowed Todd's eraser. Teacher N put his arm around Brian and Bill and turned to say something to Bill. Brian squirmed in his seat. The teacher finished

checking Brian and Bill's work by reading through the sentences with them.

Brian got up from his seat next to the teacher and walked over to his cubby. He put his studybook away. Bill joined him, and the two started talking together. Then they walked over to the waterbed and started tumbling and playfully wrestling on it. Brian interrupted this play for a minute when he went to get something out of his lunch box, plopping it into his mouth. When he returned to the waterbed, he laid across its surface. Bill started to pick Brian up by the shoulders. Brian said, "Bill -- don't," and Bill threw him back down on the waterbed. Teacher N paid no attention to this activity, for he was busy grading other students' studybooks.

When Brian and Bill finished playing, Brian went over and asked Teacher N what they were supposed to work on. This signaled the end of the Magnet Board Reading Lesson.

At the beginning of the year, Teacher N spoke of Brian as a student who needed to improve in several academic areas:

> Brian is a boy with good motor skills, but weak language. Learning letters and sounds and other aspects of reading curriculum seem to be quite difficult for Brian.

At midyear, Teacher N emphasized Brian's learning effort and social skills:

> Brian is very well liked in school. He tends to be quite competitive physically and in games. He's well liked by all the children, including the girls, because he is very charming. He seems to enjoy socializing and being involved with other children. He's motivated and independent. He is working hard and has made a lot of academic growth this year.

When interviewed after the work activities event, Teacher N did not refer specifically to Brian. He was not named as one of the students who had done exceptionally well in the group, nor was he named as one who had exceptional difficulties.

The available information on Brian suggests that he was a cooperative student. He seemed to gain confidence during the course of the group presentation, participating more at the end. When working on his studybook, his manner suggested that he tried to answer all the questions on his own.

Conclusions and Implications

The observations made during the work activities event suggest that Teacher N was successful in organizing activities for his three reading groups. Students spent most of their time on task and seemed to enjoy their opportunities to participate. Furthermore, the level of activities selected by Teacher N seemed to match the skills of his groups, with students usually having a mix of correct and incorrect answers.

Teacher N ran his reading groups in a structured way. Students were given few choices and were expected to attend seriously to the lesson. In fact, Teacher N seemed acutely aware when a student lost attention and was quick to bring the student back to the focal point. While Teacher N was structured in these ways -- probably because he felt this was necessary for teaching a basic skill -- he also communicated a good understanding of his students during the lessons. He was able to cue students successfully wnen they had difficulties, and he exercised caution in not forcing them into any one approach for learning to read. His lessons seemed designed, at the very least, to give all students some sense of success and (familiarity) in working with letters and words.

The social atmosphere of the class seemed to meet Teacher N's goals. The student interaction that was observed seemed sometimes playful and was free of conflict and disturbance. All students appeared comfortable in approaching Teacher N, and conversely, Teacher N always seemed willing to answer student's needs at some point soon after the request.

CHAPTER SIX

TEACHER S - SECOND GRADE

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

Our goal in this chapter is to describe completely the work activity structures, task demands, and student responses which were observed for a single event in Teacher S's second-grade classroom at Central School.

Teacher S was a woman in her forties who had been teaching for ten years. More than half of that time has been spent at Central School. Teacher S had participated in numerous in-service workshops and obtained 45 units of post-credential coursework. When Teacher S talked about her classroom, she articulated expectations for the students in her class which were clear and well defined. Perhaps as a consequence, her classes were well organized and orchestrated. She did not brook nonsense; her classroom was a place to work and to learn. It was not a place to fool around. Up until this year, Teacher S taught the upper elementary grades. At the end of the summer, when class schedules were made final, Teacher S was assigned to a second-grade class. At the time, she was away on vacation and learned of her class assignment only a few days before school began. Upset, she nevertheless accepted the assignment and filed a grievance with the local teacher union. It took her four to six weeks to arrange her class and its curricula to her satisfaction and to adjust fully to the job of teaching younger children.

Teacher S was interviewed and observed on February 22, 1981. At that time she appeared to be acclimated fully to the second-grade curriculum and at ease with her students. The investigators talked with her for approximately two hours at the start of the school day using an open-ended interview format. The first topic discussed was the selection of a period of observation. It was collaboratively decided that the observation would take place for 40 minutes immediately preceding lunch. This was "Centers" time, and the four instructional activities that were planned were reviewed: (1) Spelling; (2) Weaving; (3) Nutrition packet; and (4) ABC Order Cards. Teacher S explained each of these activities and described the activity structure she intended to implement. After the senior researcher and data collectors (who also attended the interview) were certain that they understood the instructional set-up, we asked Teacher S to comment about each student in her class. After completing this activity, the investigators left the faculty room and proceeded to the classroom to conduct the observation.

After observing the class for 40 minutes, the two data collectors and the senior researcher interviewed the teacher to tap her perceptions of the lesson. After lunch, the investigators returned to the classroom and interviewed three of the four target

students who had been selected for observation. (The fourth student was unavailable.) The student interviews served to solicit students' perceptions of the events which had occurred.

In the following paragraphs, Teacher S's explanation of the activities she had planned during the Centers period are summarized.

Overview of Work Activities Event

Spelling Center

The teacher intended that children at the Spelling Center "choose their own ways to study words using one of the thirteen methods written on the chalkboard." The teacher noted that she had spent a great deal of time and effort trying to find a "creative" way to teach spelling, and that she preferred to teach spelling by having students write journals and proofread and edit each other's papers. She despised the spelling workbook approach -- she called the workbooks "awful." However, she was required by the school district to use a spelling workbook, and she felt resigned to the "yeech" workbook approach and had just about "given up trying to improve the teaching of spelling." She did, nonetheless, attempt to give the students new and interesting ways to learn the words -- e.g., the 13 methods listed on the board. These included making thin snakes out of clay and using them to spell out the required words on the student's desk, making a crossword or jigsaw puzzle out of the words, tracing words five times with a crayon, and writing words by adding a letter with each repetition (c-co-coo-cool). During the interview, Teacher S mentioned that students' favorite methods were making words out of clay and the add-a-letter procedure. The children were already familiar with the spelling procedure and had been practicing the various ways for several weeks.

During the class meeting at the beginning of the observation period, the teacher told the students assigned to the Spelling Center to "choose the method which helps you learn the best." The teacher did not lead the group, but left students to work on their own. During the interview, the teacher mentioned that students were encouraged to receive informal help from each other in learning the words. In other words, she viewed the spelling workbook as more a resource than a lesson plan to be followed. No formal evaluation accompanied the spelling activity, although the teacher noted that she often asked the children as they went out the door to lunch how well they did their words and what method they used to study. Their accomplishments were assessed by spelling tests at the end of every week.

Weaving Center

The teacher intended this activity to help children develop their motor skills and noted that the same children who have trouble with the "motor planning" required by the weaving task also have trouble with handwriting. The weaving was carried out on small cardboard looms approximately 12" by 12". These looms were criss-crossed with string, and students threaded yarn of different colors through the strings. The teacher intended that the children complete their projects and cover the entire loom with yarn. She demanded that the product be competently woven but didn't care which textures or colors were used. She required that children "look like they are involved in the activity and not bother others." After completing the weaving projects, children were free to engage in any "free-time" activity, but they were not allowed to join a different center. Typical free-time activities included legos, pattern blocks, drawing pictures, or playing board games. Teacher S left students on their own and did not evaluate closely what the students at the weaving center were doing as long as they appeared to be involved and did not bother other students.

Nutrition Packet

The Nutrition Packet was prepared by the National Dairy Council. Its purpose was to teach children what generic food groups specific food items belonged to. The packets were illustrated with pictures of various foods, and the children marked Xs to indicate the appropriate food groups. On the day of observation, the teacher was introducing the food packet for the first time this year. Most children had completed a similar packet the preceding year.

The teacher intended to give students a pretest today to determine what they already knew about food groups and then proceed immediately to the nutrition lessons in the workbook. The teacher viewed the pretest only as a record of what children knew about food groups before beginning the unit; she did not plan to grade the pretest or use it diagnostically to select later material. The teacher planned to look at the pretests later and did not want students to hand in their nutrition workbooks for evaluation. Instead, the teacher and the students would discuss the correct answers as they progressed through the workbooks.

ABC Order Cards

The ABC Order Cards consisted of a series of plastic-coated cards. A student's crayon marks on the card could be wiped clean and the cards reused. The cards varied, each one presenting a task requiring students to alphabetize different letters. For instance, some cards asked the student to connect the letters with lines, in "dot-to-dot" fashion; others asked students to fill the appropriate letters in blanks.

The teacher usually had an aide work at a table with a group of students to correct and check their ABC Order Cards. The aide was absent today, and, consequently, this was not possible. Instead, the teacher intended students to work in a small group and to complete whatever ABC Order Card they chose. While there was no explicit assignment of certain students to act as "correcter" or "helper," it was expected that children would work together informally and offer each other advice. Teacher S made no mention of the evaluation procedure she intended to use or whether the cards would be evaluated at all. She was unsure how well the ABC Order Card assignment would go since the aide was absent. If it were to fall apart because of the lack of supervision, the teacher noted that she would terminate the Centers and "pull the kids up for sharing." This judgment would be made on the basis of "the way it feels."

At the end of the interview, we asked Teacher S to predict how each of the members of her class would participate during the Centers period. We have excerpted below the comments which pertain to the four target students who were observed.

Judy?	"She's all over the place. Her family just moved up [name of town 40 miles away], and they drive her down to Central School each day. She's been real wild. God only knows what she'll do today."
Marsha?	"She'll do fine."
Daniel?	"He's got a big sack of popcorn [he had brought popcorn to school to share with the rest of the class after lunch]. He'll do fine [at his Center]."
Ken?	"He's a high achiever; he already has peptic ulcers."

The work activity structures put in place by Teacher S during the observation appear in Table S.1 and are described below.

The Elements of the Work Activities Event

Content

Different students worked on the four separate tasks at the same time. These tasks, described above, were:

(1) Spelling;
(2) Weaving;
(3) Nutrition Packet; and
(4) ABC Order Cards.

Table S.1

Teacher S's Work Activities Structures During Centers

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Spelling	7 students, selected by the teacher to ensure heterogeneous ability and social compatibility	No formal division of labor; students complete their workbooks on individual basis	- Spelling method to use - Pace of assignment	Students not dependent on teacher to advance within activity	Observational scan of students working at seats; no comments made to individuals or groups
Weaving	7 students, selected by the teacher to ensure heterogeneous ability and social compatibility	No formal division of labor; students each work on their own weaving	- Design or colors of weaving - Pace of assignment	Students not dependent on teacher to advance within activity; may advance on their own to free time activity if weaving complete	Observational scan of students; no comments made to the group
Nutrition Packet	7 students, selected to ensure heterogeneous ability and social compatibility	No formal division of labor; students individually fill in workbook	No student control	Dependent on the teacher to advance within the Nutrition workbook	Visual evaluation of students' academic progress; verbal comments made to the group and to individuals
ABC Order Cards	7 students, selected to ensure heterogeneous ability and social compatibility	No formal division of labor; students individually complete their cards	Selection of which card to complete	Can progress on their own through the Cards (although some students brought their work to the teacher to be checked)	Quick scan of completed cards for correctness; comments made to individual students

Grouping

The teacher already had formed four pre-established groups of seven students each. In her interview, she noted that she had spread the brighter and slower children throughout the four groups to make the groups heterogeneous in ability. At the same time, Teacher S had tried to form groups of children who "work well together." The names of the children in each group were posted on the bulletin board next to the chalkboard. Each group was expected to work on only one of the four Centers activities during the period.

Division of Labor

There was no division of labor for any of the activities. In all of the tasks, however, children were implicitly encouraged to work together and "use each other as resources." (One of the expectations for children in Teacher S's class was that they would cooperate and help each other with the academic work.) Since the Nutrition Packet lesson was led by Teacher S, there was less opportunity (and necessity) for informal cooperation among the students. By contrast, there was a great deal of informal cooperation and task-related conversation observed for the group working on the ABC Order Cards.

Student Control

The amount of student control varied according to the task students were engaged in. For those children working on Spelling, they had the opportunity to choose the method used to study the words and the pace with which they learned the words. For those students at the Weaving Center, they were able to choose the rate at which they worked (as long as they completed the task within a given time limit) and the pattern they produced -- both in terms of color and type of yarn used. The children in the Nutrition Packet group had no control options. The children who worked with the ABC Order Cards were given the choice of what card they would complete.

Student Advancement

For the Spelling and Weaving activities, students were not dependent on the teacher to advance within the activity. In the Spelling group, students were not allowed to advance on to any other activity. In the Weaving group, students could advance by themselves to "free time" if they finished their weaving. In the Nutrition Packet assignment, which was conducted in the form of a teacher-led recitation, the students were completely dependent upon the teacher to advance. For the ABC Order Cards, the teacher did not specify during the interview nor during the pre-Centers meeting that the children working on the cards were required to show their completed cards to the teacher before advancing to new cards. During the Center peri-

itself, however, one boy told other students that they must have their completed cards checked by the teacher. This boy apparently influenced the behavior of several children in the group, and they brought their cards over to the Teacher for approval.

Teacher Evaluation

The teacher worked with the children at the Nutrition Center during the episode which was observed. From time to time she surveyed the room from this vantage point to determine whether or not the children appeared to be productively engaged. She could not see the children in the Weaving group from where she was sitting, and on one occasion she left the Nutrition Center to walk over to where the Weaving group was working to survey the children's engagements. Another time she left the group to survey a group of Weaving children who had finished and were playing games; they had become too noisy. Teacher S then talked quietly to these children and directed their attention to new activities. Consequently, one of the girls began working on a new wooden puzzle. The other students, who were boys, began to play a battleship game, and the teacher walked back to the Nutrition group.

As Teacher S conducted the Nutrition lesson, she evaluated whether or not the students understood the material as it was presented. At one point, she said to the group: "You've got the idea, I can tell," later adding, "You guys are pretty bright." When she noticed that Hayden was on the wrong page in the Nutrition booklet, she redirected his attention to the correct page. While she was conducting the Nutrition lesson, Garth and Sharon interrupted several times to ask Teacher S to check the ABC Order Cards they had completed. The teacher glanced quickly at the cards and gave the students an immediate evaluation. At these times, the other children in the Nutrition group were privy to this evaluation. When Teacher S noticed that one student had become too loud, she informed him, "Zack, you're making noise. Will you sit down please."

After the Center activities had concluded, Teacher S brought the children together and surveyed the room to determine how well the room had been cleaned up. When she noticed that the yarn on the Weaving table was out of place, she told the weaving students to go over and clean up the area before going out to lunch.

After the observation, Teacher S was interviewed to find out how she felt the episode had gone.

> I really missed my aide; I felt I was being pulled in a lot of different directions. Usually, when I'm working with a group, there are fewer interruptions and things are more low key. Kids had to come up to me to check the ABC Order Cards, and they usually do this with the aide. It looked like the kids in the Spelling group were getting into arguments.

In the Nutrition group, there were too many interruptions for me to teach well. The kids, however, have done a Nutrition unit before, and they seemed to know it. Hayden and Blonda were leading the group. Chet and Tanka knew the material. It was a little hard to keep their attention. William had trouble; he didn't know it.

Zack was in the Weaving group. During recess today he was kicked in the ribs; that's unusual. We've had two physical injuries today -- Dandy and Zack. I think Zack was flashing on the observer being there.

Zack's a great manipulator. He also can space out easily. I often tell him to think about what he is going to do in free time, and to let me know what he is doing.

Garth was bouncing up and down; he kept coming to me with the ABC Order Cards. I looked quickly at them; they seemed to be okay. I didn't have time to really check them. He had been working with Nancy and Dixie. Garth was trying to tell me something with the ABC Order Cards which I didn't totally catch. I told him to check the cards with another student. Kessie came back to tell me that the other kids were calling her names. Nancy and Dixie were on the floor behind me working on the puzzle.

From where I was sitting, I could see the ABC Order Cards table. Most of the kids seemed to be doing well. The weavers were on the floor over by the door; they had a nice social thing going. The kids who were doing seatwork -- working on their Spelling -- were on task.

I heard a noise behind me. Thatcher was observing a couple of other kids as they argued over the battleship game. I went back to get him involved in an activity. Those kids are volatile.

When I'm working with a group like that, I have my scanner on. I scan the class periodically to make sure everybody is on task. If kids are working, I don't pay any attention and continue the scan. I stop to look only when kids are off task, or there is some problem. Candy kept coming back to me at frequent intervals with a finished ABC Order Card. She wanted to show me that she had completed the card; that it was all done.

Zack could have finished and gone on. He didn't. Arthur came up to me and reported that he had done his Spelling two ways. I gave him the high sign that this was good.

In general, I think the class was doing okay. The girls behind me working on the puzzles were doing well. The kids working on the games were doing well. Everybody accomplished what they were supposed to. The only kids I am unsure of are the spellers who were working on the floor at the front of the room. They were out of my sight.

Task Demands

The task demands observed to be operating during the lesson varied according to the Center to which the children were assigned.

Spelling. This activity required children to memorize words.

Weaving. The Weaving assignment required children to design and recognize patterns and to select the appropriate yarns.

Nutrition Packet. The Nutrition Packet required children to recognize the generic food-group category to which different food items belong.

ABC Order Cards. This assignment required students to recognize letters and place them in alphabetical order.

Motor Demands

Like the task demands, the motor demands which were observed varied from activity to activity.

Spelling. Depending upon the method the student chose to use to learn the spelling words, different motor activities were required. Each activity had its own motor demands such as tracing words with a crayon, making words out of clay snakes, cutting up pieces of paper to make jigsaw puzzles, and so on.

Weaving. Small-motor coordination was at the heart of the Weaving project. Children had to thread yarn through the loom strings to form patterns of color and shape.

Nutrition Packet. This activity required only that children mark an X in the appropriate box and, thus, was the least demanding of the four Centers.

ABC Order Cards. Each card varied somewhat in the task to be completed, and, thus, there was variation in the motor demands of each

card. Typical cards required children to connect the letter of the alphabet together using lines or to print letters in various locations on the cards.

Interactional Demands

In all of the observed activities, children were expected to work quietly with some allowance made for peer assistance. In the Nutrition group, children were expected to answer the teacher's questions and to participate appropriately in the group discussion.

Student Response

Observational and interview data were collected on four target students during Centers time. The normal activities of the students were complicated by the fact that four sixth-graders were present conducting a survey of what foods children had eaten for breakfast. (This survey was the first part of a sixth-grade math project.) The sixth-graders interrupted children at the various Centers to ask questions. After the event was over, the teacher commented that there was more commotion in the classroom than was usual.

The teacher conducted a class meeting at the beginning of "Centers" time to remind students what was to be done at each Center. She told the weavers that they were to work at the back of the room on the floor. She instructed the children assigned to complete the ABC Order Cards to work at Table I (see map for Teacher S). The teacher told the class that she would be working with the Nutrition Group at Table II. Spelling activities could take place wherever the children wanted -- on the floor, at their desks, etc. The teacher then pointed to the observers who were present and instructed the class to ignore them and complete the Center activities which had been assigned. She noted that the observers would not bother the students and mentioned that after lunch some students "would get a chance to talk to them." The teacher concluded the class meeting by asking if everyone knew what to do, and there were nods and other nonverbal signs from the students indicating that they understood their tasks. The teacher said, "Okay. Let's go!" and walked over to Table II.

Ken

Ken was the first student to arrive at Table I, and he was quickly joined by Garth, William, Sharon, and Christine. All five students were seated around the table. Ken took an ABC Order Card and worked on it for a few minutes. As he finished, he turned to his tablemates and said, "I'm all done with my first one." At that point, he rose with his card and walked over to show it to the teacher. Teacher S glanced up briefly from the Nutrition workbook she was using and said, "Okay. Good. Good." (It will be remembered

that the teacher gave no explicit directions that students were to check the ABC Order Cards with her.) Ken returned to Table I and started using a Kleenex to erase the ABC Order Card. He talked to Garth quietly as he erased the card (the exchange was inaudible). After a few moments, he said, "Oh-oh, I pushed too hard on this one." (He was apparently referring to having pushed too hard on the crayon, thus making it difficult to erase.) Finally, he succeeded and tossed the card into the center of the table with the comment, "Here, that was easy."

Ken reached for another card in the pile at the center of the table at the same time Garth stretched out his hand. Ken told Garth, "You have to go show it [the ABC Order Card] to Mrs. S." Garth replied, "Oh yeah?" and walked off in the direction of Table II.

Ken pulled a new card out of the pile and said, enthusiastically, "Oh, dot-to-dot." He started to work on the card by connecting lettered dots in alphabetical order. (The product of this activity is a picture.) When he finished the card, Ken got up and again took the card to the teacher. This time he did not interrupt the Nutrition group but stood slightly behind and to the left of the teacher and waited to be recognized. The teacher took the card from Ken, glanced at it briefly, and handed back the card. Ken smiled and returned to his seat where he erased the card.

After working on a new card for awhile, Ken got up again to show the teacher his handiwork. He stood behind Christine who was also waiting to show a card to the teacher. His turn arrived, and after receiving the teacher's attention he returned to Table I. He sat down and watched Christine as she erased her card. After a few moments, he told Christine, "You do it like that." Garth made a wisecrack, and Ken repied, "Oh-oh. I forgot to laugh." Garth continued the conversation and said, "Ask her what she had for breakfast." (This was in reference to the two sixth-graders who were taking a survey of what the students had for breakfast during this period.)

At this point, Ken stood up and began to play catch with a ball of Kleenex. He then threw the Kleenex in the direction of the wastebasket and missed his target. He sat down and left the Kleenex on the floor. As he picked up a crayon and began to scribble on a new card, Garth looked at him and said, "I'm telling Mrs. S!" (referring to the Kleenex on the floor). Ken responded, "Oh-oh. If she sees one speck!" and continued to erase furiously. He did not, however, pick up the Kleenex.

At this point, the sixth-graders arrived at Table II and asked who William was. Garth and William pointed to each other, claiming that the other one was really William. Finally, the sixth-graders located the real William. William clammed up and refused to answer any of the questions. While the sixth-graders interrogated him, he continued to sit at the table with hand clamped over his mouth. This evoked great laughter from the other children at the table. One of the sixth-graders began to get impatient and said, "Come on! What

did you have for breakfast?" William replied, "I had sugar in my little sister." Ken laughed at this witticism. The interviewer found it less humorous and asked, "Would you like to be dead?" Immediately Ken chimed in, "Dead!" William replied, "Yeah, I would."

The sixth-graders gave up and left the ABC Order Card group. As they walked away, the second-graders' attention returned to the cards in the center of the table. Ken picked up a card and then threw it back in the pile saying, "I don't want to do this one; it's too hard." As he picked another card out, he commmented, "Ooh, look at this one."

The sixth-graders returned at this point and began to interview Garth, who was less recalcitrant than William. As Garth answered the questions, Ken began working on his new card. He became stuck, stopped working on the card, and then erased the work he had completed. He returned it for an easier card. The new card required that he fill in the missing letters in an alphabetical list (e.g., A B _ D). Sharon (one of the other children at the ABC Order Card Center) then showed the rest of the children a card on which someone had scribbled lines with a crayon. Sharon said, "Look at what somebody did!" Ken replied, "You did it." Sharon retorted, "No -- somebody had a black crayon. I have a blue."

Garth's attention appeared to wander at this point, and he glanced up at the 13 ways to learn spelling words written on the board. He turned to Ken and asked him in a confidential tone of voice, "I have a question: How do you test with a friend?" Ken replied, "I don't know." Garth leaned forward and began to talk quietly with Sharon. At this point, the sixth-graders arrived again and interviewed Ken, who cooperated fully with the other students.

After working for awhile on his card, Ken changed his position, this time straddling one chair and leaning against a second one. He was talking animatedly with the other children in the group. Sharon had left the group to take her ABC Order Card to the teacher. Garth rose and jumped up and down in a mock fit of temper. Garth clowned around and told Ken, "I wanna make the part." Ken replied, "You do not have high heels on. You have your tennis shoes on." Garth looked down at his feet and responded, "Oh, yeah. I do." (The observer was unsure about the significance of this interchange.) Ken resumed his work on the card in front of him, and then joined William in giving Christine help on a card. As the children were working, Christine tapped her crayons up and down on the card and made a group of dots. Ken responded, "You're not supposed to do that." Christine said in reply, "I'll wipe it off." Ken laughed and returned to working on his own card.

Garth and William began talking together, and this attracted Ken's attention. He looked over and laughed, but he did not join the conversation. He remained focused on his ABC Order Card and soon finished it. He got up and walked over to Table II where he again waited patiently for the teacher to acknowledge him. After a few moments, Teacher S looked up and glanced at his card. She

commented, "Alright," and handed the card back to Ken. He returned to Table I and set to work erasing the card. William turned toward the teacher and called out, "One minute to, Mrs. S!" One of the girls in the class turned off the room lights. (This was a signal to begin cleaning up the Centers). Ken said, "Come on. Let's put the cards up-up-up." Garth chimed in, "Hey William! Erase that!" William responded, "I didn't do it. Chris-tine!" Garth added, "Christine! Erase it." Damon chimed in, "Christine. Erase it." Christine replied, "I will, I said." Ken picked up a piece of scrap paper from the table and threw it away. He had ignored the interchange between Garth, William, and Christine, and walked over to the sofa to sit down and wait to be dismissed for lunch.

The teacher surveyed the room and noticed that the Weaving Center was messy. She instructed the children to clean it up. Once this was completed, she dismissed the children according to the different articles of clothing which they were wearing. She began by announcing, "Anyone who is wearing plaid may go." At this, Ken got up and walked out; he was wearing a plaid shirt. Forty minutes had elapsed since the observation began.

After lunch, Ken was interviewed about what he had been doing during Centers time. He replied:

> I was working with cards, writing stuff on them and erasing them after we got them checked from the teacher. When we've done one card, we go and do another one. Some people -- Garth -- forgot to check in. He started erasing it; he just didn't know.

We asked him how the teacher checked the cards, and he noted that:

> [She looks at them to see] if they're right or wrong. She'd tell us to do them over again if we got them wrong. [If you don't check in with the teacher], she'll just ask you to check in with her more after that.

When Ken was asked if he had done a lot of work today, he said, "Hmm. Not that much." When asked why, Ken replied, "I don't know. I had a lot of, well, some stuff to do." When asked how Ken knew he had done a good job on the cards, he said that it depended on whether the teacher said, "It's okay and stuff." Ken went on to say that the teacher graded the cards on the basis of how a student was "doing the work. [She looks for] good work and stuff, how good you are on the cards.

Ken told us that he did not help anybody at the ABC Order Card Center, and that no other students asked for help. He implied that no assistance was required because "they're easy cards." He was unable

to specify exactly how he completed the cards. It seemed to come naturally:

> There's lots of them that I knew how to do and I did 'em. [I could do the] little words, [put them in] alphabetical order. [Also] the dots-to-dots.

The cards with the bigger words caused more problems. On these cards, "[There] were a lot of words, and you gotta put them in alphabetical order." Overall, Ken evaluated his work as "okay," and said that this was about how he usually performed. When asked about what was required to do well on the ABC tasks, he replied, "To think about it and do it." He indicated that it was hard to tell someone how to do the cards, and agreed when the interviewer suggested "you have to know how to do it in the first place?" In all, the interview suggested that Ken was not conscious of any particular learning strategies or techniques but was certain that students were to check in with the teacher after completing each card.

Judy

Judy was a member of the Spelling group. Once the pre-Centers meeting was over, Judy moved to the front of the room (marked "A" on the map) to begin studying her words. She was soon joined by Natasha and Diedra. All three girls sat down on the rug and began making jigsaw puzzles using their spelling words. The jigsaw-puzzle method of learning spelling words was a complex method which required several steps. To begin with, each child wrote a word on a piece of construction paper and then cut the paper into irregular pieces. After all of the words had been written and cut, the pieces of construction paper were mixed together. The task was now to reconstruct the separate words. Judy, Natasha, and Diedra now sat with a pile of paper puzzle pieces in front of them. The three girls discussed who made the hardest puzzles and how they should go about sorting the pieces.

Natasha: "I make the hardest puzzles."

Judy: "So do I. [Showing the other girls a puzzle] Look! You can't even tell the way this goes."

Diedra: "You have to sort'em all out before you cut 'em."

Judy: "You do not."

Diedra: "Yeah, you do, cause me and Michael -- that's what me 'n Michael did."

Natasha: "Oh-oh. I lost two pieces."

Judy: "Look 'it! I did it!" [Judy had finished putting together the pieces which spell "foot."]

At this point, the conversation and spelling practice was interrupted, and the three girls looked up to watch their classmate, Marsha, being interviewed by a sixth-grader. The girls' attention returned to the spelling task, and Diedra and Natasha began to talk about the spelling test scheduled for the end of the week. Natasha watched Judy as she put the puzzle together which spelled "school." Judy was having trouble assembling the word; she moved a piece into place and then replied, "Oops. That doesn't go there." Natasha commented, "I can't do this." Judy responded, "Neither can I." As if on call, two sixth-graders arrived to rescue the girls from their frustration. They interviewed Judy about her breakfast. One of the sixth-graders looked at Judy and said, "You're Judy, aren't you?" At this Diedra repeated Judy's name in a high, funny-sounding voice, playing with the words, "Judy Gaycee."

After the interview was over, Diedra and Natasha returned their attention to the spelling words. Judy, however, found a bunch of short, felt-tip markers which fitted together, and assembled a long baton using the pens. She waved it about and attempted to twirl it as if it were a majorette's baton. This attracted the attention of the other two girls who soon wanted a chance to play with the stick.

Natasha: "Come on Judy."

Judy: "Mine. I found them."

Diedra: "Where?"

Judy: "Well, by my yard."

About this point the baton fell apart, and Judy began to unhook the pens. Diedra and Natasha lost interest and began discussing what an F-word is. Judy did not join in. Instead, she looked at the unfinished puzzle piled in front of her and commented, "I'm not gonna do this. I don't wanna do this. I'm gonna do something else." With this, she wadded up the paper puzzle pieces and walked toward the door. She tossed the papers at the wastebasket next to the door and missed. She appeared oblivious to the papers which remained on the floor and returned to sit down next to the other two girls. She bundled the felt-tip pens together in both hands and then handed them to Sherry who was sitting alone at her desk. Sherry replied, "Thanks for letting me use them," and explained that her own markers wore out because she had let everyone borrow them. Judy went back to her own desk and took out another pen and returned to give it to Sherry. Judy then walked to her cubby and took out a piece of paper. As she passed by Ken at Table I, she looked over his shoulder to see what he was working on. Making no comment, she continued to walk to the area next to the blackboard. She sat down and picked up a piece of particle board. She placed this on her lap and used it as a desk. After

she had settled herself, Natasha asked her, "Judy, where's your pencil?" Diedra added, "Don't you have another pencil?" Judy replied, "You took it!" and sprung up to go tell the teacher. As she walked away, Diedra and Natasha both called after her, "No we didn't; no we didn't." (In fact, they did hide Judy's pencil.)

Judy told the teacher, who was working with the Nutrition group, that the two girls had stolen her pencil. The teacher looked over at the girls, and Diedra held up Judy's pencil in the air. Diedra called out, "We found it." Judy turned away from the teacher and walked back to Diedra and Natasha. She took the pencil from Diedra and sat down at an empty desk where she began immediately to write her name on the side of the pencil, commenting, "I'm gonna put my name on it." She then got up and went over to her own desk where she stowed away her newly labelled pencil. This completed, she walked over to the shelves near the sink and took a handful of red modeling clay. She returned to her desk and moved it close to Natasha's desk. The two girls began to roll out clay snakes. Diedra arrived with a handful of blue clay and began to make her own spelling snakes. Turning to Judy, Diedra asked, "What's the first word?" Judy replied, "Food. I don't know how to spell it." The girls began discussing the color of the clay they were using. Some blue clay had become mixed in with the red clay, and Natasha commented, "We got blue clay." Diedra replied, "We only got that much." [She holds up her index finger and thumb together to indicate a very small amount.] Natasha added, "We don't have to give it to her." Judy disagreed and replied, "Give it to her."

Another student, Karen, walked by and commented to the three girls, "From 1:30 to 2:00 we get to play Steal the Bacon." This occasioned Judy to get up and run to the blackboard where she pointed to the day's schedule. Written next to the 1:30 to 2:00 slot were the words Steal the Bacon. Judy commented, "Ya-a-ay! I <u>love</u> Steal the Bacon."

At Teacher S's signal, the girls cleaned up the spelling snakes. They then moved over to the rug and sat directly in front of the teacher as they waited to be dismissed for lunch. The teacher ran through several items of clothing and then said, "Anyone who is wearing <u>lace</u> may go." Judy got up at this point and held out the lace trim of her T-shirt. She asked the teacher, "Do I have lace?" The teacher guided Judy to her side and displayed the lace trim to the group saying, "This is what I was thinking about when I said, 'lace.'" Judy got up and left the classroom.

After lunch, Judy was interviewed about her participation during the Centers period. Judy talked about several different ways to learn the spelling words and then noted that she had chosen the method she had "liked the best" because "it was hard and I like hard things." This method was:

> Makin' a puzzle. The way you do that is just take a piece of paper and you write the word,

then you cut it all up and try to put it together.

She agreed with the interviewer, who noted that it sounded as if this were a "pretty hard" way to learn words, and told the interviewer that she had learned all of her words using the puzzle technique. When reminded that she had also used clay snakes, she assented. When asked about how she knew when she had finished the assignment, she replied, "I look at my words and see if they're all done." She also said that students who don't finish are supposed to work on the words during free time. They are not required to complete the spelling assignment on the same day that they are at the Spelling Center. When asked if the teacher graded the learning exercises designed to teach the spelling words, Judy replied:

> Well, she looks at it. We have to do it and then leave the spelling words there, then do another one and stuff. She comes and looks at the thing that we're making.

Judy was asked if she had shown Teacher S the puzzle or the clay words today. She replied that she had and that the teacher looked at the work and told her, "Good." (Note: this was not observed.) When asked what the teacher looks for when she checks the spelling, Judy answered:

> She looks for good work. She has this book, and it has all the answers in it and stuff, and it tells how it should be written and stuff, and she looks in that and she sees if it's just the same thing. And then she knows if it's good or bad.

Judy said that the teacher likes to have students use "two or three ways" to study their words, but today she "had only time for two because it was time to go to lunch."

When asked how well she did today, Judy replied, "Good." When asked how she knew this, Judy answered that the "teacher told me." (Note: This was not observed.)

Daniel

When the pre-Centers meeting broke up, Daniel walked over to his desk and knelt beside it. He looked in as if he were trying to find something. No other students were standing nearby. The teacher had now moved to the rear of the room and was seated at Table II with the Nutrition group. Daniel walked up to her and stood at the side of the cluster of children. Teacher S got up and walked to the front of the room. Daniel followed her for a few steps, swinging his arms along the tops of the desks he passed. He walked casually as if he were in no particular hurry. Another boy came up to him and asked, "Do you have an eraser?" Daniel replied

that he had none and continued to amble toward the teacher. She was alone when he finally reached her, and he told her, "Miss S, I can't find (inaudible)." The teacher replied, "I can't help you on that; I'm sorry." Daniel returned to his desk where he knelt on the floor and looked inside once again. He did not take anything out, and soon he got up and walked over to join several other children at the Weaving area.

Daniel stood at the Weaving table and looked through a stack of partially completed Weaving projects. In the process of finding his own cardboard loom, he left the remainder of the projects in disarry. He sat down on the floor. Thus far, he had not talked to any other students. Two sixth-graders, a girl and a boy, came up to the weavers and asked to interview Steve, one of the other boys sitting on the floor. Daniel watched this occurrence and commented to Steve, "She's writing down that she loves you." Steve looked at the interviewer and replied in a playful and dramatic tone, "I don't want to have to do it. Boo-Hoo!" Daniel caught the spirit and repeated, "Boo-Hoo!" He then changed the subject and said to Steve, "Knock-Knock." At this point Steve became aware that this interchange was being recorded by the observer, and, instead of continuing the "knock-knock" game, he told Daniel in whispered, furtive tones that they were being watched. Daniel apparently paid no attention to this information and began another round of the "knock-knock" game. The second boy did not respond, and commented again on the presence of the observer. Daniel appeared oblivious. He did not look over or make any acknowledgement of the observer's presence.

Daniel turned his attention to the weaving project and worked with the loom nested in his lap. Jennifer, Terry, Georgette, Alvin, Penny, and Steve were seated next to him. Steve was singing a song, "Tarzan, the Monkey Man." This caused the other children to laugh. Daniel joined in on the song, but didn't know most of the words. He resolved this problem by fabricating his own nonsense phrases (e.g., "Tarzan, of the Grape Soda"). He repeated some phrases several times, as if he particularly liked his words. This captured the attention of the other children, but they did not appear to be as taken by Daniel's singing as they were by Steve's.

The sixth-grade girl who was conducting the interviews called out Daniel's name, and Jennifer responded, "Daniel's right there." The two sixth-graders came over to Daniel. The sixth-grade boy leaned over to talk to Daniel (who remained sitting on the floor) and asked him in a mock-gangster tone, "Now listen kid, what did you have for breakfast?" Daniel looked up and replied in a flip tone, "A bowl of cherries." The interviewer quickly responded, "Wrong!" Daniel repeated his answer: "A bowl of cherries," and the interviewer his response, "Wrong!" The two boys continued this interchange a third time. The interview took on the character of an interrogation. Daniel sat with his arms folded and insisted his answers were correct while the interviewers stood over him and questioned their validity. The sixth-graders asked Daniel if he had juice for breakfast. He replied, "No. I dumped it on my sister." The sixth-graders asked Daniel if he had

vitamins or sugar. He replied, "No." Having reached the end of the interview questions, the sixth-graders walked away.

During the interview, the other weavers had moved to other places in the room. Daniel remained alone on the floor weaving methodically. Jennifer returned and sat down immediately next to Daniel, and they talked amicably. After awhile, she got up and moved to another part of the room. Daniel continued to sit in the Weaving area. Another girl, Tina, walked up to him and presented her weaving for inspection. Daniel didn't look up. Tina said, "I know you hate my guts." Daniel made no physical response to this comment, but replied in an even, almost pleasant tone, "I hate your guts." He then began singing one of the verses he had made up for the Tarzan song.

Tina sat down, and Daniel and Tina exchanged friendly comments: "How are you?" "Fine." "This might be pretty weird [the weaving]." Daniel continued to weave and then overheard the children at the ABC Order Card table repeating the ABC's. He joined in spontaneously, but his voice trailed off after a few letters.

Clean-up time arrived. At the pre-dismissal meeting, the teacher noticed that the Weaving table was in disarray and instructed the class to go clean up the table. Daniel was one of the four children who walked over to the weaving area to straighten it up. His fellow weavers muttered as they walked that the mess was "Daniel's fault." After rearranging the weaving materials, they returned to the group of students by the board. The teacher dismissed the class by calling out various items of clothing, and Daniel left the room.

(Daniel was not available after lunch for an interview.)

Marsha

After the conclusion of the pre-Centers meeting, Marsha walked over to her desk and took out her Spelling materials. She procured a ball of clay and began to roll out small clay snakes. She sat at her desk shaping the clay into letters and words. Marsha worked by herself; she was one of two children in the class completing their Spelling assignments alone at their desks. A few minutes after she began to form the clay snakes into words, two sixth-grade interviewers, a boy and a girl, appeared. The boy asked her in a demanding tone, "What'd you have for breakfast? We're going to check your answers against your sister's." Marsha, who appeared to be a shy and soft-spoken girl, seemed rather intimidated by this intrusion. To the interviewer's question, she responded, "Cereal." The sixth-grade boy continued, "With milk?"

Marsha: "Yeah."

Sixth-Grader: "Juice?"

Marsha: "No."

Sixth-Grader: "Sugar on it?"

Marsha: "Yeah."

Sixth-Grader: "Vitamins?"

Marsha: "No."

Sixth-Grader: "Yeah you did. How come your sister takes 'em and you don't?"

Marsha did not respond to the last question and appeared puzzled or confused by the rough tone of the interaction. At the conclusion of the interview, the sixth-graders walked off in search of another student. Marsha watched them walk away and then returned to her spelling snakes. The sixth-graders went over to the group of three girls making spelling puzzles on the floor. Marsha watched as the sixth-graders conducted another interview, continuing to roll the clay snakes and form letters all the time. Although her spelling workbook was open on her desk during this whole time, she seldom referred to it. Marsha worked methodically with sustained attention. She had completed spelling "food" and "foot" at the top left corner of her desk.

Marsha continued to work for awhile and then stood up, resting one knee on her chair seat. This particular method of studying required a great deal of rolling and kneading of the clay, and Marsha spent most of her time rubbing the clay on the desk to form the clay snakes. As she rolled, she watched Natasha, Judy, and Diedra working on the floor in front of her. She did not, however, initiate any interaction with them, and there were no verbal or physical exchanges. Marsha had now completed the words "loose," "pool," and "cool" in addition to "foot" and "food." Suddenly, she hopped up and went over to the teacher at Table II. She talked briefly to the teacher and then returned to her desk. Before sitting down, she made a comment to one of the girls on the floor before her. Marsha then resumed her kneading and worked continuously on the clay. Her eyes were focused for much of the time on the three girls on the floor in front of her. As in the past, the three girls and Marsha did not interact in any way.

After awhile, the three girls on the floor got up and walked over to another part of the room leaving Marsha as the only person in her area. As a result, she became the most isolated student in the class. She had added the words "school," "bloom," "too," and "spoon" to her group of completed words and appeared to be working faster. As she worked, she frequently turned her head to look at the teacher and the other children at the rear of the room.

At 12:00 the lights were turned off to signal clean-up time. Marsha immediately began rolling her clay words i a ball. The teacher did not check her work. Marsha walked over to talk to Natasha, Judy, and Diedra (who now had returned to their desks and were

cleaning up their own clay snakes) and then returned to her own desk where she picked up the clay ball and returned it to its proper place. Clean-up completed, she moved to the blackboard to await dismissal.

After lunch Marsha was interviewed about the morning's activities. When asked to describe how she had learned her spelling words, she replied:

> Well, you take some clay and you roll it up and then you make it long enough and then you can, like, make your words with it.

She said that there were several ways to learn spelling words, but that the clay method was her favorite. It was "funner." Marsha had no response when asked about what the hardest thing was about the clay method, but she said that "making the letters" was the easiest part of the task. Marsha was asked why she worked alone at her desk while her friends were working on the floor, and she replied, "They were doing puzzles, and I was doing clay." Marsha noted that she preferred to work alone, "to get more work done. 'Cause when you're working with somebody else, they talk a lot." Marsha added that it was important to get more work done, "so you get the words right on the spelling test. [If you get the words wrong], then you have to take the test over." And that, Marsha agreed with the interviewer, "was a bad thing." She said that when children complete one method of studying spelling words, they "can choose another [method] and go on to that." Marsha herself finished "when it was one minute to lunch." She knew she had finished because she was "all done with the spelling list." If she had not finished, she "would have to stay in [from lunch] or recess." Although she was not usually required to remain in the room, Marsha said that "some people" had to stay in a lot.

When asked by the interviewer if she got a lot of work done, Marsha answered affirmatively and said that the teacher knew if kids were really working on their words instead of spelling because, "She can hear people talking and stuff." Marsha noted that the teacher didn't grade the spelling practice. Nonetheless, Marsha expressed this view:

> the most important thing [to do during the spelling assignment] is to practice your words. So you know 'em on the spelling test.

Marsha indicated that they were given a spelling test once a week and said that she thought this test was graded. After previous tests, she had received the paper back from the teacher who "put a star on it, or something." When asked if she always got a star -- indicating that all the words were spelled correctly -- she said that she did. When asked why she always did such a good job in Spelling, Marsha replied, "Well, I practice." Marsha was asked whether she had friends in the class, and she responded that she had "lots"; in fact, her classmates were "all . . . [her] best" friends. When asked if sometimes it would be more fun to sit and

talk with these friends instead of working alone, she indicated that it would be more fun, but she preferred to work alone because when she worked with her friends, "You don't get most of your spelling words done."

Conclusions and Implications

In this portrait of an instructional event which occurred during Teacher S's Centers time, we find a classroom in which the teacher's intents were operationalized successfully, and most students participated in their assigned tasks. The second-graders in Teacher S's classroom were able to work at least part of the time on their activities in spite of the disruptions caused by the two sixth-grade interviewers. This is striking evidence of the efficiency of Teacher S's social-instructional system. Teacher S reminded her students of their assigned tasks at the pre-Centers meeting and then monitored their behavior throughout the period by "scanning" the class. When she spotted inappropriate behavior, she left the Nutrition group and walked over to redirect the activities of the offending children. Teacher S thus combined clearly expressed academic expectations with reprimands that effectively communicated her expectations for the appropriate behavior of her students.

CHAPTER SEVEN

TEACHER O - THIRD-FOURTH GRADES

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

Using observational, interview, and self-report data, one instructional event in Teacher O's classroom will be described. This event consisted of three Language Arts activities observed between 11:00 to 11:50 on November 15, 1979: (1) Practice Spelling Test; (2) Third-Grade Language Arts Packet; and (3) Fourth-Grade Language Arts Packet. Teacher O had these three assignments listed on the chalkboard at the beginning of the period.

Teacher O taught a combination third-fourth grade class. In terms of number of years of teaching experience, Teacher O was the most experienced teacher at Central School, having taught for a total of 25 years. She had taught a range of grade levels (first through fourth) at Central School for the past nine years. Teacher O was a vivacious woman who took care to get to know her students. She was quite concerned about students' social and emotional growth and often called class meetings to discuss the disputes and problems of individual students. In this manner, she attempted to mobilize the efforts and energy of all of her 26 students toward facilitating each other's growth and development. Her teaching style and instructional organization were "open," and she involved students in a variety of individual and group projects. She assigned work to the entire class at the beginning of the day and established due dates for each assignment. When students were not occupied with their assignments, they were free to play board games, read, or talk quietly with friends. Often, students chose to do their "school work" at home so that they could socialize with friends during class time.

Overview of Work Activities Event

Practice Spelling Test

Teacher O's spelling program was organized so that all students progressed through a single unit in the spelling workbook each week. Third-graders and fourth-graders used the district-selected spelling workbooks appropriate to their grade level. The workbooks contained lists of words, various "fill-in-the-blank" spelling exercises, and space for a final spelling test. Students were to learn spelling words through a combination of memorization and completion of the exercises. On the day of the observation, students were taking a "practice spelling test" designed to assess their progress in learning the spelling list and to identify the words which required further study.

Third-Grade Language Arts Worksheet

Teacher O assigned her third-graders to work on one worksheet in their currently assigned Language Arts Packet. This worksheet was on the correct usage of the words "is," "were," and "are." Students also were expected to complete a journal entry as part of the packet.

The worksheet was from a standard set of language arts dittos prepared by a leading textbook publisher. It contained some descriptive instructional material about the use of the verbs "is," "was," "were," and "are," and there were a series of sentences with spaces where students had to fill in the missing verb. The journal entry could focus on whatever was of interest to the student. Teacher O hoped that students would use the journal for self-exploration as well as writing practice.

Fourth-Grade Language Arts Packet

Teacher O assigned the fourth-graders to work on their Language Arts Packet which contained a series of assignments focusing on reading comprehension and word formation and meaning. Students were to read a paragraph and then indicate whether questions about the paragraph were true or false. In addition, the assignment required them to look up some words in the dictionary and fill in the correct word in a series of sentences with blanks. A final part of the Language Arts Packet required students to add prefixes and suffixes to a list of words, thus changing their meaning. When students completed the Language Arts Packet, they were expected to write an entry in their individual journals.

The Elements of the Work Activities Event

Table O.1 summarizes components of the work activity structure for the observed event. These components are presented in more detail below.

Content

Three separate assignments were given to the entire class during the event. First, all children were to take a Practice Spelling Test. The spelling tests were given in grade-segregated groups; third- and fourth-graders were tested on different words. Teacher O gave students in each grade two chances to come up and take the test. Second, when third-graders were not occupied with taking the Practice Spelling Test, they were to complete a worksheet in their Language Arts Packets. Third, fourth-graders also were to complete a Language Arts Packet consisting of several assignments when not doing their Practice Spelling Test.

Table 0.1

Teacher O's Work Activities Structures During a Language Arts Event

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Practice Spelling Test	Two groups for each grade level; students chose the group in which to participate	No division of labor	- Which of the two testing groups to participate in - Whether test corrected by students or teacher	- Dependent on teacher during spelling test - Could return to Language Arts Packet without teacher's approval	- Observational scan of students; comments made to group about behavior and performance
Third-Grade Language Arts Worksheet	All third-graders in the class	No division of labor	- How long to spend on assignment - What to write in their journal	- Student can advance within assignment without teacher approval	- Observational scan of students; some monitoring of performance
Fourth-Grade Language Arts Packet	All fourth-graders in the class	No division of labor	- How long to spend on assignment - What to write in their journal	- Student can advance within assignment without teacher approval	- Observational scan of students; some monitoring of performance

Grouping

The only formal grouping occurred during the Practice Spelling Test. Otherwise, those children who were not taking the Practice Spelling Test worked by themselves or informally with their peers at various places in the room. Two fourth-grade Practice Spelling Tests were given. There were eight students in the first group; seven students were in the second. There also were two third-grade Practice Spelling Tests. Seven students were in the first group; the second group had two students. Children chose to come up and take the test when they were ready. For the Language Arts Packets, all students in each grade level worked in their respective packets.

Division of Labor

There were no requirements imposed by the teacher during this particular instructional episode that children work together.

Student Control

Students were given four explicit choices during the period of observation. First, they could control when during the period they wanted to take the Practice Spelling Test (i.e., control over the ordering of assignments). Second, they could control whether they wanted to correct the test by having the teacher read the words while they were still in the spelling test groups, or they could correct them without the teacher at their seats. Third, students could write whatever they wished in their journals. Finally, stuents could control the amount of time they were to spend on each of the Language Arts assignments -- up to two days.

Student Advancement

During the Practice Spelling Test, children were dependent upon the teacher to advance. After completing the tests, students could go back to their Language Arts Packets without the teacher's approval. During completion of the Language Arts Packets, children were not dependent upon anyone or thing and could advance at their own speed. Some children finished their work and asked the teacher if they could play a game. The teacher assented, but this does not appear to indicate that the children were dependent upon the teacher to advance to another assignment.

Teacher Evaluation

As the teacher did not receive any completed Language Arts Packets, she did not formally evaluate the academic performance of the students on the basis of these packets. In her teacher report, she indicated that "only one or two children came up to me during the whole hour to ask any questions about [the packet], and a number

did finish it, so I had the feeling that they had really understood the format and were using the skills they had acquired successfully. I'm not certain yet whether the work they did in the packet was completely successful because I gave them two days to do it." In between giving the Spelling Tests, Teacher O answered questions about the Language Arts assignment and informally monitored the work of several students. She also monitored student progress and activity once she had finished giving the Practice Spelling Tests.

In regard to the Practice Spelling Test, the teacher observed that the students "got to know what spelling words they needed to study, and many of them got 100 percent on the trial test. They volunteered that information. I didn't ask them how they did, and they didn't have to give me the information if they didn't want to." She added, "When I gave the spelling words, it was one of the few times, or maybe the only time, that someone didn't say 'wait' when I gave a word." From this, the teacher inferred that the Practice Spelling Test was proceeding appropriately.

In terms of behavioral evaluation, the teacher noted: "I felt really good about how the kids performed during this work time. In fact, it felt like one of the best hours we had in a while . . . While I was involved in giving the Practice Spelling Test, most of my attention was directed to giving the words to the group, but I was able to get a look and see -- get a sense and hear -- what was going on around me, and everybody was involved in doing some kind of work." Those children who were not appropriately engaged received negative sanctions from Teacher O as individuals, as small subgroups, or as an entire group.

Task Demands

Analysis of narrative protocols revealed the following task demands for three activities. The Practice Spelling Test required students to demonstrate their knowledge of spelling words. The third-grade Language Arts assignment required students to use the words "is," "was," "were," and "are" correctly in a sentence and to write a journal entry. For the fourth-grade Language Arts assignment, students were required to: (1) learn spelling of new words; (2) learn the meanings of new words; (3) use the words in the varied situations found in the packet; and (4) write a journal entry.

Motor Demands

The assignments required students to demonstrate small-motor coordination and handwriting skills.

Interactional Demands

Analysis of narrative protocols revealed several interactional demands. During the entire class, students were required to work quietly and not disturb each other. In addition, they were expected to cooperate, share information, and use each other as resources. During the Practice Spelling Test, students were required to listen and wait their turn to write. While students completed the Language Arts assignment, they were required to work independently and not disrupt the teacher with questions.

Student Response

Observational data were collected on two target students during the work activities event just described. Each student's response to the work activity structure and task demands put in place by the teacher is summarized below.

Stacey

Stacey was a fourth-grader who was in the first group of children who took a Practice Spelling Test. She appeared to be relaxed, and to have no difficulty with the examination. During the test, she asked the teacher, "Do we have to write in cursive?" When the teacher indicated that this was not required, she appeared disappointed. Stacey talked informally during the practice test both to the teacher and to other students in the group. She also said "hello" to the observer. The teacher tolerated this light conversation in general, although at one point she sanctioned Stacey by calling her name in a stern voice. The observer noted that Stacey was participating competently and writing the words after the example sentence was spoken by the teacher. Stacey, however, commented at one point, "I hate these sentences," referring to the example sentences the teacher was using. The Practice Spelling Test took approximately 12 minutes.

Once the Practice Spelling Test was over, the teacher gave the students the choice of correcting the words alone at their desks or together as a group. The children chose to remain together. Teacher O read and then spelled each of the words out loud. As Stacey checked her words, she noted, "I had them all right." Stacey talked now and again during the correction time and chanted, "Yeah," after a word had been read to signify that she had spelled it correctly. At one point, she mimicked the teacher's pronunciation of the word "coffee." Stacey was enthusiastic throughout the correction procedure. Once she correctly spelled the word along with the teacher. At the end of the correction session, Stacey again told the group, "I got them all right." Then she turned to the teacher and asked, "What if you get 'em all right?" The teacher replied, "That's okay." The correction of the test took approximately four minutes.

Stacey returned to her desk and began talking to the girls, Margaret and Sandy, seated next to her, and Amos, whose desk was nearby. After folding and putting away her Practice Spelling Test, Stacey walked over to the observer and said, "I got 'em all right." She picked up a Language Arts Worksheet before returning to her desk. She talked with Margaret and Sandy as she worked. After a minute or so, Stacey and Margaret walked across the room and took a book from the bookrack. The two girls sat down at the foot of the bookrack and began to work again on the worksheet. A boy came over and sat with the two girls, and the three of them continued to complete their worksheets. As the girls worked, there was much conversation about the worksheet as well as considerable movement. Other students came up to ask questions. After working on the floor for about 15 minutes, Stacey and Margaret returned to their desks. When Stacey arrived, she sat down and put her worksheet (which presumably she had finished) in her desk.

Holding a pencil in her right hand, Stacey took out her journal and began to read to Margaret. She stopped reading and looked over at Margaret, apparently realizing that no one was listening. Her gaze wandered, and then she talked softly to herself. Stacey looked around the class again and then turned her attention to the journal made of sheets of wide-lined paper stapled together. She read several entries, and then told Margaret, "I'm going to finish this . . . I wrote it a long time ago." Stacey began writing in her journal, erased her entry, and then yelled out the teacher's name two times. There was no response, and Stacey got up and walked over to the teacher's desk. When she was halfway across the room, she turned and went back to her desk where she again began to write in her journal. She read what she had written. Stacey continued to write and read her journal and then began to clown around with another student; they were both rubbing their lips with a pencil and making noises. After working on her journal for about five minutes, she put down her pencil and closed her journal.

Stacey then called out the teacher's name. The teacher responded, and Stacey asked, "If we've done everything, can we play a game?" The teacher gave Stacey permission. Stacey, however, did not move to where the classroom games were kept but got up and went over to talk with one of the observers. The teacher noticed this and said in a strong tone of voice, "Stacey! You asked me a question, I answered it, and you didn't do what you said. You lose the privilege of doing it." Stacey appeared to be confused by the reprimand. She and her neighbor walked over to the model of the Indian Village, which was sitting in the middle of the classroom, and then walked over to the game area. She selected a game called Battleship, took it over to Margaret, and then returned it to the shelf. This time she took out a game of Mastermind and went over to Margaret with the game. Margaret was reading over at the edge of the classroom near the teacher's desk. The two girls did not play, and Stacey returned the Mastermind game to the shelf. As she crossed the room, she stopped to look at a game being played by two other students. She placed the Mastermind game back on the shelf, returned to where Margaret was sitting, and began to talk. After a minute or so, the two girls

walked out of the classroom and entered the adjacent empty area. Approximately seven minutes had elapsed between the time Stacey finished her journal and the end of the 50-minute observation.

The observer who watched Stacey and recorded her behavior summarized Stacey's participation during the instructional event in the following way:

> One of the most striking impressions of Stacey is that she is an extremely talkative girl. This was evident during the spelling test, when she made a comment almost every time a word was presented to the group. She also seems to be very extroverted. She frequently came up to talk to me and has also done this in the past. It should also be noted that Stacey and Margaret collaborated a great deal on their worksheets. In spite of Stacey's social nature, she did seem to get all her work done. Like Cyrus (whose portrait follows), her participation was essentially competent during the observation.

Approximately one month after the observation occurred, Teacher O dictated these comments about Stacey, which echoed the impressions of the observer:

> Stacey reads well -- above grade level -- and has good comprehension skills. She does satisfactory work in math. It's not outstanding. She does a lot of talking when she's working, so her errors are usually from carelessness rather than anything else. Stacey writes creatively, and does fairly well in spelling. Spelling doesn't seem to be something she particularly cares about, but she does fairly well. The thumb of her right hand is shorter than normal, and she is right-handed; sometimes she has some difficulty in forming certain letters, but her work is certainly easy to read and easy to understand.
>
> She is our female superjock. She plays basketball in an all-boys basketball team. She does very well, she says. She also plays soccer. Very much into sports. She goes to races and sporting events regularly. When she has a choice of reading a biography of a famous person, it will be a sports character.
>
> Stacey sits with Francine, who is very, very feminine, and Margaret, Sandy, and Linda. Stacey talks almost all the time. She has a tendency to be a little smart alecky and comes back really fast with an adult kind of comment. I think

she spends a lot of time outside of school with adults. She seems to get along with the girls that she sits with, and those are the people who she spends her time with out on the yard.

She's very, very physical. Very active. Moves a lot. Talks a lot. Has a lot of enthusiasm about stuff and is a rather dynamic child. She can become overbearing to me with her constant conversation, but she knows that I'm very much aware of it. I make it clear to her how I feel at times -- when I feel it's really inappropriate. It doesn't bother her too much. She still does it. She's vivacious. She works pretty independently. Her biggest problems are the lack of self-control, and making conversation when it's really inappropriate and in the way.

Cyrus

After listening to the teacher's explanation of the Language Arts assignment, Cyrus, a fourth-grader, stood up to get a Language Arts worksheet. He returned to his desk and began to work. His neighbor, Boris, began to read the instructions for the same worksheet out loud, but this did not seem to distract Cyrus who continued to focus his attention on the worksheet before him. As he worked, Cyrus asked task-related questions to Boris and Bobby, who were sitting next to him. His attention switched from his worksheet to the off-task conversations of Boris and Bobby, but he generally seemed to be attending to the reading comprehension assignment in front of him. (A copy of this assignment appears in Appendix A.) Cyrus worked on this assignment for approximately 10 minutes. When asked how he did on the Language Arts assignment, Cyrus replied:

Well, I'm not sure. These questions here are pretty easy 'cuz you just read this 'n it tells you the answer . . . really all I have to do is put an S [on the words] . . . and then this up here [pointing to another part of the worksheet], you have to write the word that this definition goes to.

Cyrus was asked if there were any students who would do better on the worksheet than he did. He noted that "lots of girls" do better on their work than he does. For example:

Audrey, she's good 'n she can write really fast. She can just really write it down 'n she's really a smart girl. Smart . . . she really pays attention to what she's working on. Even if she does talk once in a while, she does pay attention to what she works on.

Cyrus noted that he often didn't do as well as girls like Audrey because:

> Well, I talk with all my friends a lot, 'n they get right to it, and they think about it. I just kinda write it down.

When Cyrus was asked what he talked to his friends about, he replied:

> Oh, what we talk about, like, was Monday night football, 'n we talk about the games 'n all sorts of things. Like if we're gonna pick new teams for football out at recess, or who's gonna play an' who's not 'n things like that.

Cyrus joined the second group of fourth-graders who took the Practice Spelling Test with the teacher. Bobby and Boris were in this group also. The teacher read the words and then gave an example sentence. Cyrus wrote the words after the teacher spoke. When the teacher pronounced the word, "speak," he repeated it with a rising inflection as if he was either not sure how to spell it -- or did not hear the teacher. When the teacher was interrupted by a student from outside the group, Cyrus talked with one of the girls in the group. In all, the Practice Spelling Test took approximately six minutes to complete.

In the student interview, Cyrus talked about his performance on the Practice Spelling Test. He said:

> I got eight wrong because I was sick for two days yesterday . . . and I didn't get to study the words . . . cause I was home sick, and I didn't know we had Spelling words.

After the interviewer confirmed that Cyrus had never seen the words before, he asked how Cyrus thought he would have done had he been given the opportunity to study the words before the test. Cyrus replied:

> Well, I don't know. Some people get a hundred percent, some people get two wrong. I think I would've gotten at least one or two wrong . . . at least.

Cyrus was asked which was more important in accounting for good Spelling performance -- a natural ability in Spelling or practice by studying the words. He told us that he thought studying was more important

The teacher began the correction phase of the Practice Spelling Test by giving the second group of students the choice to correct the tests with her at the table. The students chose to continue to work with the teacher. It took approximately three minutes to correct the

test. Cyrus responded enthusiastically each time he got a right answer. Each time he misspelled a word, he put a check mark next to the mistake. When the words had all been corrected, the teacher asked the students what was similar about the words. Cyrus responded that the words contained either "ee" or "ea."

Cyrus returned to his desk, picking up a Language Arts assignment on the way, and began talking to Barron. Boris informed them that they didn't have to finish the Language Arts Packet today. One of Stacey's comments to the observer attracted Cyrus' attention, and he got up and went over to look at the notes that the observer had been making. He then returned to his desk and opened up his journal. With his journal open, he asked Boris, "Do we have to write in our journals?" Receiving an affirmative answer, Cyrus began writing. He first traced over the last entry in his journal and then turned to listen to a conversation among Barron, Boris, and Bobby. Then he returned to tracing in his journal. After a minute or so, he sat back and closed the journal, putting it inside his desk. Boris, Bobby, and Cyrus talked about a student teacher in a neighboring room and other topics. The conversation lasted approximately five minutes.

At the end of the observation period, Cyrus announced to Boris that he was going to finish his math worksheet. After removing a blue and orange soft football from his desk and squashing it between the desk supports, Cyrus uncovered his Language Arts worksheet, removed it from his desk, and finally unearthed his math worksheet. He placed it on his desk and completed it using a black felt-tip pen. After working on it awhile, he turned to Boris and Bobby and said, "Look at this." The two boys were engaged in conversation, and they did not reply. Cyrus tried harder to get Boris' attention, and then they talked about the math worksheet. They solved a problem on the worksheet, and Boris turned back to conversation. Cyrus worked alone on the math problems. Cyrus ignored Boris and Bobby and their conversation, remaining intent upon his worksheet. He was busy circling parts of the boxes on the worksheet, and he tapped his pen up and down as he considered a problem. He did enter the conversation at one point, saying, "NO!" in an animated tone. At another point he asked Boris a question without removing his eyes from the worksheet. He had been working on the math worksheet for five minutes when the 50-minute observation concluded.

Teacher O recorded her impressions of Cyrus approximately one month after this observation occurred. Her perceptions were quite positive:

> Cyrus is a super student. He reads way above grade level and writes creatively. He has no problem with math and is far above most of the kids. Cyrus grasps concepts very, very quickly and is very self-directed. He doesn't need reminders about turning in assignments or getting things done. When he is finished what he is assigned, he will find things to do on his own.

He doesn't need someone to suggest things for him to do.

He sits with Boris, Bobby, and Barron, and he is, I think, the leader of that group. I think he's generally one of the leaders of the boys' group out on the playground.

There has been a continuing problem during the year with football, and Cyrus has been accused by other students of not being fair -- of changing rules. He was told today by the other fourth-grade teacher that if there were any more problems out on the yard with football, there would be no football for the remainder of the year for the fourth-grade boys. She has dealt with the problem because most of the complaints have come from her class, and they're directed toward Cyrus. He is a very competitive kid. He told me at the beginning of the year that he plays sports for the competition. He loves it. His father is a football coach in a town nearby. Cyrus is definitely a leader and well-liked and seems to be admired as well. He likes doing well academically. And he shares that with other kids who are near him. If someone asks him how well he did, he'll tell them. He also checks out with other kids how well they've done. He's got a lot of energy. He's also got a lot of allergies. He sneezes a lot, but he seems to have a great deal of energy in spite of that. He's very verbal. Very bright. Very conscientious. I don't see him smile too much. I'm concerned about that. He seems very serious most of the time.

Conclusions and Implications

Comparing Teacher O's intent as expressed in the self-report with the work activity structures she put in place and the observations of Stacey and Cyrus, it can be argued that Teacher O's language Arts lesson was moderately successful.

Both students took advantage of the instructional opportunities which she intended to proffer. They both completed the Practice Spelling Test. Cyrus' post-interview indicated that he became aware of the eight words he needed to study before the final spelling examination. Stacey, who spelled all of the words correctly, apparently realized that she did not need to prepare for the final test. During the observation, both students worked on the Language Arts Packet. Based on Teacher O's assessment of students' work on the Language Arts Packet, the class performed successfully. Stacey and Cyrus, although talkative, worked on their assignments. They

also wrote in their journal. In addition, both students made use of fellow students to get help in the completion of their assigned work.

In sum, it appears that there was a consonance between Teacher O's intent, work activity structures, and task and interactional demands during the Language Arts lesson observed on November 15, 1979. This congruence, coupled with the teacher's sanction of occasional misbehavior, produced a class environment in which the observed students were very social, but accomplished their work.

CHAPTER EIGHT

TEACHER R - FOURTH GRADE

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

Teacher R was a woman in her mid-fifties who had taught at Central School for 12 of her 16-year teaching career. Since obtaining her teaching credential, she had accumulated 240 units of coursework. She continued to participate actively in inservice activities and was frequently outspoken during faculty meetings. Teacher R was a strong believer in professional development and often urged the Central School faculty as a whole to organize and participate in professional and personal growth activities.

When Teacher R talked about her students, she focused on their social and emotional needs. This focus reflected her conception of education as a process which encourages the growth of complex and unique individuals rather than being solely concerned with academic learning.

Teacher R had taught both upper and lower elementary grades. For the past several years, however, she had been in charge of a fourth-grade class. According to Teacher R, her present class is challenging in that it includes two distinct groups of students. First, there are a number of extremely bright boys and girls who have qualified for an academic enrichment program and participate in extra-school activities once a week. In addition, Teacher R's class contains a large number of slower students who do not keep pace with their more advanced classmates.

Teacher R was observed and interviewed on April 28, 1980. At the beginning of the school day, the two-part writing activity that would be observed was discussed for approximately one hour. Teacher R was enthusiastic about this lesson. The Central School faculty had participated recently in a composition workshop, and Teacher R intended to try out one of the instructional techniques presented during the workshop.

The work activities event took place from 10:30 a.m. to 11:30 a.m. Following the observation, two senior researchers interviewed several students in order to elicit their perceptions of the lesson. The senior researchers and the data collectors then interviewed Teacher R for approximately 30 minutes and discussed her perceptions of the observed activity.

In the following paragraphs, Teacher R's intended and actual instructional activities are summarized.

Overview of Work Activities Event

Teacher R indicated that the overall purpose of the activity was to get children fully engaged in writing and to develop their composition skills. She intended to pass out copies of a recent edition of the local newspaper filled with articles about local townspeople who had interesting professions or who had distinguished themselves in some way. Students in the class would be required to choose an article, read it, and then write down the information contained in the article using an organizing "cluster" which had been reproduced on pieces of paper. Examples of the "cluster" worksheets appear in Appendix A.

The "cluster" was a schematic drawing consisting of a central hub with spokes radiating out from this hub. Circles containing the adverbs who, what, where, how, when, and why intersected the spokes. Students were to write the topic of the article in the hub and to add relevant information in small circles placed in proximity to the appropriate adverb. The purpose of the "cluster" was to record details necessary to complete a composition which would be assigned the following day.

Teacher R commented that "negotiating who gets what article" was the first task of the assignment. She clearly intended the lesson to foster skills of social interaction as well as composition.

Teacher R had decided to introduce the assignment in segments. She wanted students to read the articles with the knowledge that they would use them for "a follow-up activity," but she did not intend to explain how to complete the "cluster" at the beginning of the lesson. Once the reading had been completed, she would discuss the "clustering" process. Teacher R noted that she "expected that it would be a difficult assignment," and that the class would "have trouble with with words" appearing in the articles. She hoped that students would turn to their peers for informal aid. It was fine with her, she noted, if children worked together on the assignment. She would not, however, require this to occur.

When asked about the criteria which would define competent student participation, she noted that students would have to "work cooperatively" in groups to choose their articles. She expected children to "ask their [work] groups for help," and not rely solely on the teacher for aid. Since task-related student conversation was encouraged, Teacher R expected the children to "talk in quiet tones" as they worked. She wanted students to "remember the information for the 'cluster,'" although she noted that they would be allowed to return to the article to refresh their memory when they actually constructed the "cluster." She further noted that she expected students to "finish the article in the time allowed." After completing the assignment, students were expected to "restudy their [weekly] spelling lesson and complete the language worksheet and their maps for social studies."

When asked whether she had any plans for evaluating this first part of the writing assignment, Teacher R noted that she "could not check for the content and accuracy" of each cluster, and that she would judge students' progress in the lesson by the way they worked. Since she expected the lesson to progress quietly, she would reprimand and redirect noisy or off-task behavior.

The work activity structure put in place by Teacher R during the observation appears on Table R.1 and is described below.

The Elements of the Work Activities Event

Content

The work activity event consisted of the first part of a writing activity to be completed by all students. Students were required to read a newspaper article and then complete a schematic "cluster" describing the basic facts contained in the article.

Grouping

Students were expected to form groups of ten to six. They could choose with whom they wished to work. After "negotiating" the articles which would be read by the group, students were allowed to work on their own or with others.

Division of Labor

The assignment required no division of labor; students were responsible for reading the articles individually and producing their own "clusters."

Student Control

Students had control over the newspaper article they chose to read and the place in the classroom where they completed their work.

Student Advancement

It was expected that once students finished reading the articles or completed the written "cluster," they would begin working on another task which was previously assigned by the teacher.

Teacher Evaluation

Teacher R intended the class to work quietly on the activity and to complete it during the time allotted. When Teacher R was

Table R.1

Teacher R's Work Activities Structures During One Activity

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
"Cluster" Writing Activity	Students were to work in groups of 4 to 6; they could form groups with whomever they choose	Activity required no division of labor; students worked on individual assignments	Selection of article to be webbed	Students could advance within activity without teacher approval	Teacher walked among students to give help, monitor progress, and control misbehavior

interviewed after the lesson, she confided that the lesson had been "too long." She also noted that the children were "sluffing around," because they had to wait for access to newspaper articles. From her observations of students working, she inferred that "not too many students asked [her] questions," and that they generally "knew what to do." She expressed surprise that the class had acted "so lethargic," and attributed this to the fact that they were working on a "sedentary activity," and that the room was quite "stuffy." She also ventured that the complexity of the "clustering" activity may have made students feel "overworked."

Task Demands

Students were required to: (1) read and comprehend the newspaper article; (2) construct a "cluster" by segregating appropriate information next to the relevant adverb.

Motor Demands

The "web" activity demanded the usual small-motor coordination skills associated with any writing activity.

Interactional Demands

Students were expected to negotiate among themselves the articles they would read. In addition, students were expected to work quietly and seek help from other students.

Student Response

Observational and interview data collected on four target students are reported below. The observations began as the students returned from recess at 10:30.

Bob

The teacher called the group together for a class meeting. Bob seated himself next to the teacher. He had a bloody nose, and he sat rubbing it and staring out into space. His eyes appeared to be teary. The teacher began to introduce the lesson by telling the class, "We're going to do something different today." She described the contents of the special section of the local newspaper entitled "Top of the Bay" which would serve as the focus of the assignment. She read several titles of the newspaper articles and asked questions about the pictures in the paper. Teacher R gave examples of the types of stories appearing in the "Top of the Bay" section. She concluded her introduction to the activity by commenting, "You might run across someone you know."

Having described the "Top of the Bay" section, Teacher R went on to explain its role in today's assignment. She told the class:

> I have six copies of the paper. Get yourselves into groups of four. I won't tell you how. Your job is to find an article to read. I'm going to ask you to do something after. There'll be an assignment about the person to do.

As the teacher continued to explain the assignment, Bob called out to another boy in a stage whisper, "Hey Hap," and made gestures to indicate who would be in their group. This attracted the teacher's attention, and she sanctioned him. Bob became quiet and returned to rubbing his nose. The teacher resumed her explanation:

> You'll be in groups of four. There are eight sections. I want you to work quietly; talk in whispers. Go where you wish to read. Each person is to read his own paper -- Norman! I want you to listen! Some articles are back-to-back. You'll have to solve this problem yourself. Negotiate with someone. If you need help and ask someone [Teacher R means another student] and still don't know, Mrs. Block [a teacher's aide] and I will help you. Okay. Someone tell me what to do.

Students began to recite the teacher's instructions, and Teacher R emphasized the main points:

> Get into your groups first. Read an article. Some are quite long. You have half an hour to read. Okay. Each of you find four people, <u>quietly</u>.

Throughout Teacher R's explanation, Bob had been alternating his attention between the teacher and conversation with another student named Ralph. As the seated group of students got up to leave the class meeting, Bob pointed again to himself and three other boys to suggest the formation of a work group. He joined the three boys and then led the procession to Table A by running and hopping across the room. He pointed to places where the other boys should sit. When the group was established at Table A, Bob sat on a desk, placing his feet on the attendant chair.

The rest of the class formed itself into groups of four -- all single-sex groups. Bob got up and left his group to walk over and retrieve a newspaper from the table in the front of the room. He pulled the paper from the pile and with some jostling and loud words competed with the other students for the relevant sections of the paper. Teacher R noticed this commotion and told the class, "Get in your groups, and we'll bring them [e.g., the required section of the paper] to you." At this point, twelve minutes had passed since the observation began.

Emerging from the fracas with a "Top of the Bay" section, Bob leafed through it as he returned to his group. He distributed pages of the section to the other group members and stood by his desk looking at the pictures on the pages he had retained. After a minute or so, he sat down in the chair, put his feet up on the lower rungs, propped his elbows on the table, and began earnestly reading the paper. He turned to Mike, another member of the group, and talked to him about the article.

Although Bob and his group had begun the assignment, not all of the students had received their sections of the newspaper. The teacher had remained at the front of the class and continued to separate the newspaper sections. Becoming aware of the noise the children were making, she looked up and instructed the class, "It's noisy. Whisper."

Once she had finished separating the papers, Teacher R began to walk about the class monitoring the students' work. In the midst of one of her tours, she spoke in a loud voice and informed the students, "You have 20 minutes for reading, so please get settled down as soon as you can."

Perhaps in response to Teacher R's reminder, Bob completed his conversation with Mike and returned to the article. He read with his head down on the paper about three inches away from the columns of print. Appearing deep in concentration, he did not talk to his neighbors. The class as a whole was quiet and was fully engaged in the activity. Bob leaned back and cleared his throat. When he returned to the paper, he began reading by moving his finger under the the sentence and following it with his eyes. His attention turned to the title of the article and the captions under the photos. Twenty-one minutes now had passed since the observation began.

Bob continued to read using his finger. His head drooped over the paper. He remained in his chair, hunched over the desk. He looked up and saw a boy sitting on the bench in the rug area. He turned to the boy next to him and asked, "Why's Donald over there?" The response was inaudable to the observer. Bob returned to his reading; he turned the page.

Bob looked up at the clock and then turned to his neighbor and whispered something to him about the weather. Then he stretched and groaned. He had finished reading his article. He asked the other members of his group, "So what do we do now, write?" Receiving no response, he got up and walked over to ask the same question to Teacher R. He conferred briefly with Teacher R. The observer could not hear the conversation. Bob returned to Table A. He took a book on space exploration out of his desk and began to walk across the room. Teacher R arrested his promenade, and they talked briefly. Then Bob moved to the couch and began to read.

Ten minutes later, Bob was still on the couch, silently reading his book. He rubbed his eyes as he looked at pictures of planes and recurrently pushed the hair out of his eyes. A few minutes later,

Teacher R began to explain the second part of the writing assignment:

> I'd like to talk with you about follow-up. In fact, come up here [indicating the front of the classroom]. Leave your work at your desk.

The class moved to the front of the room. Bob, who was already in the front part of the room, remained seated. He opened his book again and recommenced looking at the pictures as Teacher R explained how to complete the "cluster." Teacher R told the class:

> You all got antsy. Any problems reading? [This evokes a negative response from the class]. Okay. When a reporter writes a story, he follows rules. You see the final product. What I'm going to ask you to do is to write a short story. Today, I'm going to ask you to "cluster." You'll write the story tommorrow.

A student asked, "You mean like write down the most important information?" Teacher R responded, "Yes, but like this," and moved toward the chalkboard where she said, "I'm going to show you how to cluster. If you read about a person, this person's name goes in the circle." She continued to explain the clustering procedure. (Forty minutes had passed since the beginning of the observation.)

Bob reached up from the couch and took the dittoed "cluster" scheme off Teacher R's desk. As the teacher explained the lesson at the board, he alternated his attention between the dittoed cluster in his hand and the book in his lap. Although he continued to turn the pages, it was unclear to the observer whether he was actually reading. He traced the orbits of planets and the trajectories of rockets with his fingers, holding the dittoed sheet against his head with his other hand. He continued to turn the pages looking at the pictures.

Apparently responding to the students' restlessness, Teacher R told the class to get up and stretch. Bob remained seated. The teacher finished the explanation a few minutes later and told the class to begin their "clusters." Bob walked dejectedly over to Table A. He sat down and began to fiddle with his space book. He motioned as if he were going to hit the boy next to him; the boy did not respond. Bob turned his attention to the newspaper article he had just read and looked through the article. The boy next to him commented, "Better get cracking." In jest, Bob tried to crack his neck and then started to roughhouse with the boy next to him. The boy did not respond. Bob turned back to the space book which was lying on his desk. He opened and closed it quickly in an alternating, fan-like motion, apparently glancing at the illustrations. Then he put the book down and turned to the newspaper. He opened the section and scratched his head. After a brief search, he found the article he had previously read. He put his head down to reread

"The Modern Fireman's Life is More Than Just Checkers." A short while later, he began to complete his "cluster." He continued this activity for the remainder of the observation.

A week before the observation occurred, Teacher R recorded brief descriptions of each of the students in her class. Her portrait of Bob was quite revealing and indicated that Teacher R considered him a child who required special treatment:

> Bob has finally come around the bend in many ways. Bob is a child that I've gone through a lot of work with [and] with his parents . . . they were saying they wanted him to achieve and get basic skills on the one hand, and on the other hand, they seemed to be supporting his statements that he hated school and that it was boring . . . This is a child that transferred to us from an alternative-type school. I have been pretty tight with Bob. My biggest battles have been seeing that he does the daily assignments. The parents finally, within this last two months, have come around to backing me . . . and Bob is at this point in a transition time of testing out whether they really mean it and whether I really mean it . . . I think Bob is a happier child at this point. He seems to be involved . . . socially, he's improved immensely. At one point in time, he was at the absolute end of the pecking order in the classroom. Other students dumped freely on him, and he accepted it. We've had a lot of class meetings, and I think there's been a lot of improvement. He's getting quite respectable at this point. In fact, he's even contributing in the classroom discussions. I think people are beginning to change their mind about him. I think he's a bright boy.

Bob was interviewed at the conclusion of the assignment, and his responses indicated that he knew exactly what he was expected to do. He recalled that at the beginning of the assignment he had battled with another student to get the newspaper section for his group, and that this "nearly ripped" the newspaper apart. He noted that he "wished that there was only 15 minutes to read," because he had finished early and "read a book." When asked about the activities Teacher R had listed on the chalkboard, which were to be completed that day, Bob noted that he still had a language paper to write and that he would finish it and the other requirements after lunch.

Bob noted that he had experienced no particular trouble with the assignment, but he had run into one word which was unfamiliar: the word referred to a special type of a nozzle used by firemen. In general, he liked the article.

When asked about the following day's activities, he noted that he would write a short story tomorrow and "turn it in." He was unsure about the evaluation the story would receive and commented, "We always get them back; sometimes they are corrected." In the interview, Bob did not demonstrate specific knowledge of the difference between papers which were corrected and those which were merely returned. He also did not know when he would receive the paper back.

When asked how well he did on the assignment, Bob noted that "he hadn't been fooling around," and that he had been "doing what he was supposed to." When asked what would constitute improper behavior, he referred to "kids looking around and giggling." When asked how he would know if he had completed a good paper, Bob reponded that the teacher would "put comments on the paper and tell you." Bob noted an exception to this, however: sometimes if there were no comments, then "nothing's wrong."

In sum, Bob participated competently during the observation. He demonstrated leadership behavior with his peers and completed the assigned activity before proceeding to another activity. He apparently received special dispensation from the teacher to read a book rather than complete one of the assignments listed on the board. This occurrence -- which one suspects may be rather common in Teacher R's classroom given the emphasis she placed on individual growth and development -- will be discussed in more depth later.

Alicia

The observation of Alicia began at 10:46. She was seated with two other girls on the classroom sofa. She had placed a pillow beneath her, and her head was at a level slightly above that of her classmates. She sat still with her hands folded across her chest. For the "cluster" assignment, she was reading the article entitled, "His Life is Devoted to Developing Exotic Goldfish." From time to time, she scratched her face with one hand. After a few minutes, she scrunched down and put her head on the pillow and continued to read her article. (Five minutes had passed since the observation began.)

After finishing the article, Alicia walked over to her desk. She sat down and fiddled with a canvas book bag. After a few minutes, she got up and walked over to get a pencil from a table in the corner of the room. She continued on and procured a dittoed language worksheet from the teacher's aide. She then returned to her own desk and sat down.

Bending deeply over her dittoed sheet, Alicia began to write. After a few minutes, she talked quietly to her neighbor on her left, smiling as she engaged in conversation. Writing slowly and deliberately, she completed the worksheet. As she wrote, her hair filtered into her eyes, and from time to time she tucked her hair back behind her left ear. She talked sporadically to her neighbor as she wrote.

This quiet conversation was apparently focused on the assignment the neighbor was completing, for Alicia jestured at the neighbor's paper as she talked. Turning back to her own writing, Alicia put her head down on the desk a few inches away from her pencil.

At 11:07, the teacher announced to the class: "Try to wind up reading in the next three minutes, please." Alicia continued to work on the language worksheet, putting her pencil on each word and mouthing the words as she read them. She shifted her weight slightly and conferred with her neighbor. Alicia then returned to writing.

Teacher R called the class together to explain how to complete the "cluster" ditto, and for the remainder of the observation, Alicia worked on this task. As she worked, she occasionally stopped to talk with her neighbor about the assignment. Alicia asked her neighbor questions and, in turn, she answered her neighbor's queries. Alicia also aided the girl sitting across the table, peering with some effort at the girl's upside-down ditto sheet on the other side of the table. At 11:32 the observation was concluded. Alicia had written circled words next to three of the adverbs on her ditto sheet.

Teacher R recorded her impressions of Alicia at about the same time as the observation. Her perceptions were very favorable:

> Alicia is a sparkly little girl. She's an MGM [Mentally Gifted Minor] and does well. Alicia's probably one of the ideal students . . . she does absolutely great in every academic area. She's well liked. She's interested in everything she does. She has a wide range of interests. She's very pleasant to be around, very honest. At one point, she was the one that everybody wanted to sit and eat lunch with.

Alicia was interviewed after the lesson. After explaining that she liked goldfish and had chosen to read an article about them, Alicia described the negotiations that had occurred in her group over the choice of articles.

> We just picked out a newspaper article. We each got one out of our four people in our group. I had to trade with my friend, Sally . . . I had a goat one, and she had the goldfish one. She wanted the goat, and I wanted the goldfish, but she didn't want to give it to me yet. So, first she had to read it, part of it, to see if she wanted it more than the other one.

As indicated in the above description, after Sally turned over the goldfish article, Alicia read the entire "13 or 14 or so paragraphs." She said that when she had finished reading, she turned her attention to the language worksheet because Teacher R had instructed the class that they "could do any of the [assignments] up there [on the board], but first we had to get our language done." When the

interviewer pointed out that some of the other students had gone on to read books or complete other tasks before the language worksheet, Alicia replied, "I know. They weren't supposed to." When asked what would happen to the students who did not do the language worksheet as instructed, Alicia responded, "They'll get them done later today . . . while [Teacher R] is reading or later at recess."

When asked what the purpose of the reading assignment was, Alicia replied, "Just finding out about whoever we're reading about, and then we're going to write a story about 'em -- whatever." Alicia told us that she was a "pretty good" reader, and that she had known all of the words in the newspaper article. When asked if she often helped other students, she replied:

> [I often help] Sally and Buffy and stuff -- and kids at my table . . . If they don't know a word, I just tell 'em the word . . . I'll explain to them how to do it, but they have to do the [work] for themselves."

Alicia volunteered that she "read a lot at home" and that "probably because of this, she was a good reader." She felt she could "learn faster" than other students and evaluated school in general as being "all right; it's pretty good." Alicia did mention that she occasionally wished that school was harder:

> Well, some of the words, like in our spellers, are too easy, and it's just that I've already done it, some of it, in third grade, and I don't want to go over it again.

If given the chance, she said she would choose her own spelling words and make them "just a little harder" than the ones she had now.

Next, the conversation turned to the "cluster" exercise that Alicia had completed. She noted that she had made "clusters" before -- "lots of times." When asked to evaluate how good a job she had done today on her "cluster," Alicia noted, "It's pretty good. I don't know if I did as good as I could have, but [pause; end of response]." Alicia suggested that the "cluster" would have been better if she had "put more things down." As it was, she had "about 16 things . . . on the whole thing." When asked what she would do with the "cluster" tomorrow, Alicia replied:

> Well, I'll take um, there's like a "who," and you'll put, you'll write about whatever you have in that "who" space, all the things you put, and then you just write about each para -- you write a paragraph on each one.

Alicia was asked how she knew when she had written a good story. She replied, "I don't, unless [Teacher R] grades it good or something." Alicia said she felt she did a good job occasionally. This usually

happened when she wrote a lengthy story: "If I write a longer story, it usually turns out better."

The students in Teacher R's class kept a "writing portfolio" containing samples of the work from the entire school year. When Alicia was asked if she ever looked back to compare her writing from the beginning of the year to her current work, she told us that she occasionally looked at the journal entries she had written at the beginning of the year and realized: "I write a lot better now -- just making my letters neater and better shaped." When asked why her writing was better, she replied, "I don't know. It just looks a lot better. Probably 'cause I learned more . . . I write longer, and it's neater."

At the end of the interview, Alicia was asked if she had been the "ideal student" based on the teacher's wishes during the morning's assignments. Alicia replied, "Kinda, not really. Kinda, yeah . . . I guess almost, but I'm not there yet." When asked why she wasn't there, Alicia was "not sure." It appeared to the interviewers that her inconclusive responses were due to modesty rather than to uncertainty concerning the ideal behaviors desired by the teacher.

In sum, Alicia's participation in the assignment was, as Teacher R had noted in her description, nearly that of an "ideal student." She not only completed the asssigned task, but also was able to give help to other girls in her work group. She demonstrated complete familiarity with the "cluster" assignment and appeared ready to continue the activity the next day.

Nada

At the beginning of the observation, Nada was seated in her chair erasing a design which had been penciled on her wooden desk. Nada remained in her seat throughout the explanatory meeting and then quickly formed a group with three other girls. As they stood together, Nada suggested that they could all read the same article; this proposal was quickly rejected by her group. Discussion then ensued about where the group should sit to complete the assignment. Nada resolved the controversy by telling the other girls, "Come on," and led the foursome to the back of the classroom. As they passed the pile of newspapers, Nada picked one and carried it with her.

Settled in their group, Nada sorted the papers and chose the article she wished to read before the other girls looked through the sections. The other girls took sections, and the group discussed various newspaper articles and commented about the photographs illustrating the stories. The girls seemed very taken by the pictures.

As conversation continued among the girls, Nada began reading an article about a sheepherder. The group had now settled into a pattern of alternately reading and talking. After a few minutes, Nada left the group and walked up to the teacher to ask permission

to read alone at her desk. The other three girls remained together in a group at the back of the room. Nada's attention was generally focused on the article, although she occasionally watched the teacher as she moved about the room monitoring student progress. Nada appeared to have read at least half of the article.

Before finishing the article, Nada returned to the first page and began rereading the paragraphs. A few minutes later, she completed the entire article and stopped reading. She put the article down and took her language worksheet out of her desk. She then turned to talk to Elizabeth, who was seated next to her. Elizabeth had already completed the assignment; Nada was just beginning it. After several minutes, Nada got up and walked silently to the pencil sharpener. On her return, she sat down and said to Elizabeth, "I'm not going to finish."

Nada continued working at her desk on her worksheet until Teacher R told the students to put their work away. Nada remained seated at her desk as Teacher R talked to the class about the assignment. In the middle of Teacher R's explanation, Nada rose and walked across the back of the classroom to get a Kleenex from a box on one of the tables. She returned to her desk and appeared to pay more attention to the discussion. When the teacher asked the class questions about the reading they had just completed, Nada raised her hand to answer the teacher's questions several times. The teacher did not call on her. At that point, the classroom phone rang, and Nada dashed over to the wall to answer it. She conveyed the message to Teacher R and returned to the group meeting. After listening for a few minutes, she began to wiggle about, all the while paying attention to the teacher's explanation. The teacher began polling the class to determine who had read various articles. At the end of this procedure, when Teacher R asked the class who had read the article about the sheepherder, Nada responded, "Me!"

When the teacher concluded her discussion of the lesson, Nada returned to the original group of four girls. She talked to Alicia and Elizabeth and looked up as the teacher informed the class that she was going to collect the "clusters" they were completing before lunch. After determining the article Elizabeth had read, Nada volunteered to her group that she had read an article on sheepdogs.

Nada began working on the "cluster" by filling in the central circle. The teacher's aide came over to where the girls were working and helped Elizabeth as Nada completed her "cluster." After a few minutes, Nada got the aide's attention and told her that she had read the story about sheepdogs. The aide replied that she also had read the story and had found it interesting. Nada did not refer back to the newspaper article and worked diligently on her "cluster." From time to time, she talked with Elizabeth to ask where a certain detail of the story should be placed. Nada worked quietly until the end of the activity period.

Teacher R's comments about Nada, recorded near the time of the observation, suggest a troubled girl:

> She's a very hyper girl. She is, I suspect, emotionally disturbed. She's a compulsive talker. She's rattled. She's the kind of a student who lets out of her mouth everything that comes into her head . . . If you criticize her, she's down in the dumps. If you give her praise, she's all over the place. She's a very fractured, scattered child.
>
> First half of the year, she was extremely unhappy with everything . . . She seems to have come out of that a bit right now . . . her work does have real problems. She has spelling problems; she has math problems . . . she reads well -- she's on grade level. Her writing skills are not developed. She needs to work for clarity. I've done a lot of conferencing with Nada's mother. It's pretty clear this student needs therapy of some kind.

Teacher R encapsulated her impressions of Nada with a final description: "[a] very unstable child."

Shortly after the close of the activity, Nada was interviewed. When asked why she had chosen the article about sheepdogs, Nada replied that she had "wanted to read about the firemen, but I started reading about sheep and got into sheepdogs." Like the other students who were interviewed, Nada's group had experienced some difficulty dividing the newspaper sections.

> I got the paper and passed it out in the group. Buffy [another student] started yelling [for a section of the paper], so I took the one I wanted. Then they yelled at me for taking it. I just took the first one. The teacher said we could go somewhere to do the reading. The others were talking; they had not settled about where to go, so I went to my [own] desk so I could get some work done.

Nada said that she did not have difficulty with the assignment, although she had to ask Teacher R about the meaning of one word. She also noted that she forgot part of what she had read, and as a result, she had to go back and reread the article.

When asked how well she did on her "cluster," Nada replied that she "didn't know." She said that she would have to go back and compare it with the article to evaluate her work and "make sure she had all the pieces." She said that as she completed the assignment, she tried to attach "at least two or three circles" to each adverb. She commented that some of her classmates didn't read their entire newspaper article, but "pretended" that they did. We asked Nada how she would evaluate her own performance on a scale of one to five -- five being the best. She noted that she had "worked hard" and "spent time

well." She admitted that she may "not have worked hard enough," but finally evaluated her participation as a four.

In sum, Nada's participation in the work activity event appeared to be appropriate. Nada knew what was expected of her during the observation period and went about accomplishing it. Once she finished reading the article, she went on and worked on her language worksheet without being told. Perhaps Nada's performance should be considered evidence of the variability that can be a part of student behavior. Although she may have been, as Teacher R perceived, an "unstable child," she was able to interact with other classmates and complete the assignment in a competent fashion. Her "cluster" ditto, which appears in Appendix A, shows that she was able to record the necessary information.

Frank

At the beginning of the observation, Frank was standing at the back of the classroom. As the teacher began to explain the assignment, Frank sat down on his desk, which was situated next to the desks of Simon, Ron, and Norman. When the teacher told the class to form groups, this foursome stayed together and ran up to the front of the classroom en masse to get a newspaper.

The boys took the paper and returned to their desks. They leafed through the sections. Simon read silently while the other boys discussed the articles. After a few minutes, Frank got up and walked over to another part of the room to read by himself. Apparently dissatisfied with the article he was reading, Frank returned to the group of three boys and traded the article he had just read for several new sheets of newspaper. He returned to his original spot.

Shortly after his departure, Simon, Ron, and Norman walked over to the center of the classroom and reclined on the floor. Simon began to read while Norman and Ron talked. This threesome alternated their attention between conversation and reading. Frank, who was seated some distance away, remained focused on the reading task.

Frank finished reading his article and returned to the group of three boys. He talked with Ron about the articles they had read. Teacher R walked by, and Frank told her that he had finished the reading. The teacher passed on, and Frank went over to get a language worksheet. He and Dennis then began to talk about the language paper. Although the observer could not hear the conversation, the boys appeared to be confused. Dennis got up and walked over to where the aide was standing, a few feet away. He asked the aide how the language worksheet should be completed. Frank remained seated at his desk and listened intently to the aide's instructions. Dennis returned and sat down next to Frank. The boys then worked together on the language worksheet, verifying each others' answers as they progressed. (Thirty-five minutes had passed since the beginning of the observation).

After a few minutes, Frank got up and moved away from Dennis to a desk at the side of the classroom. Teacher R called the class together to explain how they were expected to complete the "cluster" exercise. Frank did not join the meeting and continued to work on his language worksheet. The teacher noticed that he had not given the teacher his attention and said pointedly, "Come on, Frank!" As if he were not about to give his ground, Frank finished working on a sentence. Only then did he get up and walk over toward the teacher, leaving his language worksheet behind. Frank appeared to be daydreaming throughout the rest of the meeting. He alternately gazed out into space and then refocused his attention on the teacher.

At the end of her explanation of "clustering," the teacher told the students to begin work on the "cluster" ditto. She informed the class that they had 15 minutes to complete the task. She said she would collect these papers before lunch. Frank got up and returned to his desk. He sat down and began to write on the worksheet. Next to each adverb, he filled in a circle enclosing one or several words and then progressed to the next adverb to repeat the procedure. At the end of the activity, he had written words next to five of the six adverbs.

Teacher R's impressions of Frank suggested that she was concerned about his work performance:

> He's so laid back and still so cool that it bothers me. He is a kid who has to work and really work at spelling . . . in order to get it, and we've been through a lot of work with his mother. He's lazy, basically . . . the last few weeks he's been just so laid back and uncooperative. He never volunteers to help. If the room has to be cleaned up, he's always standing around. Really out of it . . . He seems to have a lot of image that he's protecting. He is a very sensitive boy, but he's also just not that motivated.

Frank was interviewed after the observation. He demonstrated familiarity with the instructions that had been given by the teacher. He added, however, that he was supposed "to wait for the others to be done" before going on with the second part of the assignment. He noted that he "preferred" to work by himself and commented that if he worked with someone else, "they'll talk, and I don't want to get interrupted or get in trouble." When asked about how the assignment had gone, he first talked about the negotiations that had been necessary to get his own copy of the article

> Daryl had the newspaper, and everybody wanted different ones [i.e., articles]. We looked for ones we wanted. First, we wanted the one Daryl had -- it was the most interesting.

Frank said he finally chose his article and found it to be "hard to read." He noted that he had experienced "trouble with the words --

mainly names, but I figured them out." He pointed out that he did not ask the teacher for help, apparently making reference to the teacher's instructions that students were to rely on each other for assistance. He told us that "since I had time, I started working on my language paper" because he "had finished all of the other assignments.

Frank expressed familiarity with the clustering procedure; he commented that he "could do most of them." The one he had just completed, however, was "tough because it was not a person -- but a lobster." When Frank was asked why the teacher had the class complete the assignment, he replied that he "didn't know why." Moreover, he "didn't know how it would be evaluated," adding that "we don't usually hand it in." Frank was asked what would happen with the short story the class was to write tommorrow. He was not sure. When asked what he would do when he received the story back from the teacher, Frank replied that he would "look at the story and put it in his writing portfolio." He added that Teacher R wrote "comments on a good story." Frank defined what he meant by a good story as, "one which described everything." He evaluated himself as "an average story writer," and when asked how he had done on today's "clustering" exercise, he noted that he "didn't goof off."

In sum, Frank also completed the assignment competently. His daydreaming may suggest the "laid-back" quality which worried Teacher R, although judging from the finished "cluster" ditto, this did not deter him from accomplishing the assignment's intent.

Conclusions and Implications

The observational data reported above indicate that Teacher R's lesson was generally successful. Students knew what they were expected to do -- although their awareness of the purpose of completing this activity appeared to be murky. Students took full advantage of their peers to gain assistance. In addition, those who wanted to work alone were able to do so.

A management problem occurred at the beginning of the activity when children were picking up copies of the newspaper needed for the exercise. Although this commotion had not been forseen by Teacher R, she reacted quickly and intervened to calm the disturbance. Thus, a serious disruption was averted, and students returned to their reading task. They completed this task quietly and followed the teacher's instructions.

Looking across the four students' participation, the preferential treatment received by Bob may point out an interesting issue. Although the class had been instructed that they were to work on one of the assignments listed on the board when they finished reading their articles, Bob received the teacher's permission to read a book. When we asked Alicia about students who read a book rather than doing one of the listed ssignments, she responded, "They weren't supposed to."

CHAPTER NINE

TEACHER Q - FIFTH GRADE

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

This chapter describes four activities that occurred during one work activities event in Teacher Q's fifth-grade class. The activities are depicted in terms of their structures, task demands, and student responses.

Teacher Q has been employed at Central School for three years. Prior to Central School, she worked at another elementary school for seven years and taught fourth- through sixth-graders in a team with three other teachers. She has taught second- and third-graders in previous years at Central School. This year she has a fifth-grade class of 29 students (17 boys and 12 girls).

Interviews with Teacher Q revealed that she had developed a distinct philosophy of teaching. A major component of this philosophy was that students should have freedom to choose how to accomplish assignments and, in many cases, to choose the assignment itself from various instructional options. As a consequence, students in Teacher Q's class spent the majority of class time in self-directed seatwork activities. During these activities, Teacher Q monitored and assisted individual students. Teacher Q had no regular grouping arrangements in her class. During reading, for example, students voluntarily signed up to sit with the teacher on an individual basis and read. If students with reading problems did not sign up regularly, the teacher signed up for them. The teacher indicated that she sometimes did put together temporary groupings of students who had difficulties with similar kinds of material, especially in math. These groups usually were heterogeneous in terms of overall ability and were disbanded once the difficulties were overcome. Teacher Q said she avoided regular groups because, "I didn't want kids going around saying, 'I'm a dummy in a dumb group, and he's a smart one in a smart group.'" Besides learning curricular skills and content, Teacher Q hoped that her general class arrangements would encourage student friendship, cooperation, self-motivation, and the ability to think independently (as opposed to simply accepting peer norms and values).

Teacher Q and her students were observed on Tuesday, May 20, 1980. The period of the work activities event was from 11 a.m. to noon. The work activities event was designated by the teacher as a "jobs time," when students could choose to work on one or more of the following four activities: (1) Indian Project; (2) Nutrition Workbook; (3) Animated Cartoon; and (4) Record Listening. The first three activities were ongoing in the sense that students had received them earlier and would be given more time in the near future to complete

them. Some of the "jobs times" period also was devoted to miscellaneous concerns having to do with preparing for a camping trip that was to occur the coming weekend. Some students left the room for brief periods of time to make a "buddy burner" (a small stove consisting of a candle in a can) in Teacher W's classroom.

Teacher Q was interviewed in the morning before the work activities event. During this interview, she provided an introduction to each of the four activities, discussing the origin and purpose of each activity as well as the expected procedures for participation in each activity. We talked with Teacher Q following the work activities event about her impressions. Four students were observed, and three of these students were available later for interviews following the work activities event. Observers and the teacher also recorded their perceptions of these students' participation in the various activities.

Overview of the Work Activities Event

Indian Project

The Indian Project had three components, and every student was expected to complete all three by the following Thursday, May 29. The first component was an essay. Students could choose from one of four essay topics (e.g., compare the Indians' form of democracy with ours). There were accompanying filmstrips for each essay topic. The second component was a biographical sketch. Students had access to a set of "activity cards" that presented brief introductions to 13 famous Indians (e.g., Sitting Bull, Buffy St. Marie). Students were to choose one of these personages and base their biographical sketch on library research. Teacher Q expected the essay and biographical sketch each to run at least one-and-a-half pages in length. The third component of the Indian Project was an endeavor designed to encourage more creative skills. Again, there was a set of five "activity cards" that suggested projects (e.g., mapping the locations of the different Indian tribes in the United States territory), and students selected one of the projects to complete. The teacher said that the "activity cards" used in this project were ones selected from a larger set that she had purchased several years ago at a materials fair.

Students could choose to complete the three components of the Indian Project in any order. Nevertheless, students had to commit themselves to a plan for completing the project. When they had received the assignment during the previous week, they were required to indicate on a sign-up sheet which topics they wanted to do and the date when they would have each one completed. Teacher Q viewed these "deadlines" as tentative. She indicated that this was the first project where students would be completely on their own, i.e., where they would not have to check in with her after completing each component. Her attitude was to, "give them a due date, and let them go, and see what happens." Students were required to write the

essay component of the project on an individual basis. For the biographical sketch and project components, students were given the option of pairing up with another student to produce a single product.

During the pre-observation interview, Teacher Q said that she planned to grade the projects by assigning points to various criteria. She noted that she didn't have the grading scheme formally figured out yet, but that the criteria would include, "neatness, amount of outside research, presentability, overall look, whether it is in order, and the completeness of the projects." The teacher emphasized that when she graded the Indian Projects and returned them, she would tell students that, "The score is your own -- they are private. You are not to ask anybody about their scores. If they want to volunteer them, that's okay, but you are not to ask other people what they got." Teacher Q added that she tried to assure this kind of privacy in all her formal evaluations.

Because students already were familiar with the Indian Project, Teacher Q simply mentioned at the beginning of the event that this was one of the assignments students could work on. Teacher Q also asked one student (Maria) to speak briefly to the class about her research on the Indian athelete, Jim Thorpe. This was the extent of the teacher's reference to the Indian Project during the class meeting that initiated the "jobs period."

After the work event was over, Teacher Q noted that most students seemed to spend the period on the Indian Project, in particular, doing the third component of the assignment (e.g., making posters).

Nutrition Workbook

All students had their own nutrition workbooks. These workbooks contained lessons about the four basic food groups and exercises testing students' knowledge of the lesson content. For example, some exercises asked students to mark an "X" below the picture of the food that belonged (or did not belong) in a particular food group. At the time of the work activities event, most students had two pages left to complete in the workbooks.

The teacher expected students to work quietly when completing their workbooks, although some peer collaboration was permitted. The teacher indicated that she would not grade the students' work. Instead, she said that when the class had completed the pages, they would correct the work together.

Following the observation period, Teacher Q noted that very few students chose to work in their Nutrition Workbooks.

Animated Cartoon

For the Animated Cartoon activity, students were assigned to make their own cartoon segments. Students used construction paper and felt-tip pens to create scenes with moveable parts that could be filmed in a sequence of frames (e.g., the chick in an egg hatching). Teacher Q gave students the option of working alone or in pairs. Students could select any topic for their cartoons except one that was excessively violent. The teacher indicated that she had said "no" to one boy who wanted to depict a person being stabbed in the face with blood spurting out. The only other difficulty with the project she mentioned was that there was a shortage of scissors, and students sometimes had to share.

Students were supposed to have their cartoon materials completed by the day of the work activities event, but many cartoons were not finished. The teacher planned to actually film the cartoon sequences the following week and show the class the film. She added, "If it's really good, we may also show it to the school." No formal evaluation of the cartoons was mentioned. Teacher Q noted that next to the Indian Project, the Animated Cartoon was the second most popular project.

Record Listening

On the observation day, the teacher brought in the record entitled, "Johnny Cash Sings Bitter Tears." Apparently, Teacher Q intended the record as a tie-in to the Indian Project because several of the songs dealt with Indians. The record player was located in one corner of the room with three sets of headphones so that students could listen and not disturb others. During the pre-observation interview, the teacher indicated that she wanted students to go in groups of three to listen to the record until everyone had a turn. She also said that she wanted to hold a class discussion of the record afterwards to help students understand what the songs were about. In fact, the teacher spent several minutes at the beginning of the "jobs" period introducing the record. (She did not spend time introducing the three other activities since students had begun them during previous lessons.) She held the jacket cover up for the students to see and went down the list of songs, telling the students something about each one. Teacher Q also told students to use a sign-up sheet on the board. Upon saying this, students raised their hands to indicate that they wanted to sign up. Teacher Q proceeded to write down the names of these students on the sign-up sheet in groups of three.

The Elements of the Work Activities Event

The dimensions of Teacher Q's work activities structures are summarized in Table Q.1. A more detailed description of these dimensions follows.

Table Q.1

Teacher Q's Work Activities Structures During Four Activities

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Indian Project	No groups specified; students can spend time on this activity if they want to	Division of labor optional except for essay component; otherwise, two students may work on single product	- Order of completion of component assignment - Particular topic	- Students can advance within activity without teacher approval - Students can advance to another activity at any time	Observational scan of students; comments to individuals on behavior and performance; formal evaluation to occur later
Nutrition Workbook	No groups specified; students can spend time on this activity if they want to	No division of labor; students complete their own workbook	Pace of assignment	- Students can advance within activity without teacher approval - Students can advance to another activity at any time	Observational scan of student behavior
Animated Cartoon	No groups specified; students can spend time on this activity if they want to	Division of labor optional; two students may choose to work on single cartoon	- Particular topic - Pace of assignment	- Students can advance within activity without teacher approval - Students can advance to another activity at any time	Observational scan of students; comments to individuals about behavior and performance
Record Listening	Only 3 students can listen to the record at one time; teacher signs up students in voluntary groups of 3	No division of labor; students listen independently to the record	No student control	- Students dependent on the record during activity - Students can advance to new activity without teacher approval	Observational scan of students; comments to individuals about misbehavior

Content

The four activities that were observed during the work activities event were:

(1) Indian Project
(2) Nutrition Workbook
(3) Animated Cartoon
(4) Record Listening

These four activities occurred simultaneously because students had the option of working on any of them during the observed period.

Grouping

There were no assigned groups for the Indian Project, Nutrition Workbook, and Animated Cartoon because each individual student had complete freedom to decide whether and when to work on any of these work activities. While some students worked in pairs on the Indian Project and Animated Cartoon, these pairings were voluntary and not organized by the teacher. For the Record Listening activity, students were assigned in groups of three to listen to the record. This group size was determined by the fact that the record player had three headphone sets. The teacher signed up students in groups of three based on who had their hands raised for wanting to do the activity; apparently, the teacher did not try to place particular students together.

Division of Labor

There was no division of labor required by the teacher for any of the four work activities. Most students worked independently for most of the period. There were some pairs of students who chose to work together on the Indian Project and Animated Cartoon activities; in these cases, the students in the pairs appeared to work on similar tasks and to have no agreements about differentiation of tasks. On all activities except Record Listening, students could collaborate with one another on an informal basis. Teacher Q permitted this kind of interaction because she felt it was important for students to get to know one another and to learn how to cooperate.

Student Control

There were different types of control which could be exercised by the students in each of the four activities. The Nutrition Workbook and Record Listening activities presented students with the fewest opportunities for control. Students who elected to work in their Nutrition Workbooks could set their own pace, but the content and method of the assignment was predetermined by the self-instructing workbook format. There were no control options associated with Record Listening once a student decided to participate in this activity. Students simply were expected to listen attentively to the

whole record as it played. In contrast, students had several control options for both the Indian Project and Animated Cartoon. The Indian Project had three separate component assignments, and students could choose to complete them in any order. Students could choose their own topic for both the Indian Project and Animated Cartoon, although the topic alternatives for the former were specified by the teacher. In short, for activities that were not strongly tied to one form of instructional presentation (e.g., record, workbook), Teacher Q gave her students a good deal of control over the completion of individual assignments. In addition, Teacher Q allowed students to control the selection of which of the four activities to participate in. Clearly, Teacher Q was willing to give students great discretion in carrying out their assignments.

Student Advancement

Students were not dependent on the teacher to progress across or within the activities. The teacher's function during the period was one of monitor and resource person. As the teacher had predicted, a shortage of scissors impeded some students' progress in the Animated Cartoon to a small extent.

Teacher Evaluation

Teacher Q's evaluation was completely informal during the work activites event. (The teacher did plan to formally evaluate the Indian Project, but this was to take place at a later date.) The teacher visually monitored all individual students as they worked on the activities of their choice. When the teacher assisted students, she helped those working on the Indian Project or the Animated Cartoon. It was during these intervals of giving assistance that Teacher Q offered informal comments to students about their work and behavior. Her comments about student work indicated both affirmation and negation. The latter seemed to be more frequent. When one girl brought up her Indian poster for the teacher to see, the teacher asked:

Teacher: Did you edit it?

Student: Yes. Why? Are there mistakes?

Teacher: Yes, there are a lot of mistakes. Before you put it down in final form, get somebody and do the editing.

Shortly thereafter, when the teacher examined one boy's cartoon work, she said, "No, no. You draw one on a separate piece of paper, and then you move it across the background. That will make it look like it's moving."

The teacher made few comments about behavior, apparently tolerating off-task behavior that did not cause a disturbance to others. The most notable instance of reprimanding occurred in the Record

Listening corner, when one student was teasing another by repeatedly writing his name on the board. The teacher walked over to the instigator and talked with him privately.

When interviewed following the work activities event, Teacher Q said that the period had gone "Like I expected; it was pretty ordinary. I felt good about it. It was very typical of the classroom. Everybody was involved in something. There was no crisis." The teacher also noted that some students had demanded a lot of attention and assistance. The teacher indicated some disappointment about this, saying that "I'm constantly telling the kids all year to get help from each other before coming to me; I'm the last person you should come to."

Task Demands

Different task demands were associated with each activity.

Indian Project. Both the essay and biography components of the project required that students be able to read independently source materials (filmstrips and books), analyze their content, and write at least one-and-a-half pages of summary and discussion. The writing, in turn, required the more specific skills of being able to put words together to form sentences, spell the words, and apply the rules of punctuation. The task demands for the third component of the project, i.e., the more creative endeavor, varied according to the topic students selected. Many students appeared to have selected the poster ("Speaking with Signs") or map ("Map of Indian Tribes") activities. These activities required that students be able to copy and organize shapes, symbols, and letters in an enlarged format.

Nutrition Workbook. Students who completed pages in this workbook were asked to learn and recognize the four food groups (milk, meat, fruits/vegetables, and bread/cereals) and examples of specific foods from each group. They also had to know how many servings from each group were required for a balanced meal.

Animated Cartoon. This activity required students to create their own story line for a cartoon and to visualize this cartoon in terms of cut-out parts that move on a background. Furthermore, students had to be able to translate their visualization by making the parts and drawings for the cartoon.

Record Listening. Students listening to the Johnny Cash record were supposed to listen carefully to the lyrics of the songs, comprehend them, and -- to some extent -- realize relationships between the lyric content and previously acquired knowledge of Indian history and culture.

Motor Demands

Each of the four work activities involved particular kinds of motor skills.

Indian Project. All components of the Indian Project required that students be able to use writing tools both for writing letters and drawing.

Nutrition Workbook. For each workbook question, students used a writing utensil to mark an "X" in the box indicating the correct alternative.

Animated Cartoon. In making and demonstrating the cartoons, students had to have the motor ability to trace and draw on paper, cut out pieces of paper, and move the paper pieces in such a way so as to produce the animation sequence.

Record Listening. This activity required few motor skills. Students simply had to place the headphones on so that they could listen to the record.

Interactional Demands

The interactional demands for the four activities varied in terms of the degree to which students could use one another as resources. Students were encouraged to work together on the Indian Project and Animated Cartoon project either on an informal (e.g., sharing ideas) or formal (working in pairs) basis. The essay component of the Indian project was an exception to this norm, because students were asked to write something that reflected their individual beliefs and abilities. Conferring with other students on an informal basis was an option for the Nutrition Workbook, but one that students did not seem to choose often. Record Listening required student interaction to the extent that three students had to agree to begin listening to the record at one time and not disturb one another.

Student Response

Anne, Toby, Mickie, and Carla were observed during the work activities event. All of these students except Toby were available later in the day for an interview that focused on their perceptions of the observed event.

Anne

Anne was sitting on the floor, to the left of the teacher, as the teacher was introducing the "jobs period" assignments to the class. As Teacher Q reviewed the contents of the Johnny Cash album, Anne sat with her knees drawn up to her chest. She was not looking at the teacher; instead she looked at the students on the sofa and then at the remaining students seated on the floor. As Teacher Q invited Maria to talk about her work on Jim Thorpe, Anne appeared

to go into a daydreaming state: with her knees still drawn up to her chest, she held on to her toes and began to rock back and forth in a regular rhythm. When Teacher Q asked for the hands of those students who wanted to listen to the Johnny Cash record, Anne did not raise her hand.

When the teacher dismissed the class to begin work on their assignments, every student except Anne stood up and left quickly. Anne was the last to stand up. She slowly walked over to Carla and said something to her about her buddy burner. Anne then walked over to her own desk. Her desk neighbor, Lynn, was talking to Teacher Q about her Indian project. Anne stood to the side and listened to them talk. Teacher Q left and soon returned to give Lynn a can for her buddy burner. As the teacher handed Lynn the can, Anne pulled out an envelope and gave it to the teacher saying, "Here, [Teacher Q]." Teacher Q indicated surprise by saying, "When did this come in -- have you had it?" Anne responded, saying, "My mom's paying for it because she's working now." Apparently, the envelope contained the money necessary to go on the class camping trip. The teacher and Anne then discussed the Indian sign-language poster that Anne had chosen as one of her Indian Project activities.

Anne spent the next few minutes collecting materials to make her sign-language poster. Eventually, she sat down on the floor next to her desk with a large yellow sheet of paper, felt marker, pen, and a draft of the poster layout that she was going to copy onto a large sheet. Lynn sat down next to Anne with her own materials which included an even larger sheet of green paper. Anne arrayed her own materials in front of her and seemed about ready to begin copying the cartoon. Instead, she stood up and walked across the room to the vicinity of the pencil sharpener. Without sharpening anything, Anne returned to her desk. She stood there, reached in, and pulled out an empty tuna can. Anne then proceeded to walk out of the room with the can, apparently intending to make her buddy burner in Teacher W's classroom. Anne did not communicate to anyone that she was leaving, and all her poster materials remained spread out on the floor.

Anne returned approximately 15 minutes later. She held her finished buddy burner, which was wrapped in a paper towel since it was still hot from the melted wax. Anne placed the buddy burner on her desk and sat down on the floor in front of her poster materials. Before Anne could begin to work, Lynn came over and told her that she was now working in a new place. Anne got up and proceeded to follow Lynn to the far edge of the room where Lynn had laid out her materials on a table. Anne examined this setup and then returned to her floor space. Apparently, she had decided to remain there rather than move to Lynn's location.

Anne began work on her poster. She wrote out sentences and symbols with her pen and then went over them with a felt marker. She then began to copy an illustration to the paper in pen, working from the original draft that was on the floor next to her. She worked steadily for about ten minutes.

Anne next stood up with the draft copy of her poster in hand and walked over to where Lynn was working. When she got there, she was immediately distracted by two younger girls from another class who were sitting nearby playing "patty cake." Anne watched them for a moment and then looked back at Lynn and made a few inaudible remarks. Afterwards, Anne turned and watched the "patty cake" players again. She continued watching them until they stopped playing.

Anne walked over to the teacher, who was seated at a desk behind the sofa talking to another student. As the student left, Teacher Q turned to Anne. Anne still had the draft of her poster in hand and indicated that she wanted the teacher to look at it. The teacher took the draft and began to read it. The teacher soon reacted by saying, "Anne, how can I see this? It's all messy." (Here, the observer noted that the teacher's reaction seemed justified.) Anne said nothing, and the teacher continued trying to read the draft, occasionally asking Anne about a point of spelling or grammar. Three other students congregated around the teacher as she looked at Anne's work. One of these students, Lena, started massaging Teacher Q's shoulders. When the teacher finished going through the draft, she gave it back to Anne. Anne returned to her floor space and resumed working for another few more minutes until Teacher Q instructed the class to clean up for lunch.

The observer and Teacher Q had similar perceptions of Anne. At the beginning of the school year, the observer noted that Anne often spent a lot of time in off-task behavior and sometimes tried to do her assigned activities during the wrong periods. The observer also remarked that Anne seemed to spend a great deal of time with another girl named Rona.

At the beginning of the school year, Teacher Q had a fairly comprehensive view of Anne, owing in part to the fact that she also had taught Anne in the third grade. Teacher Q described Anne as:

> . . . a very different kind of child. She's very, very creative with written expression and with her artwork. It's something that she and I worked on when she was in third grade, really emphasizing those two areas and showing and using her writing and her artwork as models for the rest of the class. They really came to respect her, and she came to respect herself. I think that a lot of emphasis last year was put on math, because that is her low area, and as far as she is concerned, she would just as soon skip math altogether which has already been evident this year. I feel that now she feels good enough about herself, and she has been making friends with the two girls [Rona and Lynn] who are new to the school. She really never had friends before -- she was always alone. I hope these friendships last with the two new girls.

> I think I'm going to hold a little tighter rein on Anne and push those math facts at her. Hopefully, I'll still be able to give her as much time as she needs or wants for her writing and her art, because it is important that she keeps that up.

Prior to the observed work activities event, Teacher Q expressed a more frustrated attitude about Anne, saying, "She keeps busy sometimes, but she's a little hippie who spaces out and daydreams." The teacher anticipated that Anne might be a behavior problem during the event. After the event, Teacher Q referred to Anne's difficulties with the poster assignment and her close -- almost completely dependent -- association with Lynn:

> Anne takes on Lynn's qualities. Today, she and Lynn exchanged clothes just before recess. Anne started on this Indian poster, but she didn't edit it. I think she didn't edit it because she saw that Lynn didn't edit the poster she was making.

The interview with Anne solicited her perceptions about the assignments that she worked on during the period and how her work would be evaluated. In accordance with the Indian Project description, Anne indicated that there were three components to the project. She also gave reasons for why she did not participate in the Nutrition Workbook or Record Listening activities:

> Well, I'm a little ahead on my nutrition book. I don't like to do the work, so I just do it ahead of time . . . I have listened to it, the [Johnny Cash] record, at home a lot, and it's very good because it's kinda like a play because it has all different voices and it has a cute picture on the front of a little Indian doll sittin' front of a -- it looks like a model or somethin.'

The observer asked Anne about what happened when she met with the teacher near the end of the period:

> Anne: She was correcting our writing.
>
> Interviewer: She was correcting your writing?
>
> Anne: Yeah.
>
> Interviewer: Well, did you have to check in with her or did you just . . .
>
> Anne: Well, my friend, she told me to do it with my friend, but my

friend was busy. So, she corrected my paper, and I'm doing it on a big piece [of paper] now.

Interviewer: Okay, so what she told you was to correct it with Lynn?

Anne: Yeah, because she's kinda busy, you know, she doesn't like doin' it.

Interviewer: Oh, uh-huh. But what, you didn't correct it with Lynn -- Lynn was busy?

Anne: Yeah, she was doin' hers. She was correctin' hers.

Interviewer: Had you corrected yours before?

Anne: Um, ah-uh, no. Whenever I'm doing a rough draft, I don't care about the wording. I just want to get down what I want to get down. 'Cause it's supposed to be short. It's not supposed to be real long. So I'm trying to make it real short.

The observer then asked Anne to talk about the qualities that distinguish a good poster from a bad one:

Anne: Well, it's well, I think it would tell people something -- that it, that it was a story.

Interviewer: So what makes a good chart?

Anne: Well, you have to know a little bit about the Indians first, I think, first. I think that's . . .

Interviewer: Does it matter the way you draw on it?

Anne: Well, I think it matters a little -- that you should know, you should make a picture of an Indian doing something that the Indians did all the time. Like in this picture right here, I made a picture of them eating wheat. Indians like the wheat, eating wheat you know. See, these are the pictures I made, like this. It's kinda messy, but,

like long, long ago there was a land of Indians, that's a bunch of moons, like moons ago, you know. That's what I made. And right here an Indian that was going, I made like a picture of them fighting all the time, like right here. See, always fighting. And um, like when God got mad at 'em, I made a picture of God getting mad at 'em, and they're just looking up there, and He said He would send 'em down a boy, a boy to help them and told them not to fight, and He told them, He was supposed, and they were supposed to obey Him and they didn't fight anymore.

Interviewer: What would somebody who really did this assignment poorly, what would it look like if they really did a bad job on it?

Anne: Ah, well, they might make a messy thing. They might use words like "ain't" and stuff like that. Like "There ain't no, nothin." And they might not draw such good pictures, and they might do a sloppy writing job. And they might not make too many good pictures with the story. I don't even know if I made good enough pictures.

In sum, Anne did not appear to be a completely successful participant in classroom activities. She was slow to get down to work and frequently spent time wandering around, looking at others, and interacting with girlfriends. While Teacher Q clearly was not satisfied with Anne's behavior habits, her instructional setup allowed for these habits and did little to discourage them. Anne herself was able to give lengthy -- if uncertain -- descriptions of class requirements and procedures, but she seemed unaware of the extent to which she fell short of these.

Toby

Toby was not in the room when the work activities event began. Instead, he was making his buddy burner in Teacher W's room. Toby returned to the room approximately 15 minutes after the beginning of "jobs time." When he entered the room, he walked over to a round table near his desk and watched Mickie and Kim work on their map. He then turned to a group of six desks behind his own to watch Teacher Q explain animated cartoon techniques to the girls congregated there.

Finally, Toby walked back to his own desk and sat down. Toby's desk was in a group with three other desks occupied by Carla, Dave, and Frankie.

Toby asked Carla a question about her animated cartoon. Carla told him, "It's gonna be all hairy," referring to her cartoon of a head growing hair. Toby poked around in his desk and came up with a handful of potato chips. He stuffed the chips into his mouth. Then Toby got up and walked over to the pencil sharpener. He sharpened a pencil and returned to his seat.

Three public library books sat on Toby's desk. Two were about the famous Indian, Ishi. The other was entitled, The Book of Wild Animals. Toby pushed the books to one side of his desk top and took out the materials for his animated cartoon. Toby had begun working on his cartoon when Samuel came up to talk with him. Toby described his cartoon to Samuel: "He's gonna brake this car, and it's gonna come up like this." Samuel returned to his seat.

Toby reached in his desk for another handful of potato chips and ate them. Then Toby stood up and left the room along with Samuel and Frankie. This action seemed to be the result of some prior agreement.

Toby returned to the room in about five minutes and went back to his desk. He resumed eating potato chips. Toby picked up one of the Ishi books and began to flip through it, looking at the illustrations. Toby put the book back down and picked up the second book. He stood up and took the second book over to show the teacher aide. He opened the book and showed the aide some of the illustrations, saying, "I got two Ishi books at the library." The aide responded with, "How is the book report coming?" Toby did not give an audible answer. He returned to his desk and sat down, placing the book he was carrying back on his desk. As before, he pushed the books to the side. He paused and looked over his shoulder at the adjoining classroom.

Toby stood up and went across the room to where the paper supplies were stored. He selected a large sheet of white and orange paper. On the way back to his desk, he picked up a pair of scissors from the round table where Mickie and Kim were working and got a drink of water from the fountain at the sink.

When Toby sat back down again, Teacher Q walked up and noted one of the Ishi books. "That looks like a good book -- lots of pictures," she said. Toby and Teacher Q proceeded to chat about Ishi for a few minutes. The teacher asked Toby, "Have you ever been to Oroville?", referring to the place where Ishi was found and arrested. Toby did not answer but went on to tell the teacher that Ishi died in 1929. He also told Teacher Q about how Ishi was arrested:

> Toby: Somebody called up the sheriff and asked is the jail open. We've got a wild man up here. He went to jail.

Teacher Q: That's kinda sad.

The teacher next turned to talk with her aide. The teacher was still standing next to Toby's desk and she had her foot resting on the edge of his seat. Toby stood up beside his chair and looked on as the teacher called across the room to a girl about her permission letter for camp. Toby sat back down, and the teacher moved her foot. Toby looked up at the teacher and told her that he had brought in his camp money. Teacher Q said, "Fine," and walked away.

Toby began to cut out shapes from his sheet of orange paper. He also was listening to the voices around him, because when the teacher asked a girl a question about the buddy burners, Toby chimed in with an answer. Toby then looked at his cut-out shapes and said, "This guy's too big." He held up one shape of a figure and said, "Dave, Dave, -- look."

Toby stayed at his desk for a few more minutes and then walked over to the area where the teacher was sitting. He looked on for several minutes as the teacher corrected Anne's draft of the Indian poster. Toby then returned to his desk, sat down, and ate a handful of potato chips. Unexpectedly, Toby jumped up and raced out of the classroom.

Toby returned to the room almost ten minutes later. He wandered around the room, first having a brief exchange with Gary and then going to the teacher's desk to get a felt-tip pen. Next Toby stopped to chat with a boy working at the round table. From there he walked to the row of cubbyholes where the teacher now was talking with Tommie and Kenny. Toby watched for a few moments and then walked over to a corridor that led to the outside. On the wall of the corridor was a posted chart with the heading: "I am running to San Francisco. 1 mile = 5 laps x 45 miles = 225 laps." Every student's name was listed down a column on the side of the chart. Toby made three marks next to his name, apparently indicating that he had run three laps (perhaps during his recent absence from the room).

Teacher Q announced that it was time to clean up. At this, Toby went over to his desk and put away the materials he had been working on earlier.

Teacher Q described Toby as educationally handicapped and noted that he went to Teacher W's room for some remedial work. At the beginning of the year, Teacher Q seemed uncertain of how Toby would perform academically and socially:

> He [Toby] told me he came to school in the middle of last year, but I felt like he was brand-new to the school when I met him and for the last couple of days. He doesn't seem to know any of the other children or any of the teachers, although I know he was in the same class with some of them last year. He seems very foreign to the whole situation. He's always coming

> up to me and asking little questions about everything, and he always wants to make sure that he has everything straight -- that he knows all the directions very clearly for whatever he's going to do. I really don't have Toby figured out at all yet. He seems like a bright child with not a whole lot of confidence, but we'll see.

The observer's initial impression of Toby was that he was a willing participant in classroom discussions, but also that he often was engaged in off-task behavior. The observer also noted that Toby seemed to have some friendship ties with Peter, Dave, Gary, Samuel, and Frankie.

Prior to the work activities event, Teacher Q indicated that Toby had the potential to perform well despite his handicaps:

> Toby has been a loner until this year; he has poor handwriting and bad language skills . . . He's real uncoordinated. Now he's motivated and doing quite well. His mom is great; I was conferencing with her, and she said that Toby reminded her of the comic strip character, Moose, in the "Archie" comic books."

Following the observation, Teacher Q was asked about Toby's behavior during the work activities event. She replied that Toby performed well, due in part to the fact that he "didn't have his gang [of friends] about him." This evaluation seems overly favorable given that Toby spent most of the period either off task or out of the room.

In sum, Toby's behavior pattern during the work activities event indicated that he was easily distracted by other students and activities. While Toby seemed interested in all of his assignments, he seemed to have difficulty focusing his energies on a task for any length of time. Socially, Toby seemed well adjusted. He interacted with the teacher and other students easily. He seemed to have overcome whatever problems he might have had forming friendships during the previous school year.

Mickie

When Teacher Q dismissed the members of the class to begin their assignments, Mickie and Kim, his partner, took materials over to a table to work on their Indian Project map. Mickie and Kim were making one map together. Mickie and Kim already had the United States outlined on a large sheet of white paper and the title of the map written out: "Location of American Indians -- Tribes in the United States." Mickie tried to encourage Kim to start working, saying, "Kim -- come on." Kim replied, "I gotta do my buddy burner," and left the room. Mickie began to work on the map despite Kim's absence. Mickie

was interrupted by Peter, who approached him and asked, "Where's the cartoon paper?" Mickie answered, "I don't know," and kept working.

Mickie spoke softly to himself as he worked: "Let's see now -- where's a pencil?" As if answering his own question, he walked over to his cubbyhole and found a pencil. He returned to his work place and saw Carla walking past with her buddy burner in hand.

Mickie: Carla! Let me see it. (Follows Carla across room)

Carla: No.

Mickie: Why not?

Carla: 'Cause I don't want you to.

Mickie: That's a pretty good reason, I guess.

Mickie returned to his map and resumed work. Simultaneously, he began singing "That Charlie Brown" very softly to himself. Peter approached Mickie again:

Peter: What're you going to do your cartoon on?

Mickie: A storm.

Peter: I'm gonna do a 747 colliding.

Mickie: Oh man! (In response to a girl who brushed past the table, thus joggling his writing arm.) You're not supposed to do anything violent.

Peter: Well, it's not. I'm not gonna show blood or anything gory . . . I'm just doing it 'cause I'm interested in flying.

Mickie: We're gonna do this storm cloud, and all of a sudden there's this big bolt of lightening . . .

Peter: (Begins to say something)

Mickie: Shut up, no offense.

At this, Peter walked off, and Mickie returned to his map. A girl walked by Mickie and paused to look at his map. Sensing her presence, Mickie commented, "I'm not good at drawing -- especially people or horses." The girl said nothing and walked away. Mickie spoke to himself again, saying, "Where's Kim?" He then left the table and

walked to an adjoining classroom that was empty and used for projecting a map image that could be traced. Another boy was using the projector, and Mickie looked on.

Mickie walked over to the Record Listening activity corner when he realized it was his turn to listen to the record. (Mickie had volunteered to listen to the record and was signed up to be in the second group of listeners.) Wayne joined Mickie at the listening station, and the two boys listened to Johnnie Cash for several minutes. While the record continued to play, Mickie removed his headphone and stood up. He leaned over Wayne and said something about buying food for the camping trip. Wayne removed his headphone to listen. Wayne said, "I'm gonna buy ten tomorrow." Mickie and Wayne continued to talk about the food they would buy. (Teacher Q was going to permit students to spend one dollar on junk food.) Bobbie then sat down at the listening station. Mickie started the record over again and walked back to his own desk, leaving Wayne and Bobbie listening to the record.

Seated at his desk, Mickie spoke to himself saying, "Let's see -- what do I have to do?" After looking at a list of assignments on the board, Mickie pulled out his nutrition workbook. The title of the workbook was Nutrition with Nelson, and handwritten underneath was "sucks raw." Mickie opened his book to a lesson on Vitamin C. Looking at the book, he drew his hand up to his mouth as he yawned widely. He tapped his pencil on his desk and started leafing further through the workbook. He flipped back to the Vitamin C lesson and started filling in the answers. He worked steadily until he had completed the three-page lesson. Mickie closed his book and picked up the buddy burner that was sitting on his desk. He sniffed it while surveying the room.

Mickie stood up and walked to the drinking fountain. He got a drink and walked back to his desk, looking at his watch. Rather than sitting down, Mickie walked over to the chalkboard and signed himself out to go to the bathroom by making two columns labeled "Boys" and "Girls" and putting his initials under "Boys." Before Mickie left the room, Wayne walked up and exchanged a few comments with him.

Mickie returned to the room a few minutes later holding what looked like a large cotton swab. He stuck it in front of a girl's face as he walked by, saying, "Check this out!" Mickie walked back to his seat. Kim was in the seat next to Mickie and appeared to be copying answers from Mickie's nutrition workbook. Mickie said nothing. Wayne, seated across from Mickie, asked, "Is that wax?" Mickie answered, "Yeah, it looks like a gigantic Q-tip."

Kim and Mickie remained at their seats and started to work together on their animation project. They were drawing cloud shapes and cutting them out. When Kim wanted to cut out his cloud, Wayne was using the only pair of scissors in the group and would not give them to Kim. Kim said, "I gotta have the scissors." Wayne responded with, "Shove it." Mickie leaned over to Kim and mentioned the "secret scissors." Kim promptly left his seat and pulled out a pair of

scissors from behind a pile of papers in the corner. Kim returned to his seat and made a cutting remark to Wayne. Wayne reacted with, "Shut up you roach." Kim retorted with, "You roach clip."

Mickie and Kim resumed work on their cartoon. They discussed the animation sequence and how to make each part of it. Mickie looked at the pieces already cut out and said, "Hey, where's the other rain cloud?" He resolved the problem by drawing a large cloud on a piece of paper. Kim then started to describe the sequence where the cartoon would show a thunderbolt. Kim smacked one fist into the palm of his hand to indicate the suddenness of the lightening. Mickie watched Kim. The period ended as Mickie and Kim continued work on their cartoon.

The observer's informal impression of Mickie was that he studied in a conscientious manner and loved to draw. The observer noted that Mickie frequently wore a hat in class and that he seemed closely allied with Kim. The observer thought that Mickie was well liked by the teacher -- to the extent that he wouldn't be reprimanded if he broke rules.

Teacher Q did not know Mickie until the school year began. Her initial impression was that, "he seems like a really nice, bright student with good social skills, good sense of humor."

Later in the year, right before the work activities event, Teacher Q talked about Mickie in a very favorable way:

> He's my ideal student. He's been real involved in the project. He can get bored, however, and when he does, I generally let him go his own way and do his own thing because it's usually pretty good.

Following the work activities event, Teacher Q simply described Mickie's behavior as "very businesslike."

Mickie was a willing subject for the student interview on the day of the observed event. He spoke easily about each interview topic. When talking about the particular assignments he was working on, Mickie's responses indicated that he had a good notion of what was expected and how he would be evaluated. Mickie's most interesting comments concerned his friendship group, his views on grading and the class, and his self-evaluation of his progress.

Mickie described his friendship group as follows:

> Mickie: Kim's one of my good friends in the school, but we, every now and then we just yell at each other at recess or somethin'. But when we get back in, it's okay. We're still friends. And I said, five other

guys, those are my only real good friends in the whole class, you know, 'cause everybody else has their own little group that hangs around with each other, and this is ours, you know.

Interviewer: Who's in that group?

Mickie: Ah well, there's Larry, he's kinda fun, he has blond hair. There's Wayne, he's real funny, but he just gets in a lot of trouble -- that's why we kinda don't like hanging around him that much. And then there's Bobbie. He's a real nice kid and he always gets the assignments in on time. And then there's Kim, he's one of my friends, and then there's me. And we all sit in a big table, thing of desks.

Interviewer: Why is it you don't like to hang around Wayne sometimes?

Mickie: Well, because he gets in a lot of trouble, and if I hang around him sometimes I'll get in trouble too. A lot of times. But I mean, if everybody, like if we're all in a big group and we're all hangin' around him then, you know, it wouldn't matter that much. But if it's just me and him, usually I get in trouble.

When asked whether he preferred to have his work graded or not graded, he responded:

I don't care if it's graded or not. I'd rather have it not graded, you know, 'cause if it's graded and I get a high score, then I'll be real excited about the score and all that, and I won't, you know, I'd rather just be happy with what I did instead of, you know, like if I got 'em all wrong, then I'd rather not know because then I would be all bummed out.

Mickie's general comments about the class came up in reference to students copying each others' work:

Interviewer: Do people get mad at you if you you don't let 'em copy?

Mickie: No. Nobody ever threatens me like, "If you don't let me copy this," because, you know, this just isn't that kind of class -- I mean this class isn't like, everybody has their own little secrets and everything. I think this class is real open, you know, we're all together, we're not separate. Like some kids don't, in other classes, like big rooms, some kids don't even know some other kids in the class, but here I know everybody in this class. Some kids don't even know or talk to 'em or anything.

This perception of the class meshed well with some of the teacher's own stated goals.

Mickie's comments about his own performance reflected the conscientiousness that the observer noted:

Interviewer: Thinking about what Teacher Q would want someone to do during the period, how do you think you did compared to what she wanted to happen?

Mickie: Well, I fooled around a lot, and I wasn't supposed to. I mean, I did fool around, but I got a lot done. I'm surprised. Before -- before I usually didn't get a lot done, but now I've been talking to myself a lot at nights and I've been saying, "You gotta get work done -- otherwise you're gonna be behind." And I don't like being behind. Like if I'm late for school, I hate being late -- I just can't stand it. Or, you know, usually when the teacher, you know, if you get in trouble, and she wants you to write a hundred-word essay, and she, you know, some kids don't write 'em 'cause they know she's not gonna ask for it when she says 'cause she -- they always forget. But I, one time, the first time I ever got a two-hundred-word essay was last week because I was, the um, there's these people come for nutrition and I was, this guy from the Central Times [e.g., the local town newspaper] was there,

and he was standing up taking pictures, and I was going like this, you know, smiling and turning around at him, and I got in trouble and had to write a two-hundred-word essay.

Interviewer: Who gave you that?

Mickie: Mrs. F. -- she's not my teacher. She just teaches a class of fifth-graders too. And Teacher Q said she wouldn't have given me a punishment like that. She, 'cause I have so many other things to do, and she knows I have all these other things to do that she wouldn't give me somethin' like that, 'cause that was really in the way. But I finished it. Most kids didn't even start it 'cause they knew Mrs. F. wasn't gonna do it. Mrs. F. wasn't gonna ask for it, but I was still happy that I did it, 'cause instead of worrying, "Oh, no, I didn't do it, I'm gonna get in trouble," I did it, and now it's out of my mind.

In sum, Mickie seemed to be a task-oriented student who enjoyed doing most of his work. He was able to work on all four assignments during the work activities event and get something accomplished. The teacher and other students appeared to like and respect Mickie, and he interacted successfully with them.

Carla

Carla was seated on the right end of the couch, next to Lena, when the teacher had the class assembled to discuss the assignment options. When Teacher Q mentioned the Nutrition Workbook, Carla turned to Lena and spoke in a voice loud enough for everyone to hear: "I'm all done with that -- I finished a long time ago." The teacher ignored this remark and went on to introduce the Johnny Cash album. The phone in the classroom rang, and a boy nearby got up and answered it. The boy repeated the message, which was "Carla Smith to Teacher V's."* The teacher nodded for Carla to go. Carla stood up and started walking out of the room. She walked out in a mock huff with her face screwed up, saying, "I know what this is about and I don't want to go."

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*Teacher V is responsible for teaching four groups of learning disabled children.

Carla returned to the room about five minutes later, holding her buddy burner in her hands. As she walked past Mickie, he asked her if he could look at her burner. She said no and kept walking. Lena, who was still seated on the couch, spotted Carla and asked, "Did you bring mine?" Again, Carla replied with the negative.

Carla set her buddy burner down at her desk when she arrived there. Her desk was in a noticeably isolated position, away from all activity areas and on the border separating Teacher Q's room from another room in the pod. (The teacher later indicated that Carla had voluntarily moved to this location after the teacher had told Carla and Lena that they had problems being productive when seated together.) Carla eased into the desk chair and took off her sweatshirt. She turned around and inspected the back of her chair before hanging her sweatshirt on it. When she turned around, her attention also was caught by two boys from the adjacent classroom. In what seemed to be a disapproving manner, Carla watched them talk back and forth. The boys noticed Carla, and one commented, "Boy, she's weird." Carla made a face at them, saying nothing. At this, the boys broke out into laughter. Carla ignored this and turned back around in her seat.

Carla pulled a folder out of her desk and opened it. She picked out a newspaper clipping, stood up, and walked over to Teacher Q, who was seated on the sofa with Lynn and two other students. Teacher Q noticed Carla and said, "Oh, your current events?" A brief exchange between Carla and the teacher followed. Afterwards, Carla walked over to a bulletin board and pinned up the clipping. She returned to where the teacher was sitting and started to ask her a question. Teacher Q then became upset about the number of students asking for her attention and announced, "Everybody -- clear out. I need to talk with Lynn." Carla returned to her desk without finishing her question.

Carla pulled a large sheet of paper out of her desk and walked over to Lena's desk. Lena was standing up, and Carla said, "Lena, look at my cartoon." Lena and Carla started discussing the cartoon project, and others at Lena's table also joined in the talk. Carla then noticed one girl at Lena's table who was about to cut some paper with scissors. Carla volunteered to help the girl and placed her own cartoon paper down to do so. Carla cut out the shape for the girl and then picked up her own cartoon and walked away.

Teacher Q was on the phone, and Carla approached her. When the teacher hung up, Carla asked, "Can I show hair growing on my cartoon?" (Carla wanted to depict a head growing hair.) The teacher talked with Carla for several minutes about how she could achieve the hair-growing effect.

Carla collected a large sheet of paper from supplies and a pair of scissors and sheet of sample drawing from her desk. She took these items over to another desk near the middle of the room and sat down. Toby, seated to one side of Carla, asked her what her cartoon was

about. Carla told him, "It's gonna be all hairy." Carla then started working on her cartoon. At the same time, Dave, who was seated diagonally across from Carla, started reading to her the names of a coed lineup of baseball players. Carla looked up with interest and listened. Carla started cutting paper, and Dave stood up and moved into the empty desk next to Carla. The two had an inaudible conversation as Carla cut long strips of paper to represent hair strands.

Three boys approached Dave and they began arguing among themselves about buddy burner materials. Carla was distracted by them initially but soon resumed her paper cutting. As soon as the three boys left, Teacher Q called over to Carla, "Have you finished your map today? Can you do that [animated cartoon] and finish your map?" Carla shrugged and said, "I might." Unsatisfied, Teacher Q walked over, leaned down with her elbows on Carla's desk, and asked, "What's going on?" The teacher asked further questions about Carla's assignment, indicating that Carla and Dave should be working on their map together.

> Carla: He can do it 'cause I've done everything.
>
> Dave: You haven't let me [do anything].
>
> Carla: Okay, you can do this.

As Carla spoke, she got up and walked away from her desk, appearing to be mad. The teacher said nothing and left Dave at his desk. Carla walked over to the paper supplies and took a long sheet of poster paper. She walked back to where Dave was seated and sounded sincere when she asked, "Dave, Dave, wanna help me, 'cause I need your help?" Dave quickly said "Okay," stood up, and followed Carla to a table where they both could work. Observation of Carla ended as both she and Dave were working on their map.

The observer and Teacher Q both viewed Carla as easily distractible and often off task. The observer wrote:

> She talks with other students a great deal and wanders around the classroom. During meetings in the rug area, she frequently interrupts the teacher. Carla is often a rule enforcer.

The observer noted that Carla was older and physically larger than other students in the class. The observer also indicated that Carla spent time in Teacher W's class on a regular basis, and that Teacher Q seemed to treat Carla in a favorably biased way.

Teacher Q had taught Carla in third grade and, thus, had a well-developed perception of her at the beginning of the school year:

> She has a background of a lot of emotional upheavals. I think her life has straightened out and gotten more solid in the last few years and

> she's feeling good about herself and her family and her place with the other kids and her place with the world. Carla has a real sensitivity and a real good sense of humor. She still does a lot of things for attention, attention from the other children and attention from me. One day, in the middle of silent reading, she started sneezing about ten times louder than she really needed to, and leaped up into the air, threw her books in the air, and ran off outside, and nobody knew what was wrong. All it was was that she had to sneeze some more. I asked her later, and she said, "Well, I had to sneeze some more and I didn't want to do it during silent reading." She does these big, dramatic, kind of crazy things in the classroom to get attention now and then, or just to be a clown, maybe. Now that I know Carla and know what she's all about, it doesn't bother me. I think the other children are used to it too. I get a real kick out of Carla. She's going to have a good year.

Right before the work activities event, when asked how she thought Carla would do that day, Teacher Q said:

> She can be spaced out, especially if she's in a fight at recess -- which happens fairly frequently. Other kids pick on Carla because they don't like her mother. They tell Carla that her mother's a bitch; that hurts Carla. (Note: Carla's mother is a teacher at the school.)

Regardless of her generally friendly and sympathetic disposition toward Carla, Teacher Q gave a fairly objective evaluation of Carla's performance after the observation, indicating that Carla did not get much accomplished.

> She starts things and then gives up or gets involved in other things. She'll just drop an activity.

Carla was interviewed following the work activities event, and her responses indicated mixed awareness of activity requirements and her own performance. When asked about the Indian Project, Carla said she did not know when the project was due; she did have reasonable ideas about how the map project would be evaluated, mentioning "neatness, spelling, and capitals."

When asked how her behavior during the period compared to what the "perfect student" would have done, she replied:

> I think I've done good 'cause I've really gone a far way with the map, by myself. And see the

other people, they show me where to draw, but then I draw it. So . . . I do really all the work.

On the other hand, Carla said that she had made lots of "bad" maps previously because she often did not "do all the details" or "got frustrated and threw it away."

In sum, Carla seemed to have difficulty working productively on the assigned activities. This may have been due to lack of motivation or inability to concentrate or both. Carla's social interactions during class time seemed to indicate a fluctuating mood. While she sometimes behaved in a friendly, generous manner, at other times she was selfish and rude.

Conclusions and Implications

The work activities event that was observed suggests that Teacher Q was well organized in terms of giving out assignments. She planned the assignment materials well (e.g., the Indian Project sign-up sheet, the Record Listening sign-up sheet), and most students seemed to know what was expected both in terms of which assignments to work on (as presented in the initial class meeting and as listed on the chalkboard) and how the assignments should be carried out.

Teacher Q gave her students an exceptional amount of freedom to work independently of the teacher. The teacher monitored students and helped individuals, but she seemed to prefer that students progress completely on their own or with peer collaboration. This setup produced mixed results. While some students seemed to be able to work productively in this framework (e.g., Mickie), many others seemed to have great difficulty in focusing their efforts on the assignments and instead spent the great majority of the period in off-task behavior. The teacher seemed to tolerate off-task behavior, perhaps because students interacted well together and created few disruptions.

As implied, Teacher Q did seem to accomplish her social goals for the class. Students seemed familiar and comfortable with each other even across distinct friendship groups. Since the teacher did not interact frequently with students, it is difficult to comment on teacher-student relationships. It did seem that students valued the teacher as a resource (whether or not she wanted this), and that the teacher understood her students' behavior fairly well.

CHAPTER TEN

TEACHER U - FIFTH GRADE

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

This chapter describes the work activities event that was observed in Teacher U's class on Tuesday, November 27, 1979. The entire work activities event was devoted to an ongoing Social Studies Packet assignment. There were 20 sub-assignments in the Social Studies Packet, and students were expected to complete 15 of the 20 assignments by Wednesday, December 12, 1979.

Teacher U taught a combination class of fifth- and sixth-graders. She was a vivacious and quick-tempered woman who had been teaching at Central School for 9 of her 15 years of teaching. During this period, she had attended numerous in-service workshops, acquiring 60 hours of post-credential coursework. Teacher U perceived that an important part of her role as a teacher was to prepare her students for the rigors of junior high school. When she spoke of her instructional program, she differentiated her class from the more "unstructured" classes in the lower grades at Central School and explained that her class provided an important transition for older students.

During the observed event, all of the sixth-graders left the room to work with another class of sixth-graders. The group left consisted of all fifth-graders.

Overview of the Work Activities Event

Social Studies Packet

Students had been assigned a Social Studies Packet containing 20 separate sub-assignments on a previous occasion. Typical assignments included reading chapters in the social studies textbook, answering questions about the text, drawing copies of historical maps and flags, writing reports about famous patriots, defining vocabulary words related to the Revolutionary War, and completing various worksheets. A copy of the assignment sheet listing all of the sub-assignments appears in Appendix A.

The students used 9" x 12" manila envelopes to keep the completed sub-assignments and the assignment sheet handy. Each envelope was marked with the student's name, and students kept these envelopes in their desks. None of the assignments required students to work with others to complete a single product, but many students took advantage of the informal opportunity to ask peers for help or ideas. The teacher intended students to move freely from one assignment to the next; she planned to examine and assign a grade to the entire packet when

the time allotted to this assignment expired on December 12. Students were expected to have completed 15 (out of a total of 20) assignments by that time; they were allowed to do additional assignments for extra credit if they wished.

The Elements of the Work Activities Event

The elements of the observed Social Studies Packet lesson are described below. Table U.1 summarizes this information.

Content

The content for the observed work activities event was a Social Studies Packet about the American Revolution.

Grouping

All 16 fifth-graders in Teacher U's class participated in the work activities event. There was no formal group assignment by the teacher. Informal groupings could be observed from time to time as children worked on specific sub-assignments, but the bulk of the work was individual.

Division of Labor

The teacher expected each child to complete their own assignment. She also made it clear that she did not intend to provide specific instruction during the lesson because she would be involved in "conferencing" with students about their report cards. Children were expected to use each other as resources, and thus there was the opportunity for informal peer assistance.

Student Control

Students were explicitly given control over which 15 of the 20 sub-assignments in the packet to complete. They could also choose the order in which they tackled the assignments. Because the teacher gave the students three weeks to complete the entire packet, and did not formally monitor their progress, the students were able to control the time devoted to each sub-assignment.

Student Advancement

Children were free to move from sub-assignment to sub-assignment without checking with the teacher.

Table U.1

Teacher U's Work Activities Structures During One Class Assignment

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Social Studies Packet	All fifth-graders in class; no groups assigned by the teacher	No division of labor; students responsible for completing their own assignments	- Which 15 of 20 sub-assignments they work on - The order in which the assignments are completed - Pacing of assignments	Can advance through the sub-assignments at their own rate without teacher approval	Observational scan of classroom for misbehavior; occasional monitoring of and comments about academic products

Teacher Evaluation

Since Teacher U was "conferencing" with students about the work they had completed during the semester, the majority of her time during the work activities event was devoted to explaining to students her general evaluations of their academic work and planning strategies for the maintenance and improvement of their successful academic behavior.

In terms of the Social Studies Packets, the teacher did not formally evaluate the assignments because she did not receive any completed Social Studies Packets. She did, however, provide informal feedback to students when they asked her questions and monitored the work of various students when she occasionally walked around the classroom. During this time, the teacher made both public and private evaluations of individual work. She told Milt, for example, "This is what's wrong; they came from Philadelphia." At one point, she also evaluated privately the academic work occurring within an informal grouping of students. For the most part, however, Teacher U's evaluations focused on the behavior of groups of students and individuals. At one point, she sanctioned a student, Peter, who was talking, by calling his name loudly. In addition, she made a public evaluation of the personal character of a student by saying in a joking tone of voice, "Such a sweet little face."

Task Demands

The task demands experienced by the students varied according to the sub-assignment in which they currently were engaged. These demands included memorizing facts and speeches, writing essays and reports, drawing maps, and using logical deduction to complete worksheets.

Motor Demands

Several of the sub-assignments required students to make maps and other drawings, thus requiring fine-motor skills and coordination. In addition, most of the sub-assignments required students to write in cursive.

Interactional Demands

Analysis of the narrative protocols revealed several interactional demands. First, students were required to work quietly and not disturb each other. Second, students were expected to cooperate with each other and give mutual assistance when necessary. Finally, students were expected to use the teacher as a resource person only if their peers could not provide the needed help.

Student Response

Observational data were collected on two target students during the event just described. Each student's response to the work activity structure and task demands put in place by the teacher is summarized below.

Marta

At the beginning of the lesson, Marta sat on the floor cross-legged as the teacher explained that the class was to work on their Social Studies Packet. Marta was chewing a large wad of gum and looking up at the teacher. Her attention then moved to another student, Lance. She watched as he moved from one seat to another. Her attention returned to the teacher. Marta blew a bubble as she watched the teacher. During this introductory episode, the class was quiet. At the end of her explanation, the teacher admonished the students to use their time productively and said, "If I see you wasting time, I'll think you're comfortable with the work you're doing." She told the class that she was going to act as a resource person and informed the students, "You can get started working."

Marta rose from the floor and went over to her desk. She talked briefly with another student. Then she ran over to a cabinet near the door. The teacher did not sanction her for this dash. Marta returned to her desk with a piece of lined paper, sat down, and folded the paper into quarters. Marta called to Kathie. After calling Kathie's name four times, Kathie finally responded. Marta asked her for a pen. With a nod, Kathie handed a pen to Marta. In response, Marta told Kathie, "Here's your pencil," and threw the pencil back to Kathie. Then Marta beckoned to Kathie to come over and talk with her. Kathie walked around the circle of desks toward Marta and sat down.

Marta continued to write on the folded sheet of paper as she talked continually and quietly to Kathie. Kathie began to walk across the room. Marta called to her, "Shhhh. Wait." Marta joined Kathie, and the girls walked together to get more paper. They returned to their desks. Marta folded the second sheet of paper into quarters, just as she had folded the first, and wrote on it using the pen Kathie had given her. At this point, Marta had not taken out any of the assignments in her Social Studies Packet.

Sandi, another fifth-grader, returned to the room from the library area. Marta watched Sandi walk across the room. As Sandi left her line of vision, Marta made an inaudible comment to Kathie. Marta crossed her eyes and made a strange noise in her throat, apparently in reference to Sandi. Marta's attention returned to the second folded piece of paper she was working on. Kathie left her seat and returned a few minutes later. Marta motioned for Kathie to give her the folded sheet of paper she was carrying. Kathie handed her the paper, and Marta looked at it with a smile. Marta

put it in her sweater pocket. Then she took the paper back out of her pocket and wrote something on it. She handed it to Kathie, who had walked over to Marta's desk. Marta turned her attention back to the sheet of paper on which she had been working. She was using a ruler to trace and darken lines already printed on the paper. It was clear that this work had nothing to do with the Social Studies Packet.

After tracing awhile longer, Marta walked over to the observer and asked for her autograph on a piece of folded paper. Next she went to Lance's desk. She handed Lance the folded piece of paper, retrieved it after he signed it, and took it to Kathie's desk. When she arrived at Kathie's desk, she announced, "This one's mine" (referring to what was apparently her autograph booklet). Marta next walked over to Terrance's desk and handed him a pen. Terrance and Marta talked briefly. Marta chewed her gum and waited for Terrance to sign her booklet. After this, she continued on to Daniel's and Peter's desks. At each boy's desk, she stood with her hands in her sweater pockets as they signed the booklet. She then took the booklet she had been circulating and walked to Auggie's desk. Auggie asked Marta, "What's this?" Marta replied, "I don't know. It's for the end of the quarter." He then asked about two names written in the booklet which he did not recognize. Marta pointed to the observers who were sitting in the classroom, indicating that they were the missing persons. Marta continued to chew her gum as Auggie searched through his desk. She asked, "What are you doing, Auggie?" He replied, "I'm looking for a pen eraser." Marta asked the students around her if anyone had a pen eraser. Auggie got up and began to look around the classroom for a pen eraser.

Marta passed Kathie's desk as she walked toward the side of the room. Kathie exclaimed, "I'm going to get Teacher U to sign mine." Marta told her, "Ask Teacher U to sign mine also." Both girls walked to where the teacher was sitting. The teacher greeted them by remarking, "What about your social studies, ladies?" Looking directly at Kathie, the teacher added, "Marta's got time to fool around, but you don't." Marta and Kathie returned to their desks and began working on the cartoon assignment which was part of the Social Studies Packet. The observation of Marta concluded here.

After the observation, Marta was interviewed and asked about what she did during the work block. She replied that she and Kathie, "were just going around with these things, getting signatures for the end of the quarter." When the interviewer asked why Teacher U had remarked that Kathie had to do her social studies work, but Marta didn't, Marta replied, "I got mine done, but she hasn't yet." The interviewer probed to find out whether the teacher was displeased that Marta was not working on her social studies. Marta shrugged her shoulders. After another probe from the interviewer, Marta replied, "I don't really know; she didn't act like she did."

After establishing the fact that Marta had finished all of the 15 sub-assignments, the interviewer asked if there was anything Marta was supposed to be doing. Marta replied that until the teacher gave

her another Social Studies Packet to complete, she was not responsible for doing schoolwork during social studies.

It was notable that Marta worked on her Social Studies Packet for approximately 2 minutes during the 26-minute observation. Curious about this, the interviewer later asked Teacher U what Marta was supposed to have worked on during the observed event. The teacher replied that she intended the Social Studies Packet to be a three-week assignment, but that Marta had finished the Packet in one week. The teacher then shrugged in a way which seemed to indicate: "But what can you do?" She added jocularly, "I think her mother does [her work]."

The observer summarized her perceptions of Marta's work by noting:

> It is difficult to comment on Marta's academic behavior because she was not engaged in academic work during the observation, nor was it clear that there were any assignments that she should have been working on. It was evident that the teacher preferred that Marta do her academic work at school rather than at home, but this is not what happened. Marta ended up distracting other children in the classroom from working on their assignments. This was particularly true for Kathie, although it applied also to the other children she approached to sign the booklet. This was clearly undesirable and inappropriate behavior in the classroom, although Marta was not sanctioned for this behavior. It is my impression that the teacher was aware that Marta was not working.

Kathie

At the beginning of the observation, Kathie stood next to Marta's desk. She showed Marta a piece of paper folded into quarters. She then walked over to the wastebasket near the door and threw the folded sheet of paper away. Returning to her desk, she took out a pencil and set it very precisely on the edge of the right side of her desk. She picked up a yellow worksheet from her Social Studies Packet, which presented examples of cartoons drawn during the colonial period. Kathie glanced at it briefly. Still reading the yellow assignment sheet, she got up, walked over to the teacher, and asked her about the assignment. The teacher explained, "These are cartoons. What they want you to do is draw a cartoon of the Boston Tea Party, then write a story, a newspaper article, about the incident. Pretend like it was yesterday. Don't say 400 years ago." After receiving this clarification, Kathie returned to her seat. Dotti and Sandi entered the classroom from the library area. Kathie said to Dotti as she passed, "This is easy," indicating the cartoon and story assignment. Dotti and Sandi returned to the

library, and Kathie began leafing through a sheaf of dittoes on her desk. She took out the master list of assignments. At this point, Marta walked over to Kathie's desk, and they talked about the pieces of paper folded into small booklets.

Marta took the folded piece of paper to various students. Kathie remained working at her desk. Approximately six minutes later, Marta returned with the booklet and placed it furtively in Kathie's desk. Marta said, "Hurry." Marta took the booklet from Kathie's desk and placed it in front of Mickey with the instructions, "Sign this!" Mickey signed and then asked Kathie, "What's this?" Kathy gave no reply. Kathie and Marta approached the observer and asked her to sign the booklet, giving the explanation that, "It's for the end of the year." The observer complied and signed the booklet. The girls carried the booklet to Bobby. Kathie then walked over to the teacher, who was writing furiously. Kathie did not disturb the teacher, and she waited for some time to be acknowledged by the teacher. A few minutes later, the teacher said without looking up, "I'm listening." Kathie talked briefly about her report card with the teacher and then returned to her desk.

Kathie got up, walked to Bobby's desk, and took back the folded piece of paper. Marta was standing at Bobby's desk when she arrived. Kathie and Marta talked briefly. Kathie returned to her seat and began to leaf through the dictionary that was lying on her desk. After a few moments, she turned her attention to the colonial cartoon she had been working on. Kathie concluded the work block by working on the cartoon and talking with Marta about it. The observation of this work block stretched over 28 minutes.

At the end of the observation, Kathie was interviewed. When asked how social studies usually worked, Kathie replied:

> She gives you an assignment, and you have to do 15 of these, and you pick which ones you want. There's directions on the papers, and you read the directions. Then you do what it says, and when you finish it, then you go on to the next sheet.

When asked about the time given to complete the assignment, Kathie responded that she was sure that all of the work had to be done by the end of the quarter, but she was uncertain about the exact due date. The interviewer asked Kathie how she was doing on the social studies packet. She replied, "Oh, I don't know . . . I don't know how many I've got done . . . I guess I'm doing pretty good. I don't know."

The interviewer probed to determine Kathie's perceptions of the procedure the teacher used to assign grades. Kathie said, "When you're all done with them, you get like an 'A' or something. You make it into a packet."

When asked to explain what she was doing this period, Kathie responded:

> Oh, we were writing little notes so we could remember the people, the person that wrote, you know. If like you're really old, and you want to look back and remember all your friends that you went to school with.

When asked to explain why Teacher U had asked Kathie about her social studies work, Kathie replied:

> Oh, she said you should be doing -- she said, Marta could be fooling around, but she said it'll be all right -- well, she said, um, I forgot . . .

The observer summarized her impressions of Kathie by noting that Kathie seemed to be "a painfully shy, unconfident little girl. She has wispy blond hair, thick glasses, and wears a retainer on her teeth. She engaged in very little academic work during the observation. Her strategy seemed to be to avoid academic work situations where she was not confident. For example, when she looked at the yellow assignment sheet on colonial cartoons, she spent very little time trying to figure it out before seeking the teacher's help. In fact, she was still reading the directions for the first time when she walked up to the teacher's desk. Kathie gave the impression of being a child who felt there was little likelihood that she would be successful in figuring out or doing academic activities. Therefore, she expended very little effort in trying to do so."

Conclusions and Implications

Viewing Teacher U's intent as it was expressed to the class, the work activity structures put in place, and the observations of Kathie and Marta, it appears that there was an incongruence between the teacher's intentions and what actually took place. By giving the students control over the amount of time they spent on the completion of the Social Studies Packet, and by encouraging students informally to talk and work with one another to complete the assignment, the teacher implicitly gave the students the opportunity to use class time for socializing. The only requirement was that the students somehow complete the assignment within the three-week limit.

After the observation was completed, the teacher indicated that she wanted students to work on their Social Studies Packets during the school day. Unfortunately, her activity structures were not aligned to operationalize that intent. As a result, the teacher was caught in a bind. She could not dissuade Marta from walking around the room with her name booklet because Marta already finished the work and was behaving within the enforceable limits of the activity structure the teacher had established. When asked if

Teacher U was displeased because she didn't work on social studies, Marta replied with a shrug of her shoulders, "I really don't know; she didn't act like she did." If Teacher U was displeased, she didn't dare express it, probably because she realized her own system allowed for such abuses. On her part, Marta had no intention of completing more work until it was assigned by the teacher. The teacher had given the entire class three weeks to complete the Social Studies Packet, and she apparently did not want to make a special exception in the case of Marta and assign her more work.

Here we see the potential consequences of a teacher who intends to keep students working during social studies, but has sabotaged that intent by giving students two choices. First, they may spend as much -- or as little -- time on the assignment as they need. This allows for a student-initiated choice of pacing. Second, they may work on the Social Studies Packet at home. This allows for a choice of place where the student completes the work. One may speculate that the teacher experienced internal stress and perhaps even feelings of helplessness as a result of sabotaging her own instructional intents with an inappropriate activity structure. In addition, although Marta had finished her work and presumably benefited from the assignment, she was able to distract Kathie as well as other students. Her off-task behavior may have been more than a distraction and may have encouraged others to engage in off-task activities. This is, therefore, a good example of the importance of operationalizing activity structures which are congruent with instructional intent.

CHAPTER ELEVEN

TEACHER T - SIXTH GRADE

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

This chapter describes one work activities event that took place in Teacher T's class near the end of the school year. The event is described in terms of its work activity structures, task demands, and student responses. The description of the event is based on a combination of observational and interview data.

At the time of the work activities event, Teacher T was teaching a class of 24 sixth-graders (14 girls and 10 boys). Teacher T had taught sixth-graders for four previous years at Central School. The teacher viewed sixth grade as a challenging assignment because it included preparing students for junior high school. He said that at Central School this preparation necessitated becoming more structured and regimented, because Central School generally embodied a more open philosophy than the junior high school. The "regimentation" that Teacher T talked of seemed to refer to the kinds of assignments he gave (e.g., assignments that were not individualized and required student initiative and higher decision making) and the way they were assigned (e.g., with closely observed deadlines). On the other hand, Teacher T still followed many of the attributes of the Central School educational philosophy. For example, he tolerated a modicum of socializing, encouraged students to use one another as resources, and had students spend much of their time engaged in seatwork activities.

Teacher T described his current class of students as being at a lower academic level than the levels of his previous classes. He said that this was due largely to the boys, most of whom performed at average or below-average levels. He said most of the girls performed at average or above-average levels. He indicated that the makeup of the class required him to repeat a lot of basic material (e.g., in math and language) and push certain students hard.

Teacher T and his class were observed on May 6, 1980. The work activities event lasted for a half hour during a period between 10:15 and 10:45 a.m. All students worked on one assignment during the event. Data collection specific to the work activities event included observation of the event and interviews with Teacher T before and after the event. In addition, the specific behavior of students was observed during the event, and these students were interviewed afterwards.

Overview of the Work Activities Event

Teacher T had a "Reading Pictures" assignment planned for the work activities event. Two weeks prior to the event, the class had seen a historical filmstrip, and the teacher had shown and discussed with students how it was possible to "read" the details of a picture and learn about the society being portrayed. Teacher T viewed the work activities assignment as a follow-up to this earlier lesson. During the pre-event interview, Teacher T said he wanted each student to select a historical picture and write something about the "values, architectural style, and technology of the people which the picture describes." He added that students could do the writing in the form of notes, an essay, a narrative summary, or an outline. When asked how an ideal student would go about doing the assignment, Teacher T said that the student would "look for a long time at the picture before writing anything down and really mentally tune into the assignment."

The teacher approached the assignment with some reservations about how well some students would be able to handle it. Besides a general noise problem, the teacher anticipated that some students "might not know what to do and pester me by saying so." He explained that this could be expected in a class where students represented such a wide range of abilities.

Teacher T began the lesson as soon as students returned from recess. As the students entered the room and went to their seats, the teacher put out a series of large prints on a table at the back of the room. He then walked to the front of the room (in front of the chalkboard) and started the lesson:

> Okay, sit down in your seats please. [Long pause.] Okay, about two weeks ago, you remember the filmstrip? We talked about looking at pictures. What kind of information can you find in a picture? Who remembers? What kinds of things can you find out?

After several responses, Teacher T continued:

> We could break this down into three main groups. One, what people value -- by their clothes, the room. The background is sometimes very important. Okay, we can also tell about technology. Who knows what technology is?

After a few approximate answers, Teacher T said:

> Okay, technology shows what the new inventions are, what the tools are these people use.

At this point, Teacher T broke off and reprimanded a student for his inattention (the student was tapping a ball-point pen on

his desk). Teacher T asked the student to stay after school. Teacher T resumed by saying:

> This gives you a general idea of what we're doing today. You have only 20 minutes left in this period. There are some pictures on the back table. I'll also put out some books. I want you to take a picture that you like and look at it very closely and write down all the information you can find out about the people in the picture. You may write this information down as a summary. That's a written paragraph. Or you can outline. Or you may write it as notes and then maybe organize it afterwards.

One girl then asked if they would be able to work on the assignment later in the day. Teacher T responded:

> This afternoon when Miss F reads, you will have half an hour then to work on it.

Teacher T dismissed one group of girls to go to the table and select their pictures. As they went to the table, the teacher took a stack of social studies books from a shelf near the window and carried them over to the table. "If you wish to use the books, you may," he said. The teacher proceeded to excuse other groups of students to go select their pictures. As he did so, individual students started asking the teacher questions about procedures for the assignment. In addition, the noise level of the room began to build up. Teacher T began counting out loud, "One, two . . ." as a warning for students to quiet down.

Once all students had selected their picture materials, Teacher T began monitoring students at their seats by walking around the room. During this monitoring, students initiated question contacts with the teacher almost continuously for the remainder of the event. Most of these questions concerned procedures necessary for completing the assignment ("Is this picture alright to use?" or "What should I write?"). The teacher was more helpful to some students than others in his feedback. For example, in response to the questions, "What should I write?" Teacher T told a few students something like, "Maybe you should look at the rest of the picture and look for cues"; for other students, he simply said, "You decide." Twice the teacher had to remind students that, "We're not making up a story. I want you to look at the picture and write what you actually see." At 10:43 Teacher T announced to the class:

> Those finished may hand in their papers. You may hand it in like that . . . Pictures go on the back table. If you're not done, hand it in anyway. Then this afternoon when Miss F reads, get your papers and pictures and finish them.

The event ended as Teacher T stood in the middle of the room to collect the papers that students brought up to him.

The Elements of the Work Activities Event

The elements of the work activities event are described below and summarized in Table T.1.

Content

The work activities event focused on one single assignment -- that of "reading pictures" for their informational content about values, architectural style, and technology.

Grouping

All students in Teacher T's class participated in the "Reading Pictures" assignment. The teacher introduced the lesson to the class as a whole and also monitored the class as a whole.

Division of Labor

Students were expected to complete the "Reading Pictures" assignment on an individual basis, without formal assistance from or cooperation with other students.

Student Control

Students could exercise control over several aspects of the "Reading Pictures" assignment. First, each student had control over the particular content of his or her work product. Each student could choose the picture that he or she wanted to write about from a large selection of pictures. Second, students could carry out the writing according to one of several formats. At the beginning of the lesson, Teacher T stated that students could write in prose, outline, or note form. Third, students had some flexibility regarding how much time to devote to the assignment. The teacher indicated that the assignment was due later in the afternoon and left students with the option of either completing it during the work event period or during a reading period after lunch.

Student Advancement

Once Teacher T had given his students the assignment and excused them to select their pictures, the students could proceed to do the assignment on their own, without any formal approval from the teacher.

Table T.1

Teacher T's Work Activities Structures
During One Class Assignment

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Reading Pictures Assignment	Whole group	No formal division of labor; students independently work on assignment	- Select picture to write about - Select form the writing will take - Complete the assignment now or later in the day	Students can progress on their own when analyzing and writing about pictures	Observational scan of students and their work products; comments made to individuals about performance and behavior

Teacher Evaluation

Teacher T carried out several kinds of informal public evaluation during the work activities event. First, he monitored individual students and their work products throughout the period by walking around the room. During this monitoring, the teacher made informal evaluative remarks to individual students about their work. Some of these statements involved general praise (e.g., "That's a good one"), but more often the statements suggested that there was something different a student should do to improve his or her work (e.g., "[This picture] does not tell you about the people.").

The teacher reprimanded two students for behavior during the seatwork component of the period. In one instance, the teacher told a boy, "Okay, if you quit talking maybe you'll have time to get finished." In the second instance, the teacher tried to prevent one boy, Will, from working on a comic book of his own creation. When he first noticed Will working on the comic book, the teacher walked over, took the book out of his hands, and placed the book back in Will's desk. Ten minutes later, Teacher T saw that Will was drawing in the comic book again. This time, the teacher walked over and took the comic book away from Will, placing it in a box on a back table. Will protested by saying, "Hey I'm done with my [Reading Pictures] work." The teacher simply said, "Good," and turned away.

The teacher indicated during the post-event interview that, based on looking over the papers, he would use his "intuition" to decide whether or not to formally evaluate (grade) the papers. Interviews with the four target students indicated mixed expectations about what the teacher would do with the papers. Two students said that they thought Teacher T would write grades or comments on the papers. The other two students said that they thought the teacher would just look over the papers and do nothing else.

During the post interview, Teacher T talked about his general impression of the assignment. He started out by indicating that he thought the assignment had gone satisfactorily:

> It was the first time the students had done anything where they had to write about what they had learned from the pictures. Given this, I think it went okay. I had hoped that more students would feel confident about doing it; more needed reassurance in what they were doing than I had wanted. Every time you break routine, students need new reassurance that what they are doing is okay.
>
> Half of the students did an okay product; half did three or four sentences or nothing at all; they fooled around long enough so that they didn't have to do the assignment.

The teacher then suggested that there were things that he should have done to clarify the lesson. Specifically, he said that he should have put up a list of the three analytic categories (values, architectural style, and technology) and gone through an example with the class, indicating how to analyze a picture for each category and the sorts of things that could be written down. The teacher said he did not do this because of time constraints. It also seemed that the teacher didn't do this because he had not anticipated that his students would have so much difficulty with the assignment. (Examination of the actual written work of each student indicated that the great majority of students tried to tell "the story" of each picture rather than abstract concepts about what the portrayed society was like.) Teacher T seemed to acknowledge these assignment problems by the end of the interview, saying:

> [The lesson] was a shambles -- it didn't work at all . . . I don't know if it's just me that's turned on about the assignment, and the students don't like it at all, or if the lesson is worth redoing in a more structured way to ensure that the students are able to complete it successfully.

Task Demands

The Reading Pictures assignment first required that students comprehend the teacher's directions for the assignment. After students had selected their pictures, they were asked to identify and analyze the information content in the picture, to summarize this information, and to write down the information in a comprehensible form. The writing required that students be able to combine words to form sentences or phrases and that the students be able to spell the words correctly.

Motor Demands

The motor demands for the Reading Pictures assignment were straightforward. Students had to be able to sit at their desks for a period of time and be able to hold a pencil or pen and write.

Interactional Demands

During the work activities event, students were supposed to work independently and not disturb one another. When speaking with the teacher, it was expected that students would take their turn and not interrupt one another.

Student Response

Bart, James, Sara, and Randy were observed and interviewed on the day of the work activities event. A description of each student's participation behavior follows.

Bart

When Teacher T finished introducing the Reading Pictures assignment, Bart was sitting at his desk with a piece of paper in front of him. He began to write on the paper, listing five different spellings of "pictures." Bart looked up at his neighbor, James. The two boys talked briefly (probably about which spelling was correct), and James then left his desk to get some paper. When James returned to his seat, he and Bart resumed talking. They were interrupted by Sara, who said something to them as she got up from her desk to get a picture.

Bart stood up and walked over to the sink to get a drink. He returned to his desk and sat down. Teacher T then announced to the class, "Anyone who hasn't gone -- get a picture." Bart reached inside his desk and broke off a piece of the chocolate candy that was sitting there. He put the chocolate into his mouth and stood up at his desk. He followed James over to the table where Teacher T had laid out the picture materials.

When the boys arrived at the picture table, only textbooks remained. Bart picked up a United States history textbook and opened it up to one picture. Holding the picture out for James to see, he said, "Hey -- James. Look at the fighting." Bart then called out to the teacher. Teacher T walked over to the table. Bart showed him the picture and asked him if it was alright to use. The teacher responded, "It's up to you," and walked away. Still unsettled, Bart turned to a boy who was sitting at the picture table. Bart asked the boy, "Is this good enough?" The boy shrugged and said, "It looks good enough to me."

Bart sat down at his desk and started writing out a sentence on the same sheet of paper where he had written out "pictures" several times. James sat down at his desk shortly thereafter, and the two boys briefly discussed the pictures in their books. Bart called out to Teacher T. Teacher T walked up, and James first talked with him about his picture. Then Bart asked his question.

Bart: When would you say this was? -- Probably eighteen hundreds -- eighteen something?

Teacher T: Probably.

Teacher T walked away, and Bart wrote down another sentence. When he finished the sentence, he turned to James and started talking about his own idiosyncratic way of writing the letter "D." Bart said to James, "Watch! Watch! I'll write my full name out. That's when I do it." Bart wrote his name out in the top corner of the page, thus completing the following written piece:

> Bart Bret Foddin
> I see a farm family ready to work. This picture was probaly taking in 1858-1890

Considering himself done with the assignment, Bart sat at his desk chewing the end of a comb. Bart then spotted the student teacher and called out a question about what the student teacher was going to do for the lesson he was giving today. The student teacher responded with, "We'll see." The observation period ended at this point.

Teacher T expressed satisfaction with Bart's performance throughout the school year. During the first weeks of school, the teacher described Bart as a below-average student. Nonetheless, the teacher expected Bart to "make good progress" during the year, "although he will not become a high achiever." The teacher viewed Bart as having "good enthusiasm" and added:

> Bart Foddin worked with a tutor over the vacation on math. That was one of his poor areas. He seems to have done well. On the pretest that we gave them, though, he made quite a few mistakes on subtraction and some in two-place multiplication. He did pretty good on division, and that was just about where he was going to start at the end of last year. I think that he is in a good place. He has to go back and do some review, but I think he will do okay.

Prior to the work activities event, Teacher T anticipated that Bart would do "okay," even though "he has trouble with written work and has a hard time starting." During the work activities event, the observer informally noted that, relative to some boys in the class, Bart was "more directed and self-sufficient."

When Bart was interviewed following the work activities event, he indicated differing levels of awareness about particular requirements for the assignment. He viewed the purpose of the assignment as "to put down a few sentences" about what people were doing in the picture. Bart did not mention the three guiding categories (values, architecture, and technology) set down by the teacher. Bart did say that it was permissible to write down the assignment using sentences, notes, or phrases. When asked if the assignment was easy, Bart responded that it was, "because all we had to do was look in a book, pick a picture -- which was easy -- and write about it."

Bart made several comments on what distinguished a good piece of work from a poor one. He said that to do a good job one had to "really write down everything you saw in the picture, all the details," and that working hard on it mattered because:

> Well, like some people just write one or two sentences, and that's inappropriate. It don't -- they don't put that much down. But some kids, like they take a long time on it. They put down everything they see and stuff.

When the interviewer asked Bart how he thought he had done, he answered that he didn't know. Later in the interview, Bart acknowledged that he was not a good writer.

Together, the sources of information about Bart suggest that he was able to focus on the assignment for a short period of time, and that he was satisfied to hand in something reflecting minimal effort. There are several possible explanations for Bart's low-level performance. First, Bart may not have received sufficient instructions and help from the teacher. Bart did not perceive this lack of guidance, however. Another explanation is that, despite Bart's awareness that the assignment required more effort in describing detail, he did not feel motivated or capable of doing it. This explanation is more consistent with the interview information. Observations of Bart during the work activities event indicated that, in the social realm, he was comfortable interacting with both the teacher and peers.

James

James was sitting at his desk as Teacher T introduced the lesson. James was slouched over his desk, resting his head on one arm, with the other arm half-raised off the desk. When the teacher asked the question, "What is technology?", he called on James first. James said nothing for a moment, started to say something, and then hesitated, saying, "No, never mind -- I don't know." Other students in the room started offering answers. One said, "It tells you how smart they are." James followed this up by saying, "Tools are what we call technology." The observer noted that James might have been repeating someone else's answer.

As Teacher T summarized the Reading Pictures assignment, James turned to Bart, his desk neighbor. They chatted, and James asked Bart a question about having extra paper. Bart indicated that he only had one sheet, whereupon James got up and walked over to the cubbyholes containing supplies. He pulled out a single sheet of lined paper and returned to his desk.

James spent the next few minutes trying to get the teacher's attention. When the teacher carried textbooks over to the pictures table, he walked in a path by James' desk. James turned around in

his chair and raised his hand, trying to get the teacher to acknowledge him in mid-passage. The teacher did not orient to James and walked past him. When Teacher T next stood at the pictures table and began calling on students to come up and select their pictures, James again raised his hand. The teacher apparently did not notice James. Finally, James got up and walked over to the teacher. James initiated the following exchange:

James: Can I share?

Teacher T: There's all those books.

James: I know. Can I share?

Teacher T: No.

James and Bart were among the last students excused to select their pictures. They both selected copies of the same history textbook.

Back at his desk, James quickly flipped through his book. He noticed that several students and the teacher were standing in a cluster behind his chair. James stood up and joined the students, waiting his turn to ask Teacher T a question. Before his turn came, James apparently changed his mind about waiting. Instead, he walked over to a bookshelf underneath a window, put his book down, and picked up another textbook. Little thought seemed to precede James' new selection.

Carrying his new book back to his desk, James stopped and talked to several boys seated together. When James returned to his desk and sat down, Bart called out "360," thus recommending the picture on page 360 of his own book. James opened his own book, found a picture, and said to Bart, "290 -- in what book is it? -- Do you have to put what book?" Bart replied, "Yeah," and James closed his book to show Bart the cover and asked, "Is this it?" Bart looked briefly at James's book and said nothing.

James reopened his book and said out loud to himself, "What does it look like they're doing?" He answered his own question: "It looks like they're loading logs." At this point, the teacher approached James and Bart, at least partially in response to Bart's earlier request for help. James showed Teacher T his picture and asked, "What is this?" Teacher T replied that it was a steamboat. James then asked a question about the date of the scene, but the teacher didn't give a direct answer. Instead, he asked James, "What river do you think this is?" Bart was looking on and answered, "Mississippi." Teacher T next asked, "And what would the people do with the wood?" No one answered, and Teacher T seemed satisfied to have given James something to think about.

James began to write with less than ten minutes remaining in the period. He continued writing until Teacher T asked people to start cleaning up. James' finished piece read as follows:

in the United States

> This picture looks like some people are going for a cruse on the princess. the workers are loading logs and wine. the logs are for the steam engins and the wine is for partys.

At the beginning of the year, Teacher T viewed James as a student whose profile was similar to that of Bart's -- i.e., a below-average achiever who would show improvement over the course of the year. In terms of motivation, Teacher T viewed James and a boy named Jake as sharing similar characteristics:

> James and Jake seem very highly motivated right at this time. We haven't done any solid basic core. They are anxious because they don't want to be in the dumb group. They know they have limited abilities and they are anxious about that. I talked with them about math today. They were willing to do almost anything to get their math problems correct, but neither of them could divide. I tried to explain to them that we want them where they belong. We don't care where it is, that that doesn't make you dumb, that the majority of the students will have to redo division again this year, and that's okay. We just want to make sure that they do know how to do it, and that was the important thing. Hopefully, we can keep that up.

It was known that James spent part of each day receiving supplemental instruction from Teacher W.

Prior to the work activities event, Teacher T mentioned James as one of several students who probably would have problems with the assignment. The teacher described these students as needing "constant confirmation that what they're doing is right." He predicted that "they are not going to start until they know what they are doing is correct," and that they will say "I don't know what to do."

The observer's informal impression of James during the work activities event confirmed some of the teacher's expectations. The observers noted that James asked several questions of Bart during the lesson, and that these questions did not seem to result from ignorance so much as a lack of confidence in understanding the task. The observer also noted that the teacher seemed more willing to give attention to Bart than to James, even though Bart was the more self-directed of the two.

James was a talkative interviewee following the work activities event. His discussion with the interviewer about the requirements of the assignments indicated adequate if partial understanding:

Interviewer: Can you think back, remember anything about what [Teacher T] said you were supposed to be doing?

James: Yeah, to write a pic . . . what would you think about what the people are doing in a story or something. You know, like what they were thinking or something.

Interviewer: Was there anything you were especially supposed to look for?

James: What they were doing I guess.

Interviewer: Anything you were supposed to find?

James: Um, what their technology was.

Interviewer: What's technology?

James: Um, like what their -- how good their inventions were a while ago.

Interviewer: Anything besides technology?

James: Uh, not really.

Interviewer: Well, so once you found that out, what were you supposed to do?

James: Okay, I was supposed to write in a story or, you know, just a paragraph -- or you can make it an essay -- and tell what the people, what you think the story was, what the picture was about.

Further questioning suggested that James had a fairly good grasp of his own behavior during the work activities event. He acknowledged that he had spent most of the period trying to settle on which picture to use and that he had gotten started writing several minutes before he had to turn his paper in. James also was aware that he had misspelled words:

Interviewer: Did it matter if you spelled words right?

James: I don't know, but I underlined words that, I underlined words that I think are wrong so he can correct 'em.

Interviewer: And why did you do that?

James: So he can watch for those words, and that I know that I spelled it wrong, and I'm gonna find out what the real spelling was.

When asked whether Teacher T had provided clear enough instructions for the assignment, James implied that something was lacking.

I guess it came through a little bit clearer after I thought about it . . . I mean he's probably clear for other kids, but not for me because I was up -- I didn't -- I didn't quite understand until he said something, you know.

James added that he gained a clearer understanding of the assignment after thinking about it and after guessing and listening to his fellow students. James assessed his final performance by saying that it was, "Pretty good, I guess -- because I tried." His perception of self-motivation seemed linked with his overall attitude toward school:

Interviewer: Would you come to school if you didn't have to?

James: Yeah.

Interviewer: Why?

James: I want a good education when I grow up.

Interviewer: What's that mean, a good education?

James: Means that I want to be smarter, and I want to be able to go through college well, and I can get a good job and have a good life when I grow up.

Interviewer: How does school help you to be smart?

James: Well, because the teachers make you study, and they want you to be a good student for them, so I guess they make you, I don't know.

In sum, James had difficulty getting started on the assignment, but he showed interest and effort in carrying it out. In accordance with the perceptions of the observer and the teacher, James did seem to need assurance that he was doing the right thing. He gained most

of this assurance from other students rather than the teacher. Also, while the teacher had expected James to have more trouble with the assignment than Bart, it seemed that James produced a more conscientious product in the end.

Sara

When Teacher T finished introducing the Reading Pictures assignment, Sara began to chat with Cynthia, who was sitting in the opposite desk. After most students had gone to the pictures table to get their pictures, Cynthia said to Sara, "Come on -- let's go back." Both girls stood up and went to the pictures table. Cynthia quickly picked out a textbook and then waited for Sara to select hers. Sara selected a different textbook.

Sara and Cynthia sat back down at their desks and they each started leafing through their books. Cynthia said, "167 -- 167," to Sara, implying that she found something on that page. Sara, perhaps realizing that she had a book different from Cynthia's, said nothing in return. Cynthia then stood up and told Sara that she was going to get some paper. Sara looked up and said, "Yeah, I want some too." While Cynthia was off getting paper, Sara leaned over her desk, propping her head up with one hand, and flipped through more pages in her book at a lethargic pace.

Now, halfway through the period, Sara stood up and started to walk slowly across the room in an irregular path. Sara looked around her as she walked. It was not evident where she was going until she stopped for a drink at the fountain. Sara returned to her seat at the same slow pace. As she sat back down, Sara said something inaudible to Cynthia. This comment initiated an episode of chatter that was accompanied by nods, smiles, and giggles. When this chatter died down, Teacher T was standing behind Sara's desk with a group of students who were waiting for his assistance. Cynthia called out a question to Teacher T, but he didn't respond verbally. Sara observed Cynthia and the teacher's reaction. Sara then stood and stepped up to the teacher. She asked Teacher T something, but neither her question nor his response could be heard from a distance. Probably as a consequence of Teacher T's response, Sara walked away and into an adjoining room in the pod. She looked for something on a shelf, and finding nothing she returned to her seat.

Sara sat at her desk with her book opened to a picture that she apparently planned to use. Sara was having difficulty keeping the book lying flat on her desk, and she said something to Cynthia about it. Cynthia proceeded to demonstrate how to keep a book lying open by placing another book on top as a weight. Sara started to write, looked up, and asked Cynthia how to spell "trying." Cynthia leaned forward and spelled it out loud while simultaneously writing the letters out on the corner of Sara's desk top. Apparently unsatisfied, Sara got up and went over to the teacher to ask him to spell the word. Teacher T quickly spelled it for her. Sara returned to her

desk, and she and Cynthia again started to engage in a very animated conversation. The exchange was brief, and Sara soon turned and called out, "Hey [Teacher T], when did the Pilgrims sail?" Teacher T may not have heard the question, but other students around Sara did. Several of them shouted out answers for her, all of which were different. With a look of exasperation, Sara got up and went to Teacher T. They had a brief exchange.

Back at her seat, Sara started writing again. As she did so, she and Cynthia exchanged commentary on what they were writing.

Teacher T announced that it was time to hand in the papers. With little ado, Sara stopped writing and closed her book. She walked over to Teacher T and gave him her paper, which read as follows:

Sara

> This picture looks like a painting of a boat at a dock and people are trying to get on the boat. It looks like the 1600's because it reminds me of the pilgrams with the hats and everything.

Teacher T spoke of Sara in a general and positive way at the beginning of the school year. He described Sara as a "good, high academic achiever," who socially was "also in a good place." When interviewed before the work activities event and asked about how Sara would perform, Teacher T said, "She'll have no problem with the assignment." This assessment was qualified after the event when Teacher T mentioned Sara as one of the students who came to him and asked questions not to get answers but to get emotional confirmation.

The observer's informal impressions of Sara focused on her close relationship with Cynthia. The observer noted that Sara seemed to be the more dependent and less directed of the two. This friendship may have been a relatively new alliance since Teacher T said that Sara had a close friendship pattern with two other girls at the beginning of the year. On the day of the work activities event, Teacher T acknowledged that the adjacent seating of Sara and Cynthia was becoming a disruptive arrangement and that he planned to change it.

The interview with Sara, after the work activities event, indicated that she had difficulty articulating the requirements of the assignment in any detail.

Interviewer: What were you supposed to be doing?

Sara: Writing about what the picture looks like and what it tells you, how -- what they did when they were that -- in that age.

Interviewer: And any particular things you were supposed to look for?

Sara: The clothes they wear and like, um, I don't know, how their clothes looked, different things like that.

Interviewer: Anything else?

Sara: Not really.

The interviewer asked Sara several times about the permissible writing formats for the assignments, but Sara did not seem to understand the question. She ended up agreeing with the interviewer that the writing had to be in "narrative form." Further discussion with Sara suggested that she didn't think there were many quality standards for the assignment.

Interviewer: How can you tell someone who did that assignment well from somebody who did it poorly?

Sara: They wrote more maybe, or they just did it faster because they knew what they wanted to write.

Interviewer: Did it matter what they said?

Sara: No.

Interviewer: No. Main thing is writing a lot?

Sara: Uh-huh. Just about the picture.

Interviewer: Does it matter how you spelled words and whether things were neat?

Sara: No. I think we're going to do it over again. I don't know. He would have told us to write it neat if we really needed to.

Interviewer: Would he have told you to be careful about spelling?

Sara: Uh-huh.

When asked whether the assignment was hard, Sara said, "No, it's just writing what you think. And there's no right answer probably." When asked directly about how she performed during the event, Sara said that her writing was "not that good," and that she "maybe talked a little too much."

In sum, Sara expended little energy during the period on actually writing the Reading Pictures assignment. Most of her activity seemed to revolve around her companionship with Cynthia. While Sara

did approach the teacher several times with questions, these initiations with the teacher did not seem abnormally bothersome given the teacher's sparse instructions and the similar behavior by many other students.

Randy

Randy was sitting at a group of six desks with five other boys. With his picture selected and placed in front of him, Randy used his teeth to take the cap off his felt-tip pen. Randy's picture showed General Lee's surrender to General Grant. Randy started to write something on his sheet of paper. His neighbor on the right, Thadd, said something about one of the generals portrayed in Randy's picture. Randy then contemplated his picture for a couple of minutes.

Randy reached out and put his hand into the lunch bag sitting on Thadd's desk. Thadd reacted quickly, saying, "Get out of there!" Randy took his hand out, saying, "I didn't do anything." Randy resumed his writing, this time carrying on a conversation with Thadd at the same time.

Will, who sat diagonally from Randy, stood up and looked at Randy's picture. Will then began to tell a long story about a television show he saw on General Washington.

Randy got up and walked over to Teacher T. He asked Teacher T whether he could go and work in an adjoining room. Teacher T said, "You can't be in a room by yourself." Randy returned to his seat. He reached in his desk, pulled out a wine cork, and placed the cork on the desk of his left-side neighbor, Bruce. Bruce asked, "Did you steal this?" Randy answered, "I found it out there," and pointed to the school yard.

Bruce called for Teacher T's help, and Randy returned to writing. As Bruce began explaining his picture to the teacher, Randy looked up and listened. As Teacher T asked Bruce a question, Randy stabbed his pencil through one corner of his paper and began to swing the paper around on the pencil. When Teacher T finished talking to Bruce, he walked to the center of the room and asked for the papers to be handed in. Randy stood up and walked over to the teacher's desk, where he placed his paper in a box.

Randy's completed paper read as follows:

Randy D. The Picture

In this picture I see general lee and general grant. I see a flag, an american flag. confederate solgers watching lee and grant.

I see three chairs and a white and red table cloth.

> This is probably in 1804 about. Ther is a picture of general washington. Gr. lee has a sword and he is going to give it to general grant.

Teacher T was familiar with Randy prior to having him in his class for the current school year. Teacher T apparently had heard that Randy had been a "social problem" in fifth grade. At the beginning of the current school year, Teacher T indicated that he already saw an improvement in Randy:

> Randy is not a social problem in that he disturbs other people, but last year he created some of his own social problems inside of himself. He felt no one liked him, that he was different than everybody else, and because he felt that way he made himself be more so. He wanted to be known as the "different kid" or the "weird kid." He would plainly state that. I don't see that this year. He seems to be much better adjusted, more serious, ready to get work done, and there is a twinkle in his eye this year that I didn't see last year. He seems to like himself a lot more, and I think that that is going to be a big plus for him.

When discussing how social groups had changed from fifth to sixth grade, Teacher T noted:

> Basically, the only one who changed groups would be Randy, who now is with Will and Sam. I'm glad to see that. At least he is in a group. Last year he sat alone most of the time.

Teacher T apparently considered Randy's social behavior to be more salient than Randy's academic behavior, since the latter wasn't mentioned explicitly. Immediately prior to the work activities event, Teacher T simply said that Randy "will do fairly well. He's very creative."

When interviewed after the work activities event, Randy indicated that he had a moderate grasp of the assignment. He described the purpose of the assignment as follows:

> Well, we're supposed to, um, look at the picture and see, write down, maybe, if you think what time it is, and what you see about what this picture is, like, and observe what was in the picture, and stuff like that.

Randy did not mention the three descriptive categories that the teacher had outlined. However, Randy did go on to say that the assignment could be written in note, outline, or paragraph form. Randy

also indicated that he thought there were certain basic requirements for the writing aspect of the assignment:

> Well, you gotta, when you have, you have to put capital, capitalization and period and question marks, and where they go, and then indentations at the beginning of paragraphs, and good writing, which I don't really have. I have good handwriting, but not very good printing.

When asked how his own assignment had turned out, Randy said, "I thought it was pretty good." Randy also added that "I could have written better," referring to his handwriting and punctuation. Otherwise, Randy seemed satisfied with his work, perceiving himself to have made an effort to do the assignment well.

In sum, Randy seemed to be a moderately successful participant during the work activities event. He was able to attend to the assignment for some period of time despite social interludes. Also, Randy proceeded with little assistance from others. Although the content of Randy's work did not address the categories specified by Teacher T, his work seemed above the average quality of product in the class. Consistent with Teacher T's beginning-of-the-year assessment, Randy seemed friendly and comfortable with his deskmates.

Conclusions and Implications

The observed work activities event was a Reading Pictures assignment that Teacher T had difficulty translating into a successful experience for his class. Students seemed to have little understanding of the teacher's intentions, either because the task required a level of inference beyond the grasp of sixth-graders, or because the teacher's directions were inadequate. Student participation during the event was mixed. Almost all students seemed to spend some portion of the period off task. Many students also seemed to want Teacher T's assistance on the assignment. This assistance was often minimal and not geared toward compensating for inadequate directions. Perhaps, as his post-event interview suggests, Teacher T quickly gave up on the lesson and felt it was too late to redirect its course. In retrospect, he realized how he might have improved the lesson at the very outset -- namely, by working through an example with his students and emphasizing the three conceptual categories of values, architectural style, and technology.

It is difficult to determine if this work activities event was a representative sample of the kinds of events that took place in Teacher T's classroom. The degree to which Teacher T perceived it as a failure suggests that it was atypical. On the other hand, the interviews with students suggested that students did not consider the lesson to be unusual. Perhaps the students simply did not recognize that more complex thinking was being asked of them.

CHAPTER TWELVE

TEACHER V - FIRST THROUGH THIRD GRADES

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

The work activities structures, task demands, and student responses that were observed during a work activities event in Teacher V's class are described below.

Teacher V has been responsible for teaching the Educationally Handicapped (EH) class at Central School for several years. Originally a regular classroom teacher, Teacher V began teaching EH when the previous EH teacher transferred to another program. Teacher V's EH students typically range from first- through sixth-graders. The first- through third-graders often work as a group, as do the fourth- through sixth-graders.

During the 1979-1980 school year, 12 students were assigned on a regular basis to Teacher V's class. Most of the students spent the entire day in Teacher V's class, even though each was assigned to a "homeroom" and spent brief periods of nonacademic time (e.g., P.E.) in that room.

In reporting about her general instructional plan, Teacher V expressed a good command of the cognitive and motivational benefits of her various curricular activities. She indicated that she set strict standards about task completion because, "These kids seem to be the type that if you give them the inch, they take the mile." She explained that a system had evolved so that if students completed all the academic tasks on their weekly "schedules" by Thursday, they could spend Friday on "play" activities -- e.g., movies, free time, and art. She added that by completed work, she meant 100 percent accuracy, even if this required students to erase and put in corrections after she had given them initial feedback.

Teacher V had detailed impressions of most of her students. She had taught at least eight of her twelve students during the previous year. She indicated that most of her students had problems at home, ranging from parents who pressured their child too much to parents who cared little about their child's presence or progress in school. Otherwise, Teacher V indicated that each of her students was handicapped in at least one of several areas, including motivational ability, sensory-motor ability, and academic ability.

The work activity event that is described took place on Wednesday, December 4, 1979. Three consecutive activities took place during the event: (1) Order Concept Lesson; (2) Language Experience; and (3) Handwriting. These activities involved the younger group of students (first- through third-graders) and took place in the morning period between 9:30 and 10:50. This period also included a recess.

Teacher V tape-recorded her impressions of the Order Concept Lesson activity later in the afternoon. Two boys, Billy and Clark, were observed during the work activity event, and the former was available for an interview later in the day.

Overview of Work Activities Event

Order Concept Lesson

Five students (four boys and one girl) participated in the Order Concept activity. Three of the students were second-graders, one a first-grader, and one a third-grader. The students and Teacher V were seated at one rectangular table for the activity. The materials for the lesson consisted of a set of small plastic toys representing objects all starting with the same letter. Today, the teacher selected "B" objects which included a boat, bat, baby, bull, and bell.

Teacher V conducted two exercises with the objects. After lining up seven objects and having the students name the objects, she asked them to close their eyes while she removed one of the objects. Students then were instructed to open their eyes and determine which object was missing. The teacher repeated this exercise about 15 times; increasing the number of objects that were eliminated. The teacher called on one student for each turn. If a student answered incorrectly, the teacher usually asked another student to give the initial student a clue.

For the second exercise, Teacher V asked the students to try to remember the order of all the objects. Her directions were: "Now close your eyes and raise your hands and tell me what's third [or fourth or fifth, etc.] in line." She repeated this kind of question five times, having the group of students recite the order of the objects between turns (e.g., "The boat is first; the bell is second"; etc.). At the end of the exercise, a student asked Teacher V to take the role of "student" and close her eyes, while the members of the group asked her the questions (e.g., "Which one is fifth?"). The teacher went along, answering each question correctly.

The teacher commented on her expectations for the Order Concept Lesson later in the day:

> I hoped to accomplish the level at which the children in the group could identify the separate elements of the group, and I wanted them to be able to distinguish what elements were missing from the total group. I also wanted to see whether the students could give clues without giving away the answer. And I wanted to see if they could answer in turn. Also during the lesson, since it was going quite smoothly,

> I added the idea of ordinal number, e.g., numbers from first through tenth, and I switched the lesson around so that the students not only were to tell me what object was missing, but also I had them close their eyes and tell me which object was first in line, or which object was eighth in line, etc.

During the lesson, Teacher V wanted all students to participate by reciting as a group and by volunteering to answer questions. She wanted students to think of answers to her questions independently and encouraged collaboration only to the extent of having a student give a clue to a student who answered incorrectly. Teacher V indicated that she wanted students to express their answers in sentences, although she did not apply this standard consistently during the lesson. Teacher V evaluated the students' answers and behavior publicly, giving both positive and negative appraisals.

Language Experience

The same five students who participated in the Order Concept Lesson also participated in the Language Experience activity. The students were seated on a couch, and the teacher stood at the chalkboard.

To begin the lesson, the teacher said, "Clark, give me a sentence about one of the objects [from the previous activity]." The teacher wrote his sentence on the board and asked two students to give parallel sentences. This resulted in three sentences that were written on the board:

> The bull is sixth in line.
> The bear is eighth in line.
> The boat is first in line.

Teacher V asked individual students to read the sentences. She then erased the "is" words from each sentence and had the students recite each sentence as a group, filling in the missing word orally. The teacher repeated this procedure two more times, erasing the "in" words and then the "the" words. The teacher ended the lesson by writing the missing words back on the board and having the students say them out loud.

Later in the day, Teacher V said:

> I carried the [Order Concept] activity over to a written lesson, where they gave me sentences from their experiences in the [Order Concept] lesson, and I wrote those sentences on the chalkboard, and then we read the sentences. At this time, I erased certain words in the sentences and let the students know that they could read

the sentence even though there were some blanks and some words missing.

As with the Order Concept activity, Teacher V expected students in the Language Experience activity to attend only to the lesson she was giving and to participate in the recitations. She evaluated student behavior and performance publicly; this evaluation was informal.

Following the Language Experience activity, the students in Teacher V's class had a recess.

Handwriting

Following recess, Teacher V called the same group of students to the Handwriting Activity with the exception of one boy, Clark, who was doing individual seatwork instead. The group of four students was seated on the couch at the beginning of the lesson. Teacher V was at the chalkboard in front of the couch. She wrote the letters "d-o-g" on the chalkboard and asked the group to say each letter's name. After the students responded, she motioned for them to step up to the chalkboard and practice writing the three letters. The teacher assisted two of the students by grasping their hands and moving them in a motion that traced the letters. She provided continuous informal evaluation of student performance and behavior as the lesson progressed.

Teacher V then was interrupted by two students. She left the chalkboard area to get supplies for one of the students. Meanwhile, the students completed practicing the letters "d-o-g" and returned to the couch. When the teacher came back to the area, she proceeded to write out the letters "d-o-g-s." She asked the students what it was about the word that made it mean more than one dog. After one student responded correctly, Teacher V again had the students come up to the board to practice the letters. She assisted individual students.

When the students finished practicing these letters, she told them, "Okay, I'm going to watch you write your numerals." Teacher V next demonstrated writing the numbers "1, 2, 3, 4 . . . 9, 0." She said, "Make them two spaces tall." She individually helped each of the four students write their numerals. The lesson ended as Teacher V instructed the students to erase the chalkboard.

The Elements of the Work Activities Event

Table V.1 summarizes the elements of the three work activities that were observed in Teacher V's class. Each of these elements receives further elaboration below.

Table V.1

Teacher V's Work Activities Structures
During Three Class Activities

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Order Concept Lesson	5 students, selected by the teacher for similarity in age and ability	No formal division of labor; students independently attend to lesson	No student control	Dependent on teacher to advance in lesson	Informal public (individual and group) of performance and behavior based on teacher monitoring
Language Experience	5 students, selected by the teacher for similarity in age and ability	No formal division of labor; students independently attend to lesson	No student control	Dependent on teacher to advance in lesson	Informal public (individual and group) of performance and behavior based on teacher monitoring
Handwriting	4 students, selected by the teacher for similarity in age and ability	No formal division of labor; students independently attend to lesson	No student control	Dependent on teacher to advance in lesson	Informal public (individual and group) of performance and behavior based on teacher monitoring

Content

As described above, Teacher V instructed a group of students in three consecutive activities during the work activities event. In summary, these activities were:

(1) Order Concept Lesson;
(2) Language Experience; and
(3) Handwriting.

The students in Teacher V's class who did not participate in these activities during this time period were working at their desks under supervision of the teacher aide.

Grouping

The same group of five students participated in the first two activites. This group was pre-established, and apparently the members were regularly placed together. Teacher V indicated that she often grouped students according to grade levels, splitting the class into two groups consisting of first- through third-graders and fourth- through sixth-graders. The observed group consisted of one first-grader, three second-graders, and one third-grader. Four of the same students who participated in the first two activities also participated in the Handwriting activity. The fifth student presumably was excused from the Handwriting lesson because he already had some competency in handwriting. The excused student was the oldest one in the group.

Division of Labor

Students were not encouraged to work together during the three activities. Teacher V viewed the activities as "teacher directed," and she wanted students to "pay attention and not talk out of turn."

More informal and unacknowledged kinds of student collaboration took place during the lessons, however. The observers noted, for example, that some students seemed to rely on others to be able to say the right things during the group recitations, and that some students copied from one another during Handwriting. The teacher did not attend to this kind of informal collaboration. In an earlier interview, she indicated that "cheating" was a matter of definition:

> . . . like I think they're learning from doing it, you know. If I don't make it -- if I don't set the stage, say, in that if you look, you cheat, if that never comes up -- then they're not cheating. They're just looking, "Oh, that's the answer." And I really think they do learn, you know, not knowing it, trying to pick it up.

Student Control

Students had few choice options during the observed work activities. During the Order Concept Lesson and Language Experience activities, the students' role consisted of orally responding to Teacher V's questions. The only choice students had was whether or not to volunteer answers to the questions (e.g., by raising their hands). While volunteering may have increased the likelihood of an opportunity to respond, the teacher sometimes called on students who were not volunteers. Participation in group recitations during these lessons did not present real choice options since Teacher V reprimanded students who were not participating. The Handwriting activity was similar to the previous two activities in all respects except that students had an additional choice associated with practicing their writing of letters and numbers on the chalkboard: They could select their own pace. The order and size of what they were writing was prescribed by the teacher.

Student Advancement

Students were completely dependent on Teacher V to progress in the lesson content during all three work activities. They were not free to move ahead to other aspects of the lesson.

Teacher Evaluation

The teacher evaluated students in all three activites in a similar manner. She made informal public comments about the task performance of both the group and individual students. These comments involved affirmation or brief praise; they were not negative. (When a student answered a question incorrectly, the teacher just went on to another student.) A more formal evaluation of student performance (e.g., assigning and recording grades) during the lessons apparently was not planned.

Regarding the Order Concept activity, the teacher provided her impressions of overall student performance later in the day:

> I feel the students performed very well. They were enthusiastic, paid attention. They had good recall, and the lesson went very well . . . I was not sure how many objects I could place in front of the students and have them remember which one I would take away. They got all the way up to ten. We started with seven, and I feel that the level of understanding was at a level that was commensurate with their ability . . . For the most part, they could answer correctly every time they were asked. Sometimes they spoke out of turn, but more often they waited their turn and raised their hands and worked together as a group.

Teacher V's positive evaluation of students may have overestimated the amount of success experienced by students. The observational records indicate that students were able to answer questions correctly on the first try only about half of the time.

The teacher also evaluated student behavior during the three activities. These evaluations were negative and directed toward individual students when they did not participate according to the implicit rules of behavior (e.g., to join in the recitations, to take turns, to wait patiently). During the Order Concept Lesson, the teacher was disturbed most by the behavior of Melinda, the one girl in the group:

> One infraction that occurred during this [Order Concept] lesson was that Melinda would speak out of turn. This bothers the other students. They feel that I'm letting her get away with something that I would not let them get away with. So, at this point, I told Melinda that she needed to follow the rules or I would have to send her back to her seat . . . "Why did Melinda violate this rule?" is a good question. She is the youngest, so it's easier to handle the idea that she can't remember the rules; but I know this is not true. One reason that she may violate the rules is that she can get away with it.

While Melinda may have been the largest behavior problem during the work activities, other students also received occasional reprimands.

Task Demands

Each of the three work activities had its own set of task demands:

Order Concept Lesson. This activity required that children be able to memorize visually a line of objects, differentiate between the objects, recall the missing object, and express an answer in language that the teacher would accept. The students who were called on to give clues were required to identify significant attributes of the objects. During the second portion of the lesson, students also had to apply their knowledge of ordinal numbers.

Language Experience. Students in this activity were asked to generate sentences about the ordinal positions of the objects in the previous activity and to read the visual representation of these sentences. Memorization or reading comprehension also was required, because students were asked mentally to "fill in" missing words while reading the sentences.

Handwriting. The Handwriting activity demanded that students be able to recognize and say the names of four letters and the numerals

0 through 9. Students also were required to write out these letters and numerals, copying from the teacher's example.

Motor Demands

The Order Concept Lesson and Language Experience activities did not require motor skills because the activities involved verbal exchanges entirely. During the Handwriting lesson, students had to have the motor coordination to write letters and numerals with a piece of chalk at the chalkboard.

Interactional Demands

In all three activities, students were expected to interact as a group attending to the teacher. The students were required to wait to be called on, respond to teacher requests, and avoid behavior that would distract from the teacher's presentation.

Student Response

Two students, Billy and Clark, were observed during the work activities event. Their respective responses during the event are summarized below. Billy was a second-grader, and Clark was a third-grader. Teacher and observer impressions of these students are included where pertinent. In addition, Billy was available for a general interview following the observation period.

Billy

Billy sat at the table used for the Order Concept Lesson. When Teacher V dumped the objects from the "B" box on the table and asked each student to select a favorite object from the pile, Billy reached over and selected a ball. The students then placed their selected objects in a line, and the teacher picked up Billy's object. "What kind of ball is this?" she asked. When students could not give the answer, the teacher told them it was a pool ball, and that she thought it was better to keep it filed under "P" for pool, rather than "B" for ball. The teacher then put the pool ball away and let Billy select another object. He chose a badge.

The teacher began the exercise by removing one of the seven objects and asking the students to tell her which one was missing. Billy called out the correct answer before the teacher selected a respondent. Teacher V reprimanded Billy, saying, "Billy, we want you to raise your hand. If you shout out the answer, then no one gets a chance to think."

As the teacher continued the lesson, Billy was sitting up straight and chewing on the side of his thumb. When Teacher V asked the students to close their eyes for the next question, Billy put his head down on his arm. When she said they could open their eyes, Billy raised his hand. Another student was called on and answered correctly. Billy then said, "[Teacher V], why don't you put another one in," referring to the number of objects in the line. "That's exactly what I'm going to do," Teacher V replied.

Teacher V removed another object and asked the students to tell her which one it was. She called on Tim to answer, but Tim said he couldn't think of the name. Billy raised his hand.

Teacher: Tim doesn't know. Billy, can you give him a hint?

Billy: The badge.

Teacher: In a sentence please.

Billy: The badge is missing.

Teacher: I thought you were gonna give Tim a hint.

Billy: (looks confused)

Teacher: How did you know?

Billy: I just guessed.

Teacher: You chose the badge as one of your favorite things, didn't you?

Billy: (no response)

As Clark answered the next question, Billy sat sucking on his thumb. Teacher V said, "Let's count how many we have," and Billy joined in unison as the group counted the ten objects in line. Several questions later, Teacher V called on Billy. He answered correctly, saying, "The bear is missing."

When the teacher changed the exercise so that students had to remember the position of each object, she first had the students recite the positions of the objects (e.g., "first, second, third, etc."). Billy joined in, bobbing his head with each word. Teacher V then said, "Now close your eyes and raise your hands and tell me what's third in line." The teacher called on Billy. Billy opened his eyes, and Scott called out, "He's looking." The teacher said to Billy, "You peeked." Billy closed his eyes and the teacher indicated that she still was waiting for Billy to name the third object. When Billy still couldn't respond, the teacher had the students recite the positions of the objects again. Billy joined in.

When Teacher V called on the next student, Billy kept his eyes closed as the student responded. In contrast, the other boys in the group were closely examining the respondent as if to make certain that there was no peeking. Billy did not participate in this activity but kept his eyes closed throughout.

When Tim asked Teacher V to take the role of the student and have students ask the questions, Billy was the first one to break in and ask, "What is tenth in line?" The teacher answered, "The baby." As the other students asked their questions, Billy looked on, seemingly content to no longer participate.

Billy went over to sit on the right edge of the sofa for the Language Experience lesson. The teacher reprimanded two boys for their inattention and added, "Thank you, Billy, for being ready." The teacher asked for three sentences to put on the board. Clark suggested the first sentence, "The bull is sixth in line." Teacher V then asked Billy to go back to the Order Concept table to make sure Clark was right. Billy walked to and from the table, implying that Clark's sentence was correct. As he returned, he took Clark's seat and began playing with some Lego cars that were on the table behind the sofa. Clark had left his seat to check on the correctness of the second sentence. When Clark returned to the sofa, he saw Billy and said, "Hey! You took my place." Teacher V then said, "Billy, give me a sentence." Billy responded with, "The boat is first."

Teacher V asked the students to read the sentences on the board in unison. She then asked individual students to read the sentences, giving Billy the last turn: "Billy, can you read the bottom one?" After Billy read the sentence, Teacher V said, "Okay. Good." The teacher began to erase words in the sentences and had the students read the sentences as if the words were not missing. Billy paid attention and joined in the recitation. In saying the words, he lagged behind Clark, so that it was difficult to determine whether Billy actually was reading or repeating after Clark. After the students recited the sentences and missing words, Teacher V excused the group to recess. On the way out, Billy joined Scott and Tim to ask Teacher V if they could do a word-hunt exercise following recess. The teacher told them that they would have another assignment.

When Billy and the other students returned from recess, Teacher V said, "Okay, Melinda, Billy, Scott, Tim -- it's time for Handwriting." Billy went over to the sofa and again sat on the far right. The teacher wrote "d-o-g" on the chalkboard, and Billy watched. He recited the letters along with the other students. When the students were called up to the chalkboard to start practicing the letters, the teacher assisted Billy first. She held his writing hand and moved it so as to trace the letters. As the teacher helped the other students, Billy continued to practice the letters. Eventually, the teacher looked at his work and said, "That's fine, Billy. Sit down please." Billy returned to the sofa while the other students finished at the board. Billy watched Scott and Tim as they erased their words, playfully using the erasers. Billy said, "Don't play around with the erasers."

The other students returned to the sofa where Billy was sitting. Billy said each letter as the teacher wrote out "d-o-g-s." He then said "dogsss," holding on to the "s" by making a buzzing sound. The students returned to the board to practice the letters. Billy stood in between Scott and Melinda. He wrote "d-o-g" on the board and said, "Okay, I done it." Then Billy drew a small "s" to the right of the "g." Teacher V looked over and said, "Make your 's' fill up the space, Billy." Billy promptly erased the "s" and redrew it in a larger form.

Tim made fun of Melinda's writing, and Billy looked over at what she had written. Billy then turned around, walked toward the sofa, and jumped on it in a kneeling position. Apparently, he considered himself to be finished practicing the letters. Scott joined him. Billy looked over the back of the sofa at the observer and then briefly picked up a Lego car. Billy said to Scott, "Don't touch mine," referring to the car. Billy turned around on the sofa and lifted one foot in front of him so that he could tie his shoelace. When Melinda came back to the sofa to sit down, Billy made a comment about her T-shirt: "A snail." (Her shirt had a picture of a snail printed on the front.)

Teacher V called for the students' attention and wrote the numerals "1, 2, 3, 4, 5, 6, 7, 8, 9, 0" on the board.

Teacher: I will watch you write your numerals from one to . . .

Billy: Ten

Teacher: Well, it's from one to zero really.

Back at the board, Billy stood at the far right next to Scott. Billy wrote a "1" on the board and then a sloppier "2." Billy turned to watch Scott write a "2," whereupon he erased his "2" and wrote another one. Teacher V approached Billy and said, "That's fine." Scott then shook his head and erased Billy's "2," saying, "No." The teacher reprimanded Scott, saying, "You're not looking out for Billy -- you're supposed to be looking out for Scott." Billy erased his numerals and wrote a "4," "5," and "6." Teacher V indicated approval. Billy erased his writing again and began to write out a "7," "8," "9," and "0." He wrote his "7" backwards, and the teacher pointed to it, saying, "Billy, look." (She drew a line through Billy's "7" to show which side the descending line should be on.) Billy then wrote his "8" correctly but had trouble beginning the "9." Teacher V assisted by saying, "The balloon first -- then the stick." Billy erased his partial "9" and rewrote it correctly. Billy then wrote a properly shaped "0." The teacher told him, "Erase and get ready over there," indicating that Billy should move to a table in preparation for the next lesson. This marked the end of the work activities event.

On the day of the work activities event, the observer noted informal impressions about Billy's participation in class:

> Billy seems to be a child who would be perfectly content to be left alone all day to daydream . . . He seems to withdraw from active participation in academic activities whenever it is possible. He floats a lot, repeating what other members of the group say or do without attempting to think about it or make any sense of it himself . . . He interacts with his peers only minimally.

The observer also noted that:

> Physically, Billy is a very large child who has evident motor difficulties. He is slow moving and somewhat clumsy and uncoordinated.

Teacher V acknowledged that Billy had sensory-motor difficulties. She cited the example of how, during the previous year, Billy was unable to copy or write words -- he was only able to trace a few words. Teacher V indicated that Billy had begun receiving extra training at a special motor center this year.

Teacher V's prognosis for Billy's more general academic progress vacillated. In discussing her expectations for Billy's progress before the school year began, she was optimistic:

> I expect to see a lot of successes with Billy. One of the reasons is because his parents are very supportive and they care about what they're doing. The problem is that they care a lot and may push him a little too hard, but I think the good will outdo the bad . . . I can see that just with age and his willingness in mind to do it that he will improve a lot this year . . . I know that he's going to start feeling like he can read. I think writing stories will continue to be difficult for him, and that's why he will be dictating the stories, and either I or my aide will write them down. Basically, I think with Billy that he will grow up a little bit. I think there will be a significant change after Christmas. I think he'll need the time from now to Christmas to warm up and get going. I definitely think we will have a lot of success and will see some big changes before the school year is up. Socially, Billy will also show improvement. One definite reason is that there will be a child younger and less capable than he in the class which automatically elevates his ability to be successful and feel successful.

Shortly after the school year began, Teacher V expressed a more negative view of Billy:

> He seems to have reverted back to when I first saw him -- when he first entered the classroom -- when he seemed very spaced out -- very lost -- not knowing what he needed to do, or where he was, or what was going on -- he doesn't seem to have a sense about himself, and what he does is sort of hide in a shell, and it's very hard to get to him, it's very hard to know what is going on with him, so I really don't have a sense yet. The kids, when I've heard them talking, don't want him to join them because he knocks down, say, the blocks they are playing with. So he hasn't established a relationship with them either. Basically, he has been very quiet.

On the other hand, approximately four months later (the day of the work activities event), Teacher V indicated that she was very pleased with Billy's specific performance during the Order Concept Lesson:

> Billy had terrific recall. I was very impressed. I thought it would be difficult for him to participate in this lesson, and I found that it was challenging to him, and he was successful at it. Billy oftentimes has a hard time paying attention, following the rules, taking his turn, and getting along generally in a group. During today's lesson, he liked it, and he paid attention, and every time I asked him what object was missing in the group, he knew. And when I asked him which object was second in line, he knew.

In addition to obtaining the teacher's comments regarding the activities that were observed, Billy was interviewed following the work activities event. Billy's responses were brief, and he seemed to have some difficulty with his thoughts. The interviewer and Billy spent some time discussing the Order Concept Lesson.

Interviewer: What were you doing with all the objects -- those little toys?

Billy: We were just playing with them.

Interviewer: You were playing with those toys?

Billy: Yeah.

Interviewer: I know [Teacher V] had them all lined up in a row.

Billy: Yeah, you had to guess which ones she took away. And that's all.

Interviewer: Was there any reason why those objects were the ones you used?

Billy: She just takes a box out and pours them out, and we count how many there are.

Interviewer: Which box of objects was that one?

Billy: I think "T's."

Interviewer: It was the "T's"?

Billy: I think. Uh-huh.

Interviewer: What were some of the objects that you can remember from this morning? Can you remember any of those objects?

Billy: Boy, badge, bell.

Interviewer: Bell -- so what letter is that?

Billy: I think it was "L".

Interviewer: Um-hum.

The interviewer also asked Billy about school and class rules. Billy was able to think of two school rules: (1) students should not throw the tan bark pieces on the playground; (2) students should not play "Smear the Queer," a touch-football game. He had more difficulty thinking of a class rule; eventually, he came up with the rule that students weren't supposed to play with Legos unless they had free time. In general, Billy had trouble communicating his ideas clearly.

In sum, Billy's behavior during the work activities would seem to indicate a higher level of interest and participation than might have been typical of him in the past. While Billy had some difficulties performing all the work activity tasks correctly, he nevertheless made an effort to attend to the teacher and do the work. Billy also interacted with his peers to an extent that did not seem limited given the teacher-directed nature of the activities.

Clark

Clark sat at the Order Concept table between Scott and Tim and across from Melinda and Billy. When Teacher V dumped the "B" objects on the table and asked the students to select their favorites, Clark immediately selected the bumblebee. He held up the bumblebee and said to the teacher, "My grandfather has flowers. They have all kinds of these little bugs." Teacher V acknowledged the remark with a nod of her head. When the teacher had seven objects lined up for the exercise, Clark looked at each object. "Ewww! Look at that bat!" he exclaimed.

Clark raised his hand for the first three questions the teacher asked, but other students called out the answer. When Melinda called out the answer for the second time, Clark began to complain, saying, "She always . . ." The teacher cut him off to reprimand Melinda.

Clark was called on next by the teacher to tell what object was missing. This time, Clark could not think of the item. The teacher asked Scott to give Clark a hint.

Scott: It has horns.

Clark: The bull.

Teacher: The bull is missing.

Clark: I was gonna say that.

Teacher V called on Melinda for the next question. Melinda could not answer, and Clark offered to give a hint: "It drives in the water." Melinda then answered that it was a boat, and the teacher said, "Okay."

Teacher V added more objects to the line. Clark said to the teacher: "You haven't took the ball yet." The teacher replied, "It doesn't matter." The teacher called on Billy for the next question. Billy answered correctly, and Clark echoed his response. The teacher called on Tim after she removed another object. Clark slapped his palm on the desk as Tim gave the correct response. As the teacher asked the next question, Clark raised his hand. He quickly put it down as the teacher called on another student.

Melinda was called on to give a hint. Instead, she whispered the answer, and Clark complained, saying, "She said [whispered the word]." The teacher did not react. Clark yawned and leaned to his side on the table edge. He shifted and hooked his foot over the back of his chair. As Teacher V asked the next question, Melinda loudly called out the answer. Clark became upset and said, "Make Melinda put her head down. You never make her put her head down." This time the teacher responded and told Melinda, "What they're saying is that it's not fair if you always shout out the answer."

Teacher V called on Clark for the next question:

Teacher: Clark, what's missing?

Clark: (no answer)

Scott: I can give a clue.

Teacher: Are you ready for a clue?

Scott: It's something after the mom.

Teacher: Remember when we did "taller than, shorter than?"

Clark: The baby.

When the teacher changed the exercise so that students had to remember the position of the objects, Clark joined in as the students first recited the object positions. After several turns, the teacher called on Clark:

Teacher: What's ninth in line? Clark?

Clark: The baby. [Opens his eyes and looks.] Ohh! I'm wrong. Did you switch 'em around?

Teacher: No, I didn't touch them.

For the Language Experience Lesson, Clark was seated between Scott and Billy on the sofa. The teacher asked if anyone could make a sentence about the position of one of the objects. She selected Clark to answer. He said, "The bull is sixth in ne," and the teacher sent Billy to check on whether the answer was right. Clark turned around on the sofa and watched Billy walk over to the Order Concept table. He then picked up a Lego car on the table behind the sofa and began playing with it. Clark was interrupted when the Teacher solicited a second sentence from another student and asked Clark to go check on its correctness. When Clark returned to the sofa, he saw Billy in his place and said, "Hey! You took my place." Clark seated himself and attended to Teacher V.

When three sentences were written on the board, Teacher V led the class in reciting the sentences. Clark's voice overrode the voices of the other students. When the group recitation was done, the teacher asked, "Can anyone read it all by themselves except Clark?" The teacher then called on individual students to read the sentences. While this reading took place, Clark rocked his head back and forth and jostled Billy and Scott, who were seated on either side.

For the next portion of the lesson, the teacher erased particular words in the three sentences. When she had erased the "is" and "in" words, she asked Clark to read the first sentence and supply the missing words. He responded correctly. Teacher V then interrupted the lesson to comment, "Where's Perry? Perry didn't come over." (Apparently, Perry would normally meet with this group.) Clark said, "You want me to go get him?" The teacher indicated that it was too late and focused on the lesson again by having students read the sentences in unison. Again, Clark's voice was predominant.

Teacher V dismissed the Language Experience students. As they filtered out to recess, Clark approached the teacher and asked, "Can we do one of these things?", indicating a "word-hunt" sheet that he

had taken out of a file on a shelf. The teacher replied that he could work on the sheet after recess.

After recess, Clark was seated with another boy, Perry, at Clark's desk. Both boys had blue dittoed math sheets and stopwatches in front of them. The math sheets presented subtraction problems for the students to solve. Perry turned to Clark and asked, "Why didn't you meet me at the bike racks? I was waiting for you." Clark offered no response. Instead, he stood up and took off his coat.

Perry began to work on the first math problem. Clark sat down and began working as well. He then realized that he had not started his stopwatch and said, "Oop!" He started the stopwatch. He filled out his worksheet rapidly. Meanwhile, Perry was stumped on one problem and tried to count on his fingers. This failing, he looked at Clark's worksheet and copied the answer. Clark did not react to this and finished clicking off his stopwatch. He attempted to read the stopwatch and said, "I did it in 30 minutes." Perry looked up and said, "That's too long." Clark retorted with, "So what?" and then got up and walked over to the teacher aide with his stopwatch. The aide read the stopwatch for him, saying, "That says one minute and 46 seconds." Perry clicked off his stopwatch and said, "Four minutes and one second." Clark listened to Perry and then asked the aide to check Perry's stopwatch. Perry approached the aide, and she confirmed that he read his stopwatch correctly. Clark said, "Hey, you guessed right."

Perry and Clark returned to the desk where they had been working. The aide followed them and told Perry once he was seated, "You can show him [indicating Clark] how to read the stopwatch." Perry replied, "He knows how to." The aide left, and the boys ran over to some low shelves behind the sofa to search for the appropriate math answer sheet. They took one copy of the sheet and walked over to Melinda's desk. They placed the answer sheet down on her desk, sat down at the desk, and corrected their work until the end of the period.

The observer did not record an informal impression about Clark, and Clark himself was not available for an interview. Teacher V, however, provided her perceptions of Clark. Before the school year started, she described Clark's academic and social performance during the previous year and her expectations of him for the coming year:

> I feel really strong about his ability to do work. One big change that was made in his life at the end of the school year last year was that his father came home and is living with them. It really calmed Clark down a lot. He was very, very happy about it. He could keep his mind on his schoolwork, he was not as fidgety, did not have to hop out of his seat as often as he did

before. He was starting to read and he was feeling successful with it. Things just started being a little bit easier for him. Many, many days his handwriting was very, very good. I could say to him that I want you to do your very best handwriting today, and he would. Whereas before, earlier on in the year, he just wasn't capable of doing any better. Often Clark's work habits were peaks and valleys. So I really see that as a change. I'm not sure if his father is going to stay with them, but he still got a taste of his being there. I think this [coming] year I will see more of the peaks and fewer valleys. Socially, Clark is very liked. He gets along with kids of almost all ages. Older kids like him and like to take care of him, and kids his own age really think it is important to have Clark as a friend. He can really be a friend and have friends and like friends. I expect that to continue. He is an easy-to-like child, not only for kids but for adults. He does get into fights and he does have his problems, but not so many that it takes away from his ability to get along socially with other children. I don't see his behavior as negative. I think he will do well socially.

Shortly after the school year began, Teacher V still maintained her generally positive view of Clark:

> I already see an improvement in his reading. Part of it being maturity and part of it being his attitude. I see him feeling very calm and okay about himself, so I expect him to do very well -- both with his schoolwork and with the kids on the playground. He plays well with the kids. He was playing with blocks with the other kids -- they were playing with blocks -- they were building these contraptions, and he joined in and did what the other kids were doing and did not distract from their play. He added to their play.

Regarding the Order Concept Lesson, Teacher V reported:

> Clark was the oldest one in this group, and he was the most competent during this lesson . . . The criteria for Clark is that he knows he's successful and he pays attention. Since he was the oldest in this group, he saw the picture from a different point of view. Generally, he's the youngest one. But during this lesson, he was the older one, so it was easier for him to

> shine. When we read the sentences off the chalkboard, it was easiest for him to read it, so he paid attention and really pulled the group along with him. He didn't do anything negative, or I didn't see him do anything negative, so his behavior showed me that he was confident in this area . . . The quality of the product that Clark produced was at a very high level. As I said, he probably did better than any other student. It was easier for him, and he was enthusiastic and enjoyed doing it.

In sum, Clark was an active participant during the work activities event, and Teacher V perceived him as the most successful student in the group. During the two group lessons, Clark was highly verbal relative to the other students. He seemed quite comfortable initiating interactions with the teacher. During the Handwriting period, Clark was able to pursue successfully another task with little assistance from the teacher or other students.

Conclusions and Implications

The observed Order Concept, Language Experience, and Handwriting lessons suggest that Teacher V often involved students in lessons that were teacher-directed, with students having few choices about the tasks or opportunities to interact with their peers. These lessons were successful from several standpoints: (1) the teacher covered the intended material; (2) the material dealt with the necessary academic concepts and skills; and (3) despite a wide age range among students, all were able to participate with some success. Teacher V seemed to prefer such tightly controlled group instruction because she felt it helped focus the energies of the students who often lacked the necessary self-discipline and motivation.

The fact that the work activities event was highly teacher controlled probably does not mean that it was typical of all events in Teacher V's class. When Teacher V worked with a particular group of students, other students in Teacher V's class were occupied with seatwork that allowed for more student control and interaction. Thus, the group of students observed during the work activities event probably participated in more student-directed instructional experiences in other portions of the day. Also, the teacher indicated that students who completed their work by every Thursday could spend their entire Friday on nonacademic activities. Thus, Teacher V presented students with a regular reward for completing their assignments.

CHAPTER THIRTEEN

TEACHER W - FIFTH AND SIXTH GRADES

AN ECOLOGICAL ANALYSIS OF A WORK ACTIVITIES EVENT

This chapter describes one work activities event in Teacher W's class. The event is presented in terms of its work activity structures, task demands, and student responses.

Teacher W had 11 years of teaching experience and started teaching at Central School during the previous school year. Teacher W's teaching duties at Central School consisted of teaching four different Learning Disability Groups (LDG's) every day. The four groups met at 9:05 a.m., 10:15 a.m., 11:05 a.m., and 1:05 p.m., respectively. The first morning group consisted of nine students pulled from second- and third-grade homerooms. The other three groups each consisted of nine or ten students pulled from fourth-, fifth-, and sixth-grade classrooms. Some of these fourth- through sixth-graders were assigned to two, or even all three of the LDG's. Teacher W focused on reading, writing, and language skills in all four of his groups.

On December 11, 1979, the 11:05 a.m. group was observed for the work activities event. The students in this group participated in three consecutive activities, which ran until the period ended at lunchtime. The three activities were Sharing, Spelling, and Sentence Writing. While ten students were assigned to this LDG at the beginning of the year, only seven students were present on the day of the event. This reduced number probably was due both to absences and transfers (students who eventually achieved a certain level of work could be excused from part or all of their assigned time in Teacher W's class and return to their homerooms). The students present were four fifth-grade boys and three sixth-grade boys.

Besides generally observing the teacher and groups during the event, the behavior of two boys was observed in detail. These boys also were interviewed following the event. The relevant teacher data consisted of a teacher-dictated protocol about the work activities events and general comments about the class and students from previous interviews.

Overview of Work Activities Event

Sharing

The Sharing activity apparently was a regular feature at the beginning of every period. The routine for the activity was for students to sit on a couch, with Teacher W in a rocking chair, and for all of them to share their "Goods" -- i.e., what good thing had

happened to them during the previous day. Each student was asked to share his or her "Good," but participation was not mandatory.

On this particular day, only three students were in the class when the Sharing activity took place (others arrived afterwards). The first student that Teacher W called on shared his "Good." The second and third students declined to share. The activity ended with Teacher W sharing his "Good."

Spelling

Four students -- Ron, Rick, Joe, and Phil -- participated in the Spelling activity. One other student, Dave, was present in the room at the time. He was new and was given worksheets to complete on his own. A sixth student, Peter, entered the room as the Spelling activity began, but he had a note excusing himself from the class for the next 15 minutes. The Spelling activity was devoted to testing. Teacher W gave a spelling test to one student, Ron. Two students, Joe and Phil, formed a pair, and the former gave a test to the latter. The principal was present in the room during this activity, and she volunteered to give the fourth boy, Rick, his test.

The testing progressed with several interruptions. The first interruption occurred at the beginning of the lesson when Teacher W was explaining what students were to do. During this introduction, Joe picked up a couch cushion and threw it onto the floor. Teacher W then requested that Joe step outside with him for a minute to have a private talk. The second interruption occurred when Jack, the seventh student, entered the classroom near the end of the activity. Teacher W reprimanded Jack for his lateness. Last, the new student, Dave, interrupted Teacher W several times when the teacher was giving a spelling test to Ron. Each time, Dave had questions to ask about how to carry out his assignment. Teacher W was willing to help Dave in all of these instances.

Sentence Writing

The teacher called four students -- Ron, Joe, Phil, and Jack -- together for the Sentence-Writing lesson. Rick left the classroom for the day when Sentence Writing began. Both Dave and Peter were excused from the activity; the former continued to work on his worksheets, and the latter was doing his own reading. The teacher and students sat around a rectangular table. Teacher W first had students open their writing workbooks to a page containing sentences that they had written the previous day. The teacher then said, "I'm going to take a sentence. The sentence may be familiar. Someone here wrote it. The sentence is, 'Baseball is fun.'" Teacher W had a student write the sentence on the board. He then asked students to suggest other sentences about baseball that were "like" the first one. The students volunteered six sentences, and Teacher W rejected three of

them and accepted three of them. After this selection process, four sentences about baseball appeared on the board:

> Baseball is fun.
> I can hit the baseball.
> I can't catch a ball.
> Baseball is the oldest sport in the United States.

Teacher W continued his directions, "Okay. Now is the real challenge. Take this sentence, and this sentence, and this one (pointing to three of the sentences), and combine them into one sentence." The students indicated that they didn't understand what the teacher meant. The teacher then asked, "Want me to show you on this one?" Students replied affirmatively, and the teacher wrote the following sentence on the board: "Baseball, the oldest sport in the in the United States, is fun to play a lot." (Note that this is only a combination of two of the sentences.)

Teacher W asked a student to erase the sentences on the board and then asked the group to generate some new sentences about bicycles. Three new sentences about bicycles were put on the board:

> My bike can go fast.
> My bike has bad brakes.
> My bike has strip tires.

The teacher again gave directions, saying, "I want you to sit very quietly and write one sentence by yourself out of these three sentences." It took several minutes before the students focused on this task. Once each of the four students had written his sentence, Teacher W checked them one by one. Each sentence failed to meet Teacher W's criteria. Three of the attempts did not form a single sentence, and the fourth attempt was a nonsensical combination. The teacher asked the students to try again. Two students presented their second tries, and the teacher found both of these acceptable. The teacher also had written out his own sentence and presented it to the group.

Teacher W had students work on one more set of sentences in the same way. This time the sentences were about "my Dad." Students and Teacher W wrote down their combined sentences. The teacher looked over the students' work. He pointed out several problems and then asked two of the students to write their sentences on the board. Teacher W also asked the students to read their sentences once they were written on the board.

Teacher W ended the lesson by asking students to put away their writing workbooks. He then excused all of the students, except Joe. He detained Joe to discuss the further disruptions that this student had created during the Sentence-Writing lesson.

In retrospect, Teacher W described the purpose of the Sentence-Writing lesson:

> What I hoped to accomplish was for the Writing group to begin to learn how to expand sentences.

In their writing, they seem to run into: "I've written all I can -- I like my Dad -- that's my sentence," and I'm trying to get them to make longer sentences and more complete sentences. I tried to use sentence-expanding -- taking three kernel sentences and combining them into one sentence.

The Elements of the Work Activities Event

Table W.1 summarizes the elements of the three work activities that were observed in Teacher W's class. Each of these elements receives further elaboration below.

Content

Three consecutive activities, each with a different content, took place during the work activities event:

(1) Sharing
(2) Spelling
(3) Sentence Writing

Grouping

For the first activity, Sharing, all students present in the class participated. On this particular day, the number of students present for this activity was three. The group size for both Spelling and Sentence Writing was four. Three of the students who were in the Spelling group were also in the Sentence-Writing group. The teacher assigned students to these groups, presumably because they required similar kinds of skill-building instruction.

Division of Labor

The three different work activities did not require division of labor among students, with one exception. Students in the Spelling lesson needed to be individually tested; the teacher and principal were each able to test one student. Teacher W requested that the remaining two students form a pair with one student administering the test to the other. This constituted division of labor with explicit role differentiation.

Student Control

During Sharing, students exercised control over the content of the experience they shared. Students could select anything to talk

Table W.1

Teacher W's Work Activities Structures During Three Activities

CONTENT	GROUPING	DIVISION OF LABOR	STUDENT CONTROL	STUDENT ADVANCEMENT	TEACHER EVALUATION
Sharing	3 students representing all the students present at beginning of the class	No division of labor	Particular experience to share	Students dependent on teacher to advance	Observational scan of students; comments to individuals on behavior
Spelling	4 students selected because of their commitment to take the next level spelling test	Division of labor for two of the students with explicit role differentiation	No student control	- 2 students dependent on teacher to advance within activity - 2 students can advance within activity on their own	Observational scan of students; comments to individuals about behavior and performance
Sentence Writing	4 students selected for their similar writing ability	No division of labor	- Particular content of sentences - Particular sentence combination	Students dependent on teacher to advance within activity	Observational scan of students and their products; comments to individuals about behavior and performance

about that met the qualifications of being something good that happened yesterday. For the Spelling lesson, students could not exercise control over the formal aspects of the assignment. Students were required to complete their tests in a given time period, and the content of each test was predetermined. For the Sentence-Writing activity, students could exercise some control over the content of the sentences by suggesting particular sentences that fit the topic set by the teacher (e.g., baseball). When students were asked to combine the sentences into one, this gave each student control over what the particular combination (i.e., ordering of the clauses) would be.

Student Advancement

Students were dependent on the teacher to advance within all three activities, with the exception of the two paired students in Spelling who worked by themselves and proceeded without the teacher's approval. Students could not move to a new activity in any of the lessons; the teacher determined when students began and finished.

Teacher Evaluation

Teacher W made public and informal evaluations of students in all three activities. In the first activity, the teacher focused only on student behavior. Joe was the only student who received this kind of evaluation, and it was negative.

During Spelling, Teacher W made comments to students about both performance and behavior. His performance comments were directed toward Ron, the student he was testing, and toward Dave, the new student who frequently requested help. The comments to Ron were negative and concerned Ron's errors in Spelling. The comments to Dave were a mixture of positive and negative. Jack was the only student who received a behavioral reprimand during this activity. When Jack entered the room late, Teacher W called out, "Fifteen minutes," implying that he wanted Jack to make the time up by staying fifteen minutes after school.

Teacher evaluation was most frequent during the last activity, Sentence Writing. The teacher made several comments to each student about the acceptability of sugested sentences and sentence combinations. Most of these comments were negative, indicating that students could not compose the right kinds of sentences. When students were correct, Teacher W rarely gave praise and instead showed his approval by putting the given sentence on the chalkboard. Most of Teacher W's behavioral comments were directed toward Joe, who disrupted the lesson several times by talking and getting out of his seat. Near the end of the lesson, Teacher W told Joe that he would have to stay after school for ten minutes. Shortly thereafter, he threatened Joe with an additional five minutes when Joe refused to work on one sentence. Teacher W also reprimanded Ron for doodling

on a piece of paper during the lesson. Teacher W took the paper away from Ron.

Teacher W indicated his personal and overall evaluation of the lesson following the event. He commented both on students' understanding and cooperation:

> I think one, maybe two, maybe three of the people understood at least how to combine the sentences I gave them . . . One person was completely lost, though . . . The cooperation continued to be a frustration for me. I think probably it was better objectively than it appeared to me, but it felt like their span on being able to do that was very short. I'd say maybe I tried to do the whole task for a half hour, and they were with me for about 15 minutes . . . then as they began to get looser, I began to get tighter and had somebody come in after school.

In short, Teacher W indicated that he was slightly disappointed with the group's performance and behavior during Sentence Writing.

Task Demands

Different task demands were associated with each of the three work activities.

Sharing. Students were required to remember the events of the previous day, identify the "Good" events, and select one "Good" event for presentation.

Spelling. Students had to know the correct spelling of selected words and be able to write these words out.

Sentence Writing. At the most basic level, this activity required that students be able to read and write words. At a higher level, students had to be able to generate appropriate topic sentences and recognize a sentence from a non-sentence string of words. They also needed to be able to identify the clauses in the sentences that could be put together and know how to combine them into one sentence.

Motor Demands

Students in all three activities had to be able to sit still. For the Spelling and Sentence-Writing activities, students also had to be able to use a pen or pencil and to write.

Interactional Demands

During Sharing, students were expected to listen to the person sharing and to wait until they were called on before making their own presentation. In Spelling, students taking the tests were supposed to cooperate with the test administrators (teacher, principal, and student) and to work on their tests without disturbing others. For the last activity, Sentence Writing, students were expected to attend to the lesson, participate in turn, and work quietly when writing their own sentences.

Student Response

Two students were observed during the work activities event. The first student, Rick, was a fifth-grader. The second student, Ron, was a sixth-grader. During the observation, Rick participated in the Sharing and Spelling Activities. He was not assigned to the Sentence-Writing group; instead he spent this time doing other seatwork. Ron entered the classroom right as the Spelling lesson began, thus missing Sharing. Both boys were interviewed following the event.

Rick

As Sharing began, Rick was sitting on the left end of the couch, with Joe and Phil seated to his right. Teacher W called on Rick first, asking, "Okay, do you have any 'Good,' Rick?" Rick proceeded to say that he had received his last birthday present after dinner yesterday, when his parents gave him an album by ELO (Electric Light Orchestra). Rick then went on: "And this is bad -- my Mom took me to a basketball game and dropped me off, and the game was cancelled, but my Mom already had left -- so I had to wait until she got home and I could call her."

Teacher W did not respond to this, and went on to ask Joe and Phil if they had "Goods" to share. Both these students declined to present something. The teacher then presented his "Good," which was about a letter he had received from a former student in response to a baby announcement that he had sent out. In the midst of telling this, Rick asked where Teacher W's wife and baby were at the time he opened the letter. The teacher replied that they were at a friend's house.

When Teacher W finished sharing his "Good," Rick asked, "[Teacher W], can we all forget it? Let's get on with our work." The teacher responded by saying that it was time to get to work, and he indicated the students who would be doing Spelling. All three students stood up. Joe and Phil started throwing the couch cushions, and Rick looked on, uninvolved. Rick then started to walk off toward one side of the room. Teacher W called out, "Rick, where are you going?" Rick replied, "To work." Rick pulled a spelling test out of the "Economy

Spelling Kit" that was sitting on the counter, and then asked, "Teacher W, can you give me a spelling test?" The teacher said, "Okay. We'll do it now."

Before Teacher W could join Rick at a table, he was distracted by the continued disruptions caused by Joe and Phil. The teacher took Joe out of the room for a talk. Mark laughed at the sight of Joe being taken out, and said to himself, "Joe is having one of his nutso days today!"

While waiting for Teacher W to return, Rick examined some spelling word flash cards that were a part of the test set. The teacher and Joe returned to the room after two minutes. The principal also entered the room with Ron, and Teacher W immediately went over to talk to them. Rick called out, "[Teacher W], I'm ready for Group 5." The teacher, the principal, and Ron walked over to where Rick was sitting. The teacher and principal proceeded to discuss the logistics of administering the spelling tests. Teacher W then announced that the principal would give the test to Rick.

The principal walked behind Rick so as to stand slightly to his left. She picked up the list of words and started to read them one by one. Rick wrote out the words on a sheet of paper.

When the principal finished giving the test, she and Rick corrected the answers. The principal then left the room. Rick got up and put the spelling materials back in the kit and took out another folder. He returned to the same seat and started to write in a booklet. He was writing a ten-sentence composition about his birthday, an assignment the teacher had given him. As Rick wrote, he muttered phrases to himself and underlined words that he wasn't sure how to spell. He continued to work as Teacher W called together the Sentence-Writing group.

Rick worked steadily on his writing assignment for at least five minutes. Although Rick could easily look up and observe the Sentence-Writing group, he rarely did so.

Rick closed his writing booklet and stood up. He put the booklet away in his cubby and collected some new supplies, consisting of a set of colored felt-tip pens and several dittoed sheets showing outlines of race cars and dragsters. Rick took these supplies over to another desk near the couch. He started coloring in the drawings, working in a very attentive and methodical way. He worked for about ten minutes without interacting with other students. He put his drawings away when half the period had elapsed. Rick left the room at this point, apparently excused from having to stay the full period.

Teacher W and the observer both viewed Rick as a conscientious, independent worker. At the beginning of the school year, Teacher W anticipated Rick's success:

> Rick will do well. I think he'll do well academically. He has a real earnestness about

him that may be a little bit too much. Also, I watched him play "Bombardo" on the playground today, and I was impressed with the enthusiasm that he played with. He was a part of the group. Before, I've seen him hover around me almost the whole period at recess time, and today he was right at the head of the game ready to go. I think he'll do well.

While Teacher W indicated that Rick could socialize in a group, he also predicted that Rick would "probably be a lone worker" in class, not spending much time in friendship interaction.

The observer viewed Rick's ability to work by himself as a very favorable attribute:

> From the observations, Rick is again one of those students in this particular class who seems routinely to work independent of the rest of the class. In that way, he kind of gives the teacher a "breather" to focus his attention on other students. He works extremely well alone, without supervision, and seems very self-directed. He has a good sense for the classroom routines and what activity he wants to do next when a given bit of activity is completed.
>
> In many ways, Rick could be characterized for this class as an ideal student in that he works well, seems to perform well, and requires very little supervision.

Following the work activities event, Teacher W refrained from commenting on Rick's performance because he did not work with Rick or look at Rick's papers yet. The teacher simply expressed satisfaction with Rick's independent work habits.

When Rick was interviewed following the work activities event, he explained his spelling and writing tasks to the interviewer:

> Well, I only come in there [Teacher W's class] for half time now, and I start with Spelling. There are these words on cards, and somebody else has to give you the test. They have to say the words; you have to write them down. And then they tell you how to spell them. If you get it wrong, you have to put it on this other paper for the words to learn. Then the next time you have your test you go over those.
>
> I also had to write in a Journal. Teacher W wrote a topic -- my birthday, which was yesterday. He told me to write ten sentences or a

whole page about my birthday, and I wrote it down. I guess it was pretty good.

When asked about Teacher W's class in general, Rick described it as "fun" and "not that hard." Rick also described some practical difficulties associated with coming to this class:

> Well, when you go back [to the regular class], you don't know what's going on in your other class and what to do. And you miss, and let's say you're doing a report. It has to be done the next day, and you only got halfway through it. You missed a lot of time working on it.

In sum, Rick appeared to be a very work-oriented student during his visits to Teacher W's class. He was able to work continuously for a half hour, switching from task to task with little supervision or feedback from the teacher. While Teacher W may have preferred to see more in-class social behavior from Rick, it is possible that Rick reserved his social behavior for other contexts.

Ron

Ron entered the classroom in the company of the principal after the Sharing activity was completed. Apparently, Ron and the principal had just been in conference together. After a brief talk with Teacher W, the principal went off to test Rick, and Ron went and got his writing folder.

Ron sat with his folder at a desk in front of the chalkboard. He started to seek the teacher's assistance.

Ron: Can I try harder tests?

Teacher W: By working up to it. Where are you in Spelling? Show me.

Ron: My pencil is stolen.

Teacher W: Here's one. Get settled. I'll be with you in a minute. (The teacher walks over to another table.)

Ron: I want to try a harder test.

Teacher W: Get someone to give these tests to you -- you have three -- then you could get to Level 4 today.

Ron: Can you give me the test, teacher?

Teacher W: Okay. If there's time.

Before Teacher W joined Ron at the table, Ron got up and walked slowly to the sink. There he took a long drink of water. As he walked back to his desk, he called out loud to the teacher, "[Teacher W], on Friday do you want to play the State game? I'll be the President." Teacher W responded, saying, "Okay, we'll play Friday, at least you and me."

Teacher W sat next to Ron, bringing with him a list of spelling words. He started administering the test to Ron. After going three words down the list, Ron changed the subject, asking, "[Teacher W], what was your 'Good' today?" Teacher W explained that it involved getting a letter from a former student. Ron continued to talk, asking a series of questions like, "How long have you been teaching?" and "How's your wife?" Teacher W gave brief answers and then turned to help Dave, who had been waiting with questions about his seatwork. Ron sat and waited.

Teacher W invited Dave to sit next to him on his other side. Then the teacher returned to giving the spelling words to Ron. When the teacher reached the end of the list, he took Ron's paper and checked it for errors. When he came to two words that were abbreviations -- "Mr" for Mister and "Sun" for Sunday -- the teacher asked, "What did you forget?" Ron said nothing, indicating that he didn't know. The teacher answered for him: "A period. Very important. If you forget them on the delayed recall test, I'll mark them wrong. Now study today -- test again tomorrow -- and if you pass, you can have the delayed recall test tomorrow."

Teacher W turned to help Dave. Ron proceeded to write out the words that he missed in his workbook. He then closed his folder, got up, and crossed the room to the cubby area. He put his folder away and took out another one. As he was returning to his seat, Teacher W looked at Ron and asked, "Where's Jack today?" Ron smiled and quickly responded with, "I'll call him!" Apparently, getting to use the phone was a privilege for any student. Teacher W said nothing, and Ron turned abruptly and walked to the telephone on the wall. Ron picked up the phone and made a very brief call. He said nothing to Teacher W, implying that Jack's absence would not be a problem for long.

Ron walked back to the table where Teacher W was still sitting. As he approached the teacher, he pulled a small, rectangular piece of cardboard out of his back pocket. He started to say, "Hey, [Teacher W], I've been meaning to tell you something -- oh," and stopped when he realized that Teacher W was in the midst of explaining something to Dave. Instead of waiting for the teacher's attention, Ron turned around and walked back to the cubbyhole area. There he talked briefly with Peter.

Teacher W called out, "Okay, is the Writing group ready?" With this, Ron returned to the table and took a seat next to Joe. Phil was seated on the other side of Joe, and Ron looked on as both Joe and Phil engaged in some roughhousing, where Joe ended up on the floor

underneath the table. Teacher W reprimanded Joe and Phil, while Ron doodled on a piece of paper that was before him.

Starting the lesson, Teacher W introduced the first sentence about baseball. The teacher turned to Ron and asked, "Ron, can you think of another sentence about a baseball? I'll write it." Ron said, "No. I'll write it," and stood up. He wrote, "I can hit the baseball," on the chalkboard. Teacher W then said to Ron, "Can I recopy it so people can read it? I'll write it bigger." Ron responded with, "Yeah." The teacher wrote down one more sentence from Phil, and then asked, "Anyone else got an idea?" Ron said, "I do. Baseball is one of the best . . . Basebail is the oldest sport in the United States."

While Teacher W illustrated how to make a compound sentence out of the various baseball sentences, more commotion broke out among the boys at the table. Joe went under the table. Ron joined in by shaking the table top. As Teacher W wrote his compound sentence on the board, Ron asked the group, "Did anyone see the Marine on television last night?" The teacher cut off any potential conversation by asking Joe to read the sentence on the board. Joe started to read the sentence, but had difficulty. Ron said, "I can read it!" Ron stood up and read the sentence correctly. Ron then launched into an impromptu, almost theatrical, display. As if he were lecturing everyone, he picked up a piece of chalk and said, "That's not a sentence. I've been in school so long, I know what a sentence is. Teacher always says to put a period right here."

Teacher W sat back and watched Ron finish his speech. He then asked Ron to erase the chalkboard. Ron picked up two erasers, one in each hand, and erased the board with animated, rhythmic strokes. Teacher W remarked, "Oh, it's double-barreled Ron, the disco eraser." On hearing this, Ron finished his erasing by pounding both erasers on the board. Teacher W asked Ron to sit down. Ron fumbled in putting the erasers down. Then he took his seat.

As Teacher W started to introduce the next sentence topic, Ron started writing something on a sheet of paper. The teacher noticed this and took the paper from Ron, saying, "I don't want you to work on this in class."

Teacher W asked the group for sentences about bicycles. After he wrote the second sentence on the board, Ron read it out loud. Then without invitation, Ron continued to talk about bicycles. This led to an outbreak of talk, especially between Joe and Peter, about the faults in everyone else's bicycles. Soon thereafter, Teacher W asked Joe and Peter to stop so that they could return to the lesson. The Teacher then told them to sit quietly and write one sentence based on the three on the board.

Ron ignored the teacher's directions and stood up from his chair. "Guess what happened to me yesterday?" he asked. He took a piece of chalk and continued, "I was riding out in Johnson Field and I got a hole in my tire." Ron proceeded to draw his version of a tire with a

hole in it on the board. Teacher W said, "You are not on task. Sit down."

Ron returned to the position of his chair, but he stood up awhile before sitting down. Teacher W repeated the request that students write their sentences. Ron sat down and wrote something out. When he finished, he said, "I got it." Teacher W said, "Okay, good. You can work on this a bit longer," referring to the piece of paper that he previously had taken from Ron. Teacher W then realized that Ron had already taken the piece of paper back. The teacher took the paper away again. Ron asked Teacher W if he could have the paper. Teacher W replied that he should have asked the first time, and that he could not have it now.

The teacher turned to Peter and asked him to put a box of pencils away. Meanwhile, Ron looked at his neighbor, Joe, and said, "Joe, control yourself." Joe retorted with, "Well, you have a hole in your tire."

The teacher asked Ron if his sentence was right. Ron replied, "Of course." The teacher then looked at Phil's sentence. Ron took advantage of this break, got up, and started drawing on the chalkboard again. Teacher W looked up and asked Ron, "Where is your sentence?" Ron said, "Right here," and handed the copy of his sentence to the teacher. Teacher read the paper and said, "That's not one sentence." Ron said, "Yes it is." The teacher instructed Ron to try again. Ron was unable to continue the lesson, however, because of a scheduled interview with an observer.

At the beginning of the year, Teacher W had anticipated that Ron would be a difficult student:

> Ron's going to have problems. I think he's frustrated with the work he has to do in class, and it's going to be difficult to override the social stuff about being a dummy so that he can ask for the help he needs. He really seems to me to be ambivalent about needing help. Knowing that he does, but also getting a lot of trouble from other students about being dumb and not promoted for one year. I heard some student -- I was talking to him on the way out -- just on Tuesday, just before school started. He said, "Oh, is Ron going to be in your class?" I said, "Yes, I'm going to teach him." He said, "His ABC's again?" I said, "What are you talking about -- he knows his ABC's." He said, "Oh, he's gotten up to D now, huh?" I think that's an example of the reputation that he's going to have to learn to deal with.

Following the work activities event, Teacher W described Ron as "wishy-washy" and focused on his distractibility.

He was doodling away at this thing he has, the "Vote for Ron" thing. We played a game a couple weeks ago that really got him wound up about getting "elected," and now his big campaign is to get elected for being able to go to the 1:00 group, which is not an electable issue.

The observer's informal impressions of Ron were in agreement with Teacher W's to the extent that they both saw Ron as sometimes disruptive and distracted. The observer also saw Ron as being extremely aware of how he could act in the classroom context.

My impression of Ron is that, of all students I've observed in this class, his sense for the daily routine of the class -- for its timing, for junctures, for places where he can say what's on his mind, change topics, start new topics, disattend, and go about with his various enterprises -- he has an exquisite sense of timing. He seems to know precisely what's going on, and what's likely to happen next, almost as though he knows where the "soft spots" are in the daily routine, those places in which he can go ahead with whatever projects he wants to go ahead with. So that, although in many obvious respects he's the most disruptive student and seems to be constantly engaged with the teacher over issues of reprimand, punishment, and the adequacy of his performance, at the same time, in terms of certain interactional competencies, I would expect that he's one of the keenest observers of classroom life among students.

The interview with Ron focused on Ron's attitudes and feelings about his own performance and Teacher W's class, rather than specific events that had transpired. Ron spoke freely about his feelings, indicating a lot of frustration about his placement in Teacher W's class.

Interviewer: Is this the class that you work to get out of?

Ron: I think so. I just can't stand it -- I like Teacher W personally, but I don't like his class.

Interviewer: What about it?

Ron: What about it? I just hate it. I hate the thought of even coming here. Well, it makes you feel sort of dumb, having to go to Teacher W's. The work I don't especially like and everything.

Interviewer: What else? What else really makes this class different?

Ron: Well, I don't know. You just come. I don't know. I just don't like it. I've got a lot of special help. I'm tired of special help.

Ron also indicated that a predominant feeling he had regarding Teacher W's class was one of anger:

Interviewer: How do you understand the difference between those times when you work well, you're very successful, and those times when you are not getting anything done?

Ron: Probably because the time is flying fast. I don't know, but the days I'm not working very good just seem like everything drags on and drags on.

Interviewer: Like what?

Ron: The time. Like when I put my head down and I start writing and all of a sudden -- it isn't even past, then I get mad and I just stop working.

Interviewer: What do you get mad at?

Ron: Everything. I don't know. I just get mad. I get mad because I'm here so long, and it probably started off that day I was mad at Teacher W. That's probably what gets me mad.

When asked what it would take for him to improve academically, Ron implied that he wanted to be in his regular class all the time. The theme of anger also came up again.

Interviewer: Well, what do you think it would take to pull your skills up?

Ron: Just let me try it myself. When I'm happy I can work good. I'm always thinking I have to go to Teacher W's and all this other stuff. That always gets me mad. I just get so mad I don't even care, you know. I think part of the reason is that if I wouldn't

> have to go to this class, I could just try it myself. I'd be alright . . . I think if I could just be left alone, just work like everyone else, I could do something -- because next year I'll be at junior high and I'll have to work pretty much alone.

When the interviewer asked Ron about what specific areas he needed to improve in, Ron listed writing and spelling. Despite Ron's expressed ideas about his own potential to improve, other remarks he made during the interview indicated that his future expectations for himself were quite low. He identified sports as the one thing he was good at and spoke of his future in terms of failing to meet his parents' expectations:

> My parents, they really tried to get me up 'cause I would . . . my parents really want me to get on, be good in school and you know. Like all parents, they want you to go to college and all that stuff, which I doubt very much I'll ever go to college, 'cause the only reason I ever want to go to college is to get a scholarship and play in sports, mainly football. But otherwise, I probably won't go to college. I'll join the Army or something like that.

In sum, Ron was less than a successful and satisfied participant in Teacher W's class. He was not able to concentrate or work well independently. Instead, he seemed to do best when receiving the personal attention of the teacher. Unlike the more physical disruptions of Joe and Phil, the major disruptions by Ron took place when he launched into uninvited conversation and monologues. Teacher W was tolerant of these digressions up to a point. The follow-up interview with Ron suggested that one impediment to Ron's progress was the feelings of frustration he had developed as a result of being assigned to LDG. While there was no doubt that this frustration was real, it was less obvious that Ron could be "cured" by being left alone and not receiving special help.

Conclusions and Implications

The observed work activities event in Teacher W's class indicates that the class was well organized. Students seemed to be familiar with the routine, and the transitions between activities ran smoothly.

While the Spelling and Sentence-Writing activities suggested that Teacher W wanted to give his students structured lessons for improving basic skills, other aspects of the events suggested that

Teacher W viewed students' motivational and emotional well-being as an equal priority. One such aspect was Teacher W's responsiveness and patience with his students. Teacher W tolerated -- even reciprocated -- a lot of off-task student expression and behavior and only reprimanded students after repeated transgressions. Another noteworthy aspect of the class was that Teacher W made an effort to be part of class by actually doing everything he asked his students to do. Thus, in Sharing, he shared; and in Sentence Writing, he wrote his own sentences down. This may have been Teacher W's way of communicating that what he was asking them to do wasn't for "dummies" but was useful for everybody.

The two target students who were observed represented two very different reactions to LDG placement. The first student, Rick, seemed to view the class as a fun interlude in the day, and his success-oriented behavior had led to a minimization of the time he had to spend in the class. In fact, when he was there, he was given the leeway to do his own independent assignments. The second student, Ron, was bitter and resentful about being in LDG. He felt trapped and labeled, and his future self-expectations were already tainted. Thus, no matter how academically and emotionally supportive Teacher W was -- for Ron did like Teacher W and sought his attention -- the very act of being placed in a special class seemed to have a very detrimental effect. In this sense, Ron represented the dilemma that advocates of special placement must face.

REFERENCES

Barker, R. Ecological psychology: Concepts and methods for studying the environments of human behavior. Stanford, Cal.: Stanford University Press, 1968.

Berliner, D. C. Using research on teaching for the improvement of classroom practice. Theory into Practice, 1980, 19, 302-308.

Bidwell, C. E. Schooling and socialization for moral commitment. Interchange, 1972, 3(4), 1-27.

Bossert, S. T. Tasks, group management, and teacher control behavior: A study of classroom organization and teacher style. School Review, 1977, 85(4), 552-565.

Bossert, S. T. Tasks and social relationships in classrooms. New York: Cambridge University Press, 1979.

Bronfenbrenner, U. The experimental ecology of education. Teachers College Record, 1976, 78(2), 157-204.

Brophy, J. E., & Good, T. L. Teacher-student relationships: Causes and consequences. San Francisco: Holt, Rinehart and Winston, 1974.

Charlesworth, W., & Spiker, D. An ethnological approach to observation in learning settings. Minneapolis, Minn.: University of Minnesota, Institute of Child Development, 1974.

Charlesworth, W. C., & Bart, W. M. Some contributions of ethology for education. Educational Studies, 1976, 7(3), 258-307.

Damon, W. The social world of the child. San Francisco: Jossey-Bass, 1977.

DeSoto, C. Everyman as psychologist. Contemporary Psychology, 1979, 24(6), 455-456.

Doyle, W. Paradigms for research on teacher effectiveness. In L. S. Schulman (Ed.), Review of Research in Education, Vol. 5. Itasca, Ill.: F. E. Peacock, 1977.

Doyle, W. Classroom tasks and students' abilities. In P. Peterson & H. Walberg (Eds.), Research on teaching: Concepts, findings, and implications. Berkeley, Cal.: McCutchan, 1979(a).

Doyle, W. The tasks of teaching and learning in classrooms. Austin, Tex.: The Research and Development Center for Teacher Education, 1979(b). (Report No. 4103)

Dreeben, R. On what is learned in school. Reading, Mass.: Addison-Wesley, 1968.

Entwisle, D. R., & Hayduk, L. A. Too great expectations. Baltimore, Md.: Johns Hopkins University Press, 1978.

Furth, H. Children's societal understanding and the process of equilibration. In W. Damon (Ed.), New directions for child development: Social cognition (Vol. 1). San Francisco: Jossey-Bass, 1978.

Good, T. L. Teacher effectiveness in the elementary school. Journal of Teacher Education, 1979, 30, 52-64.

Gump, P. The classroom behavior setting: Its nature and relation to student behavior. Lawrence, Kan.: University of Kansas, Midwest Psychological Field Station, 1967.

Hoffman, M. Moral internalization: Current theory and research. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 10). New York: Academic Press, 1977.

Jackson, P. Life in classrooms. New York: Holt, Rinehart and Winston, 1968.

Kounin, J. S. Some ecological dimensions of school settings. Paper presented at the annual meeting of the American Educational Research Association, New York, April 1977.

Mehan, H. Learning lessons. Cambridge, Mass.: Harvard University Press, 1979.

Philips, S. Participant structures and communicative competence: Warm Springs chidren in community and classroom. In C. Cazden, V. John, & D. Hymes (Eds.), Functions of language in the classroom. New York: Teachers College Press, 1972.

Rhodes, W., & Paul, J. Emotionally disturbed and deviant children. Englewood Cliffs, N.J.: Prentice-Hall, 1978.

Rist, R. Student social class and teacher expectations: The self-fulfilling prophecy in ghetto education. Harvard Educational Review, 1970, 40, 411-51.

Rosenholtz, S. J. & Wilson, B. The effect of classroom structure on shared perceptions of ability. American Educational Research Journal, 1980, 17, 75-82.

Rosenshine, B. Classroom instruction. In N. L. Gage (Ed.), The psychology of teaching methods (the 75th Yearbook of the National Society for the Study of Education, Pt. 1). Chicago: University of Chicago Press, 1976.

Smith, L. M., & Geoffrey, W. The complexities of an urban classroom. New York: Holt, Rinehart, & Winston, Inc., 1968.

Stallings, J. Allocated academic learning time revisited or beyond time on task. Educational Researcher, 1980, 9, 11-16.

Tikunoff, W. J., Ward, B. A., & Griffin, G. Interactive research and development on teaching: Executive summary. San Francisco: Far West Laboratory for Educational Research and Development, 1979. (Report IR&DT-79-12)

Weiner, B. A theory of motivation for some classroom experiences. Journal of Educational Psychology, 1979, 71(1), 3-25.

Weinstein, R. S., Middlestadt, S. E., Brattesani, K. A., & Marshall, H. H. Student perceptions of differential teacher treatment. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.

APPENDIX A

SAMPLE CLASS MATERIALS

NAME_____ DATE_____ SCORE_____

Why You Go to School

The main reason you go to school is that schooling prepares you to lead a better and more successful life. Now you may **protest** that you would be much happier if you didn't have to go to school. But consider for a moment: Would you be happy if you couldn't read, didn't know how to write, and required help in buying things because you knew no arithmetic?

What kind of position could you **occupy** in later life without schooling? Can you think of one well-paying job that does not require a knowledge of spelling, reading, writing, and mathematics?

Will people pay attention to you if your **views** show that you have not gone very far in school? Listen to your parents and their friends. You will be astonished how much of what they say shows a knowledge of geography, history, civics, and science.

Every day, life offers a **challenge** to you. Education helps you to meet that challenge effectively.

Or, look at it this way: Learning as much as you can in school is one way of being **loyal** to your country. Educated people help keep their nation prosperous, strong, and free.

Yes, there is no doubt of it—you come to school in order to learn to live a full, happy life.

1. *DO YOU UNDERSTAND WHAT YOU READ?*

Think about what you have just read, and then decide whether each of the following statements about the story is *true* or *false*. Write T for *true* and F for *false*.

____ 1. The main purpose of school is to teach you to read and write.

____ 2. Schooling prepares you to live a richer, more useful life when you are an adult.

____ 3. A nation of uneducated people is not likely to be strong or prosperous.

____ 4. Education helps fit you for better jobs.

____ 5. We pay as much attention to the views of uneducated people as we do to the views of educated people.

II. *ARE YOU A WORD DETECTIVE?*

Can you discover the lesson word that matches each of the following definitions? Write the word (and, of course, spell it correctly!). You may refer to the story as often as you wish.

LESSON WORDS	DEFINITIONS
1. _____	fill, or have ownership of
2. _____	a dare; an invitation to a struggle or contest
3. _____	faithful, true, especially to one's country
4. _____	to show disapproval or objection
5. _____	ways of looking at things—therefore, opinions, ideas, thoughts; also acts of seeing, or things you see

PRACTICE SAYING THE WORDS

protest	prə-'test
occupy	'äk-yə-ˌpī
views	'vyüz
challenge	'chal-ənj
loyal	'lȯi-əl

III. *CAN YOU MAKE NEW WORDS?*

New words may be formed from the lesson words by adding or dropping letters, or sometimes by first dropping and then adding letters. Study the way in which the second model word below is made from the first. In the same way make a new word from the lesson word.

MODEL WORDS	LESSON WORDS
1. consider	protest
considers	_____
2. try	occupy
tries	_____
3. scorns	views
scorn	_____
4. admire	challenge
admirer	_____
5. honest	loyal
dishonest	_____

IV. *CAN YOU FIND THE RIGHT WORD?*

Complete each of the following statements either with the lesson word or with one of the new words you formed in Exercise III.

1. You are, in a way, _____ to your country if you do not get as much education as you can.
2. When we tell you how happy school will make you, you may wish to _____ that you'd be happier if you didn't go to school.
3. Your _____ on various subjects will show how much you learned in school.
4. The position you _____ in later life will depend a great deal on how much schooling you've had.
5. Life offers a(an) _____ that education will help you meet.

V. *CAN YOU USE ONE WORD FOR MANY?*

One of the lesson words or one of the new words you formed in Exercise III can be used in place of the italicized words in each of the following sentences. Fill in each of the blanks correctly. Remember that a misspelling is as much an error as a missed word!

1. He is a citizen *who is faithful to* the United States.

   He is a(an) _____ citizen of the United States.

2. George was the *one who dared Bill to fight.*

   George was the _____.

3. From this window you can get a fine *group of things worth seeing.*

   From this window you can get a fine _____.

4. George now *has possession of* the seat Richard once had.

   George now _____ the seat Richard once had.

5. Tony *shows his disapproval* when anyone tries to cheat him.

   Tony _____ when anyone tries to cheat him.

THE PROFESSOR SAYS:

"Protest" when used as a noun is pronounced "*pro*-test." The verb, however, is "pro-*test*."
"Occupy" changes *y* to *i* before adding *es*: occu*pies*.
Note the *i* before *e* in "v*iews*."
Note the *er* ending in "challeng*er*."

VI. *CAN YOU USE THE WORDS?*

Complete the sentences below by using any of the words in the list. Some words may be required more than once. A word must be marked wrong if it is misspelled.

protest	**protests**	**protested**
occupy	**occupies**	**occupants**
view	**views**	**viewing**
challenge	**challenged**	**challenger**
loyal	**disloyal**	**loyalty**

1. A woman and child were the only _____ of the car.
2. The heavyweight champion of the world is always _____ by other prizefighters who wish to capture his title.
3. America has always _____ against unnecessary cruelty in warfare.
4. No one can question Martin's sturdy _____ to his school.
5. A traitor is _____ to his country.
6. What room does your class _____?
7. Several of us signed a(an) _____ against the way the election was run.
8. We must take a serious _____ of your attempt to cheat on the mathematics test.
9. Life will always _____ you to find new and better ways of doing things.
10. We are _____ the distant sea through a telescope.

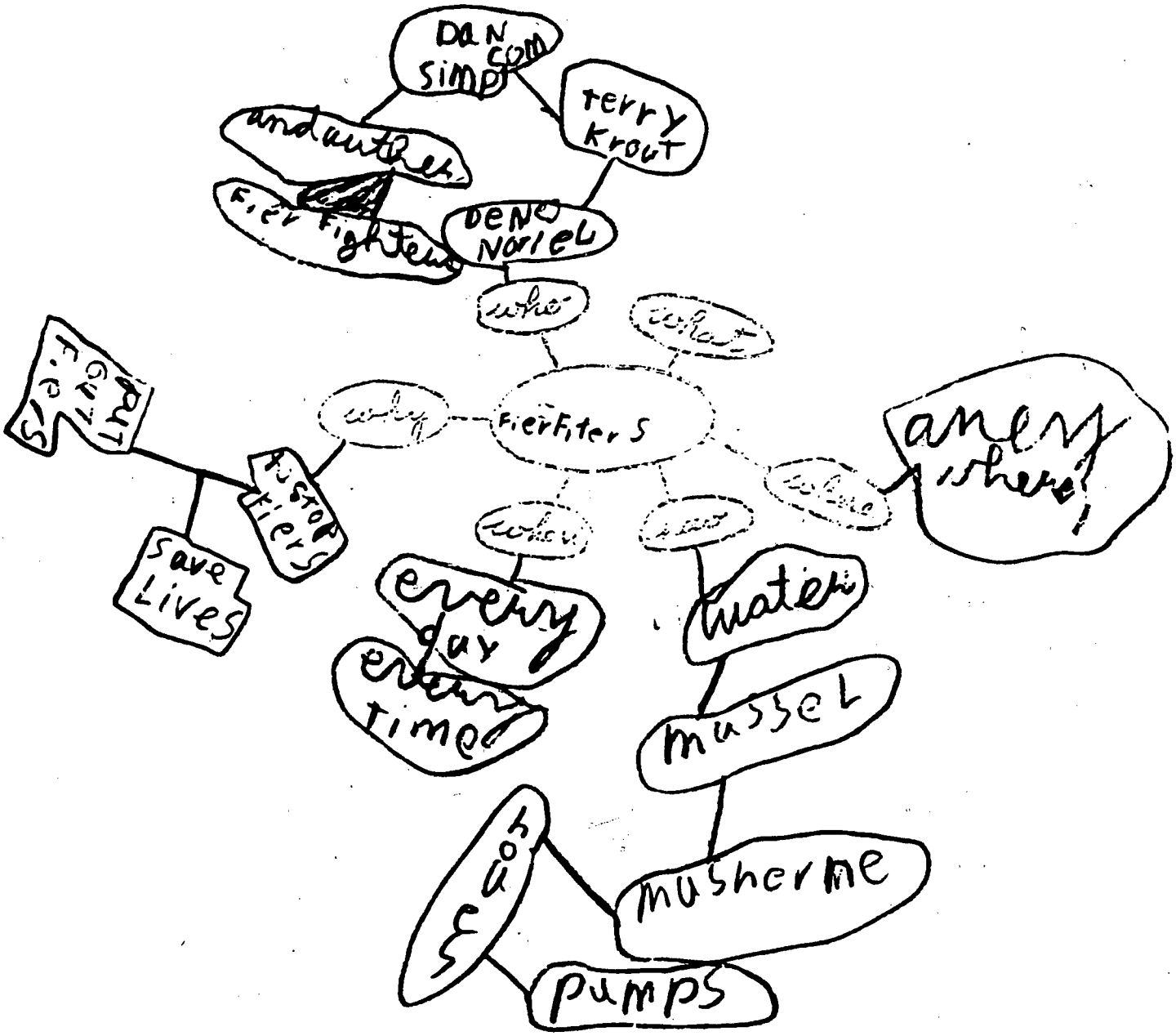
VII. *ARE YOU READY FOR A REVIEW?*

If the two words on each line are nearly the *same* in meaning, write *S* in the blank. If they are more nearly *opposite*, write *O*.

____	1. accept	refuse	____	6. sturdy	strong
____	2. occupy	leave	____	7. withstand	resist
____	3. disloyal	unfaithful	____	8. cowardice	courage
____	4. excellent	poor	____	9. views	opinions
____	5. require	need	____	10. astonish	amaze

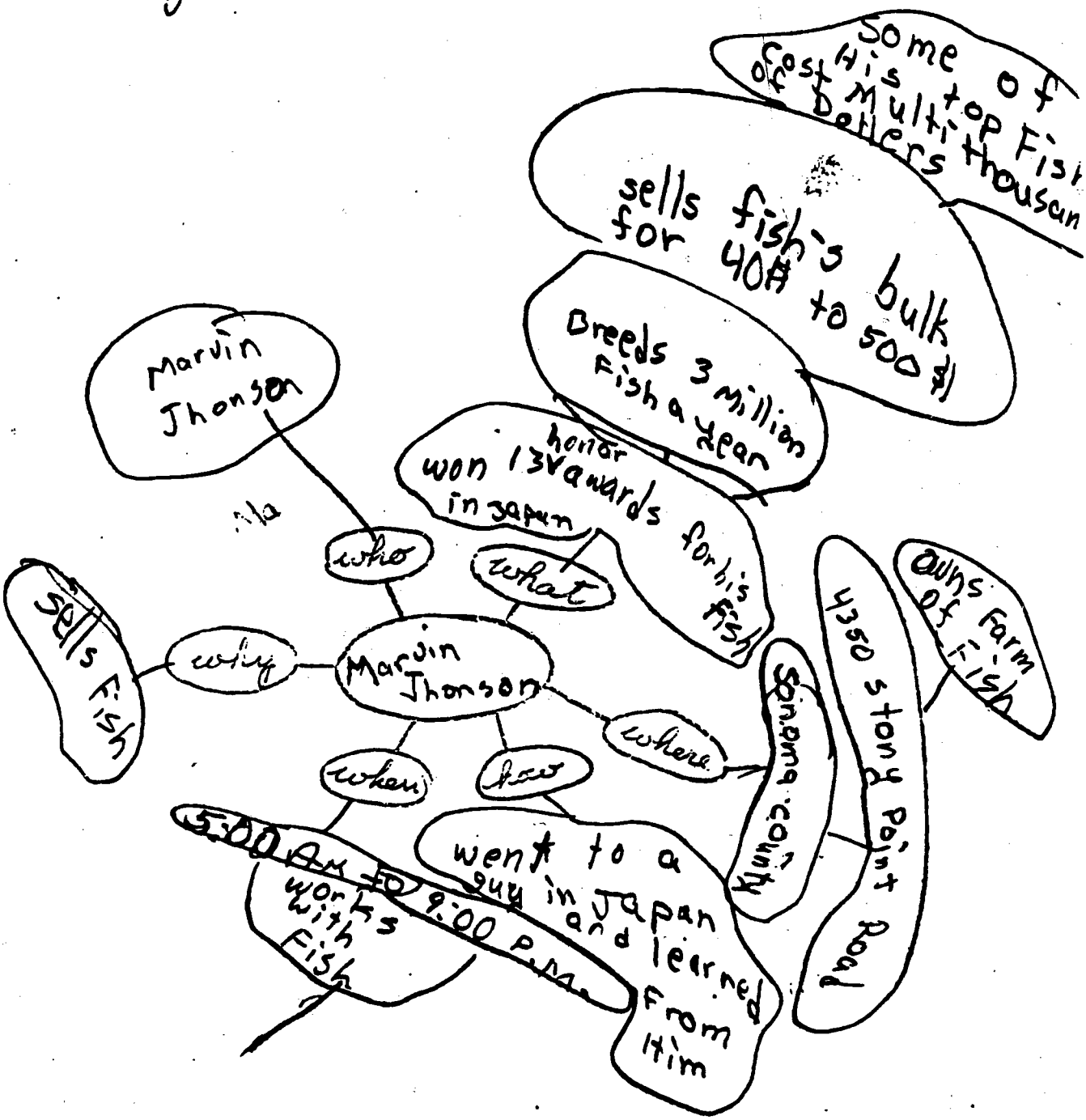
Top of the Day

Name BOB



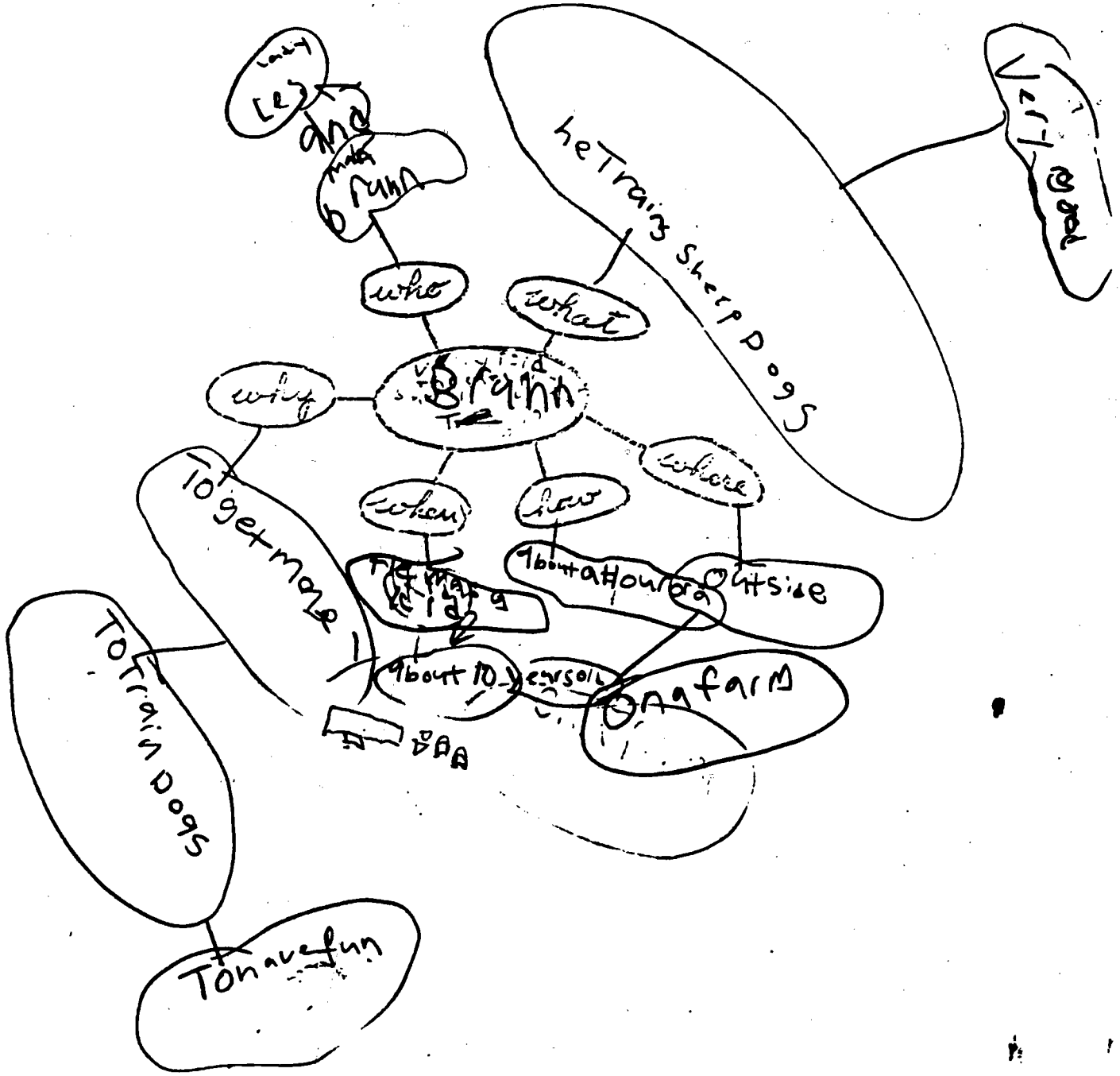
Top of the Bay

Name ALICIA



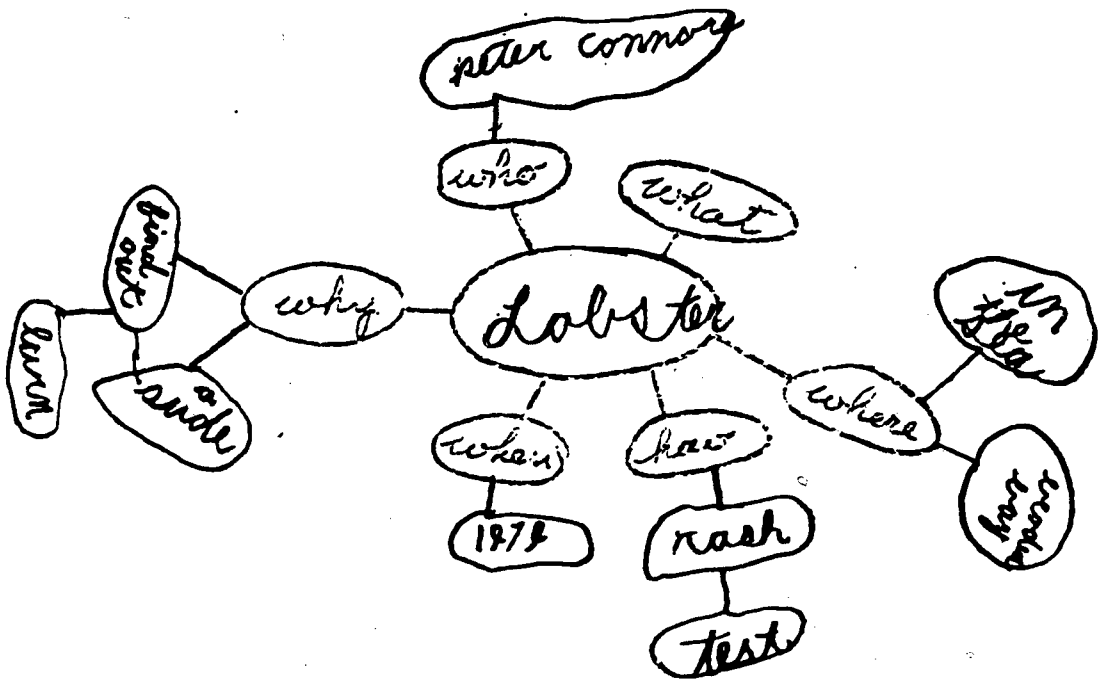
Top of the Bay

Name NADA



Top of the Bay

Name FRANK



_____1. Read the chapters in THE STORY OF AMERICAN FREEDOM and THE STORY OF OUR COUNTRY and do the questions about the chapters. REQUIRED Yes No

_____2. Draw, color and label each flag of our country from 1774-1978. Be neat and use colored pencils only.

_____3. Identify: (Use dictionary and encyclopedia)

Whigs	Minutemen	Boston Tea Party
Torys	Valley Forge	Boston Massacre

_____4. Memorize and recite to the teacher at least 10 of the 14 famous sayings.

_____5. Memorize and recite to the teacher the Preamble to the Constitution.

_____6. Memorize and recite the sentence from the Declaration of Independence.

_____7. Memorize and recite Patrick Henry's Speech to Virginia's Congress.

_____8. Write an essary about the Declaration of Independence. Include such facts as who ordered it? Who wrote it? When was it written? What three rights did it claim for all men? Why was it so important? (at least 150 words)

_____9. Fill in the list concerning the 19 FAMOUS PATRIOTS (1770-1812)

_____10. Finish completely the Map of the Battles of the Revolutionary War. Color, print, and complete as shown on page 166 of the THE STORY OF OUR COUNTRY.

_____11. Pick 25 of the Vocabulary Words and define them on binder paper.

_____12. Draw, color, and make a report of not less than 80 words on Paul Revere. Do not copy your information but write it in your own words.

_____13. Fill in the stars of the Top of the Flag with the state's abbreviation and their dates of Admission.

_____14. Write a book report on the subject of the Revulutionary War. It can be about the people of this time. For example:

Abagail Adams	Francis Scott Key	Benedict Arnold
Benjamin Franklin	Patrick Henry	Thomas Jefferson
Nathan Hale	John Paul Jones	Alexander Hamilton
Samuel Adams	LaFayette	Charles Carroll
Isreal Putnam	Nathaniel Greene	Martha Washington
Cornwallis	George Washington	George Rogers Clark

_____15. Do the Benjamin Franklin Crossword Puzzle.

_____16. Make a TIME LINE using the instructions on pages 6 and 7 of projects sheets.

_____17. Write a Colonial Cartoon and Newspaper story (use page 9 of projects sheets to give you ideas.

_____18. Make a picturestrip. Use pages 12 and 13 of projects sheets to help you.

_____19. Do A NEW NATION IS BORN puzzle.

_____20. Do THE REVOLUTIONARY WAR BEGINS - Complete a Map, projects page 10.

Name: _____

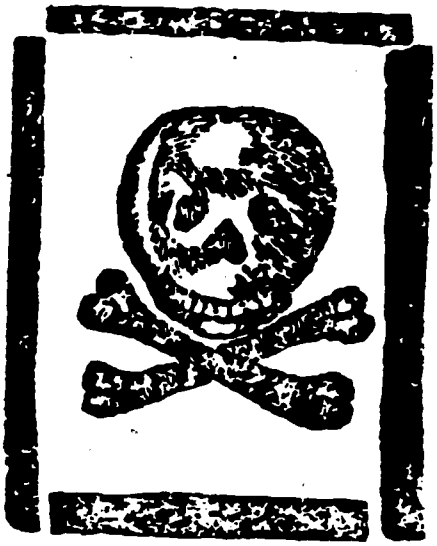
COLONIAL CARTOONS

Colonial leaders encouraged the colonists to stand against Great Britain and to fight for their freedom. The leaders made speeches, wrote newspaper articles, and drew cartoons to protest unfair laws.

Below are cartoons like the ones that appeared in colonial times. They show how some colonial leaders felt. Read the paragraphs under each cartoon that explain the cartoons.

Colonial Loyalty

This cartoon shows the problem of split-loyalties. Many colonial leaders felt loyalty to the colonies but at the same time still felt loyal to the king of Great Britain.



Library of Congress

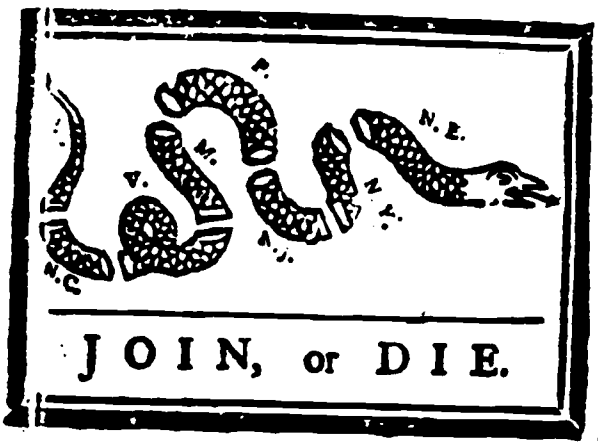
The Stamp Act

This cartoon was printed in a Pennsylvania newspaper. On October 31, 1765 the cartoonist tried to show that the Stamp Tax was like poison because it was a threat to the colonial spirit of revolution. To avoid paying the Stamp Tax, the newspaper owner stopped printing his paper.

Library Company of Philadelphia

British Colonies Break Away

In 1767 Benjamin Franklin drew this cartoon. It shows the sad end of the British Empire in North America. It also pictures the need for the colonies to join together and form a new nation.



Historical Society of Pennsylvania

Independent Colonies

Benjamin Franklin drew this cartoon in 1754 for his newspaper, the Pennsylvania Gazette. He wanted the colonies to join together and help each other fight Great Britain.

DIRECTIONS

On another piece of paper draw your own cartoon showing one of the colonists' reactions to the Tea Tax. Write a new story describing your cartoon.

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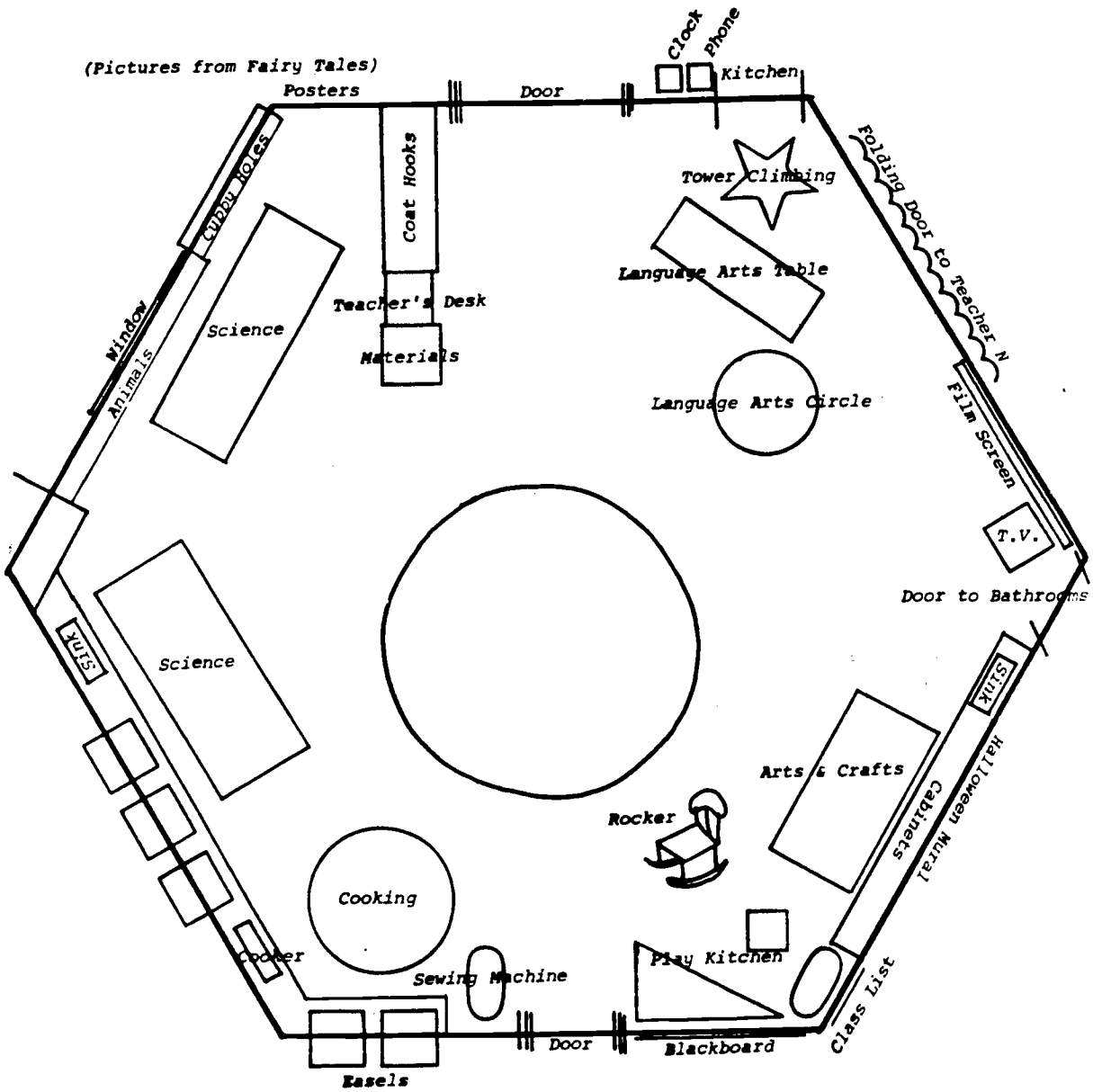
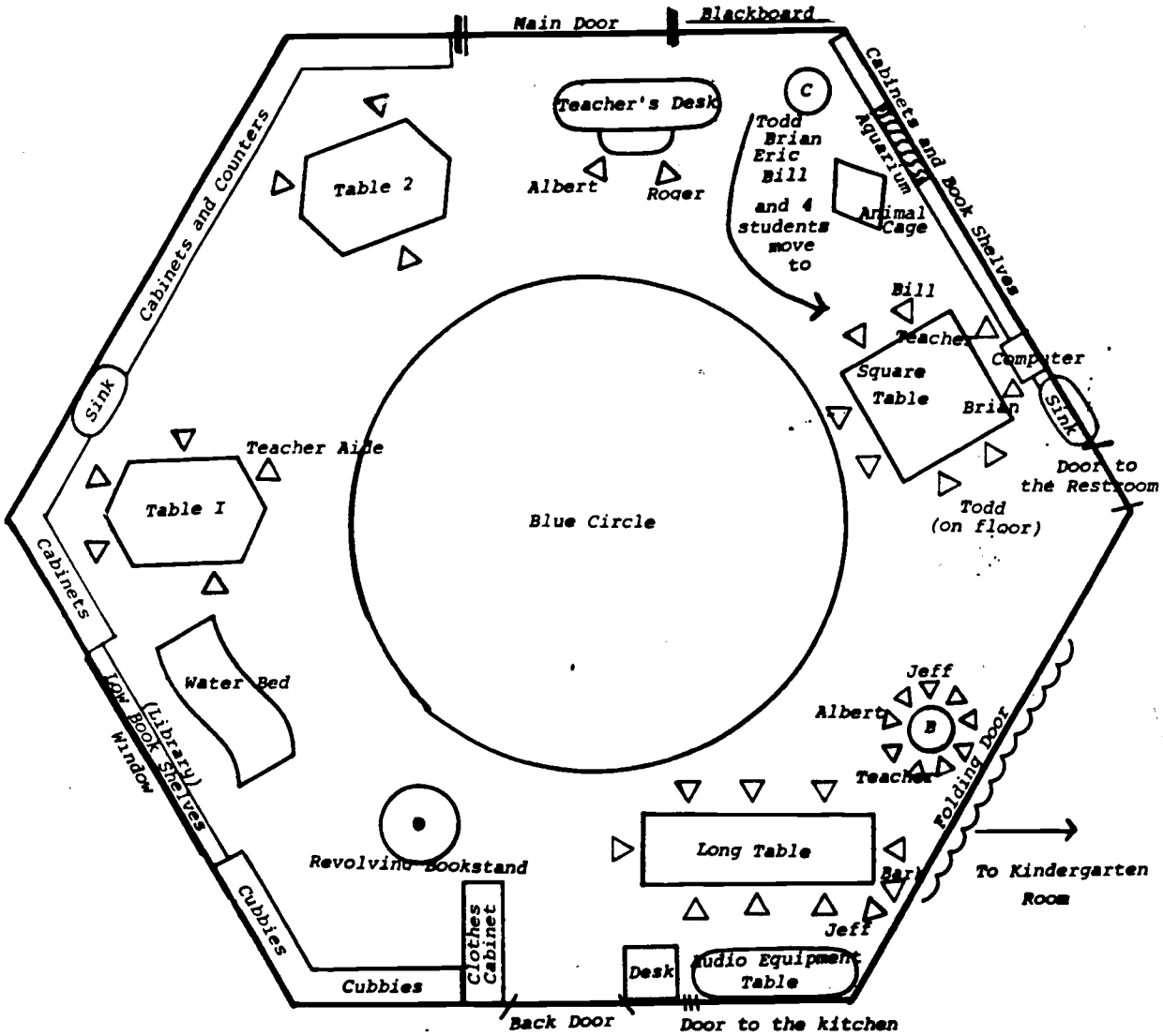
APPENDIX B

CLASSROOM MAPS

Teacher: M
Date: 11/29/79

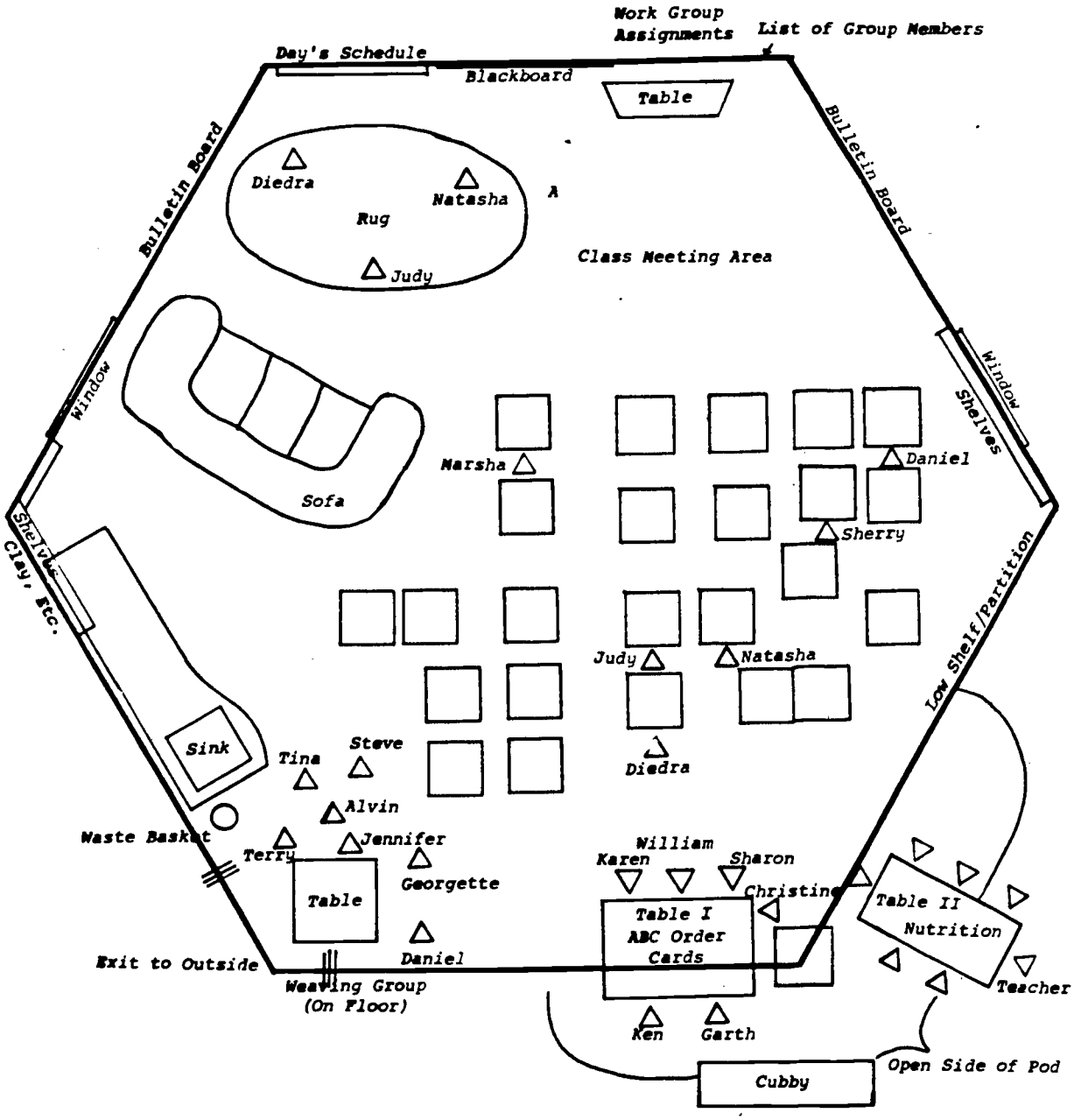


Teacher: N
Dates: 5/1/80

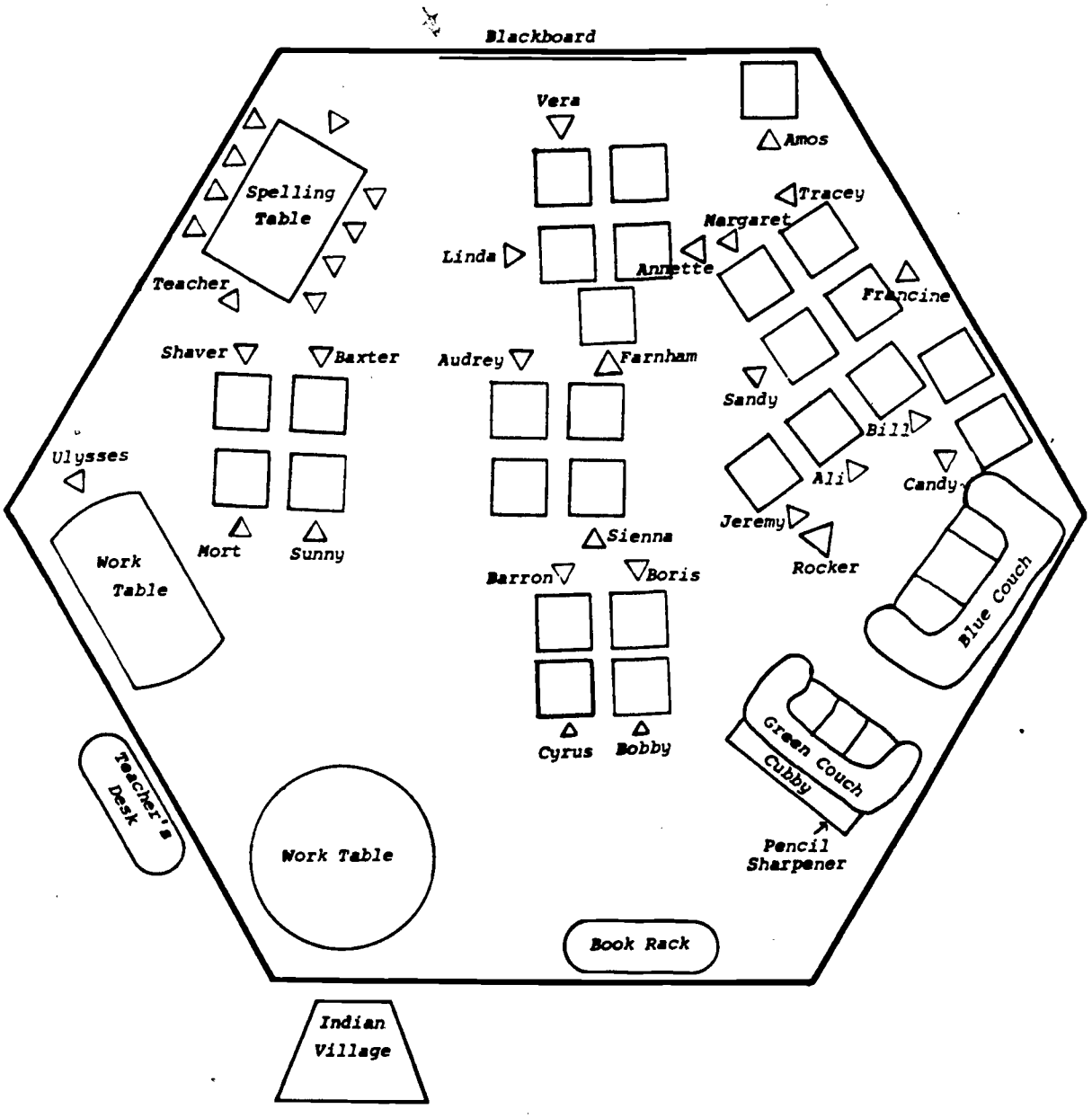


Group A at Tables 1 and 2: Read and Write Books -- 7 students
Group B at Long Table to plan Magic show, then with teacher on floor at (B) -- 8 students
Group C at (C) with Magnet Board on floor -- 8 students

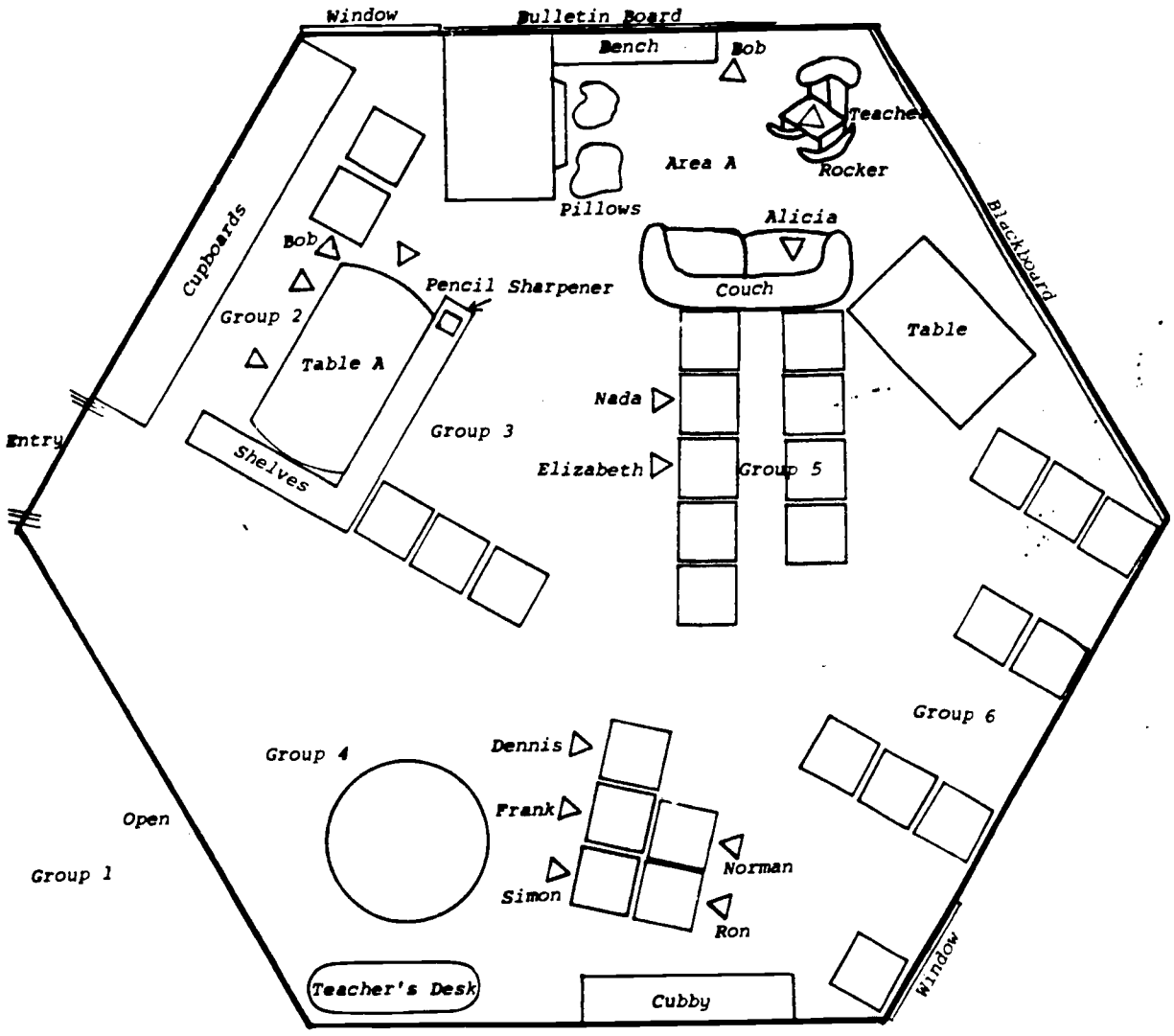
Teacher: S
Date: 5/22/81



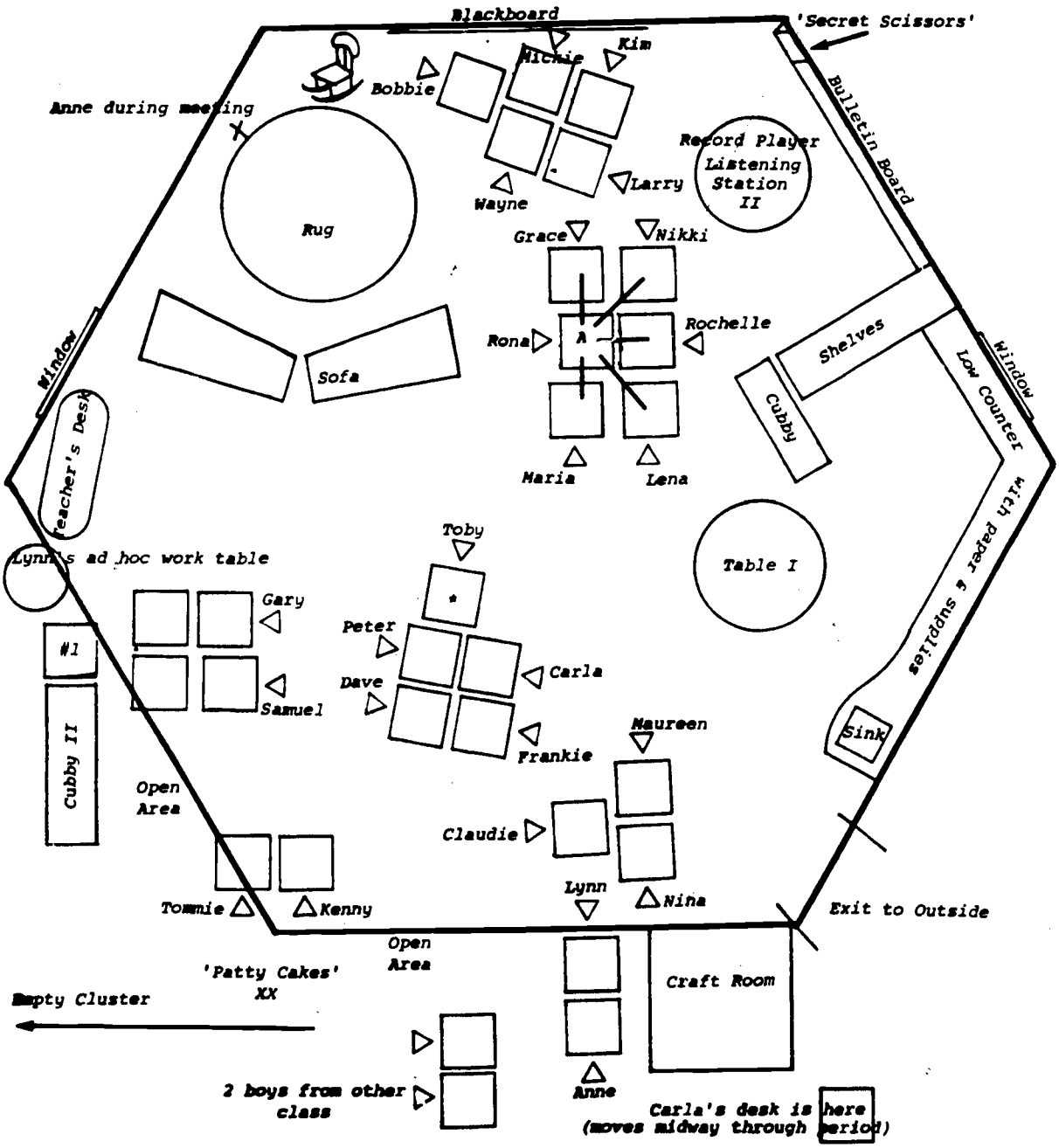
Teacher: 0
Date: 11/15/79



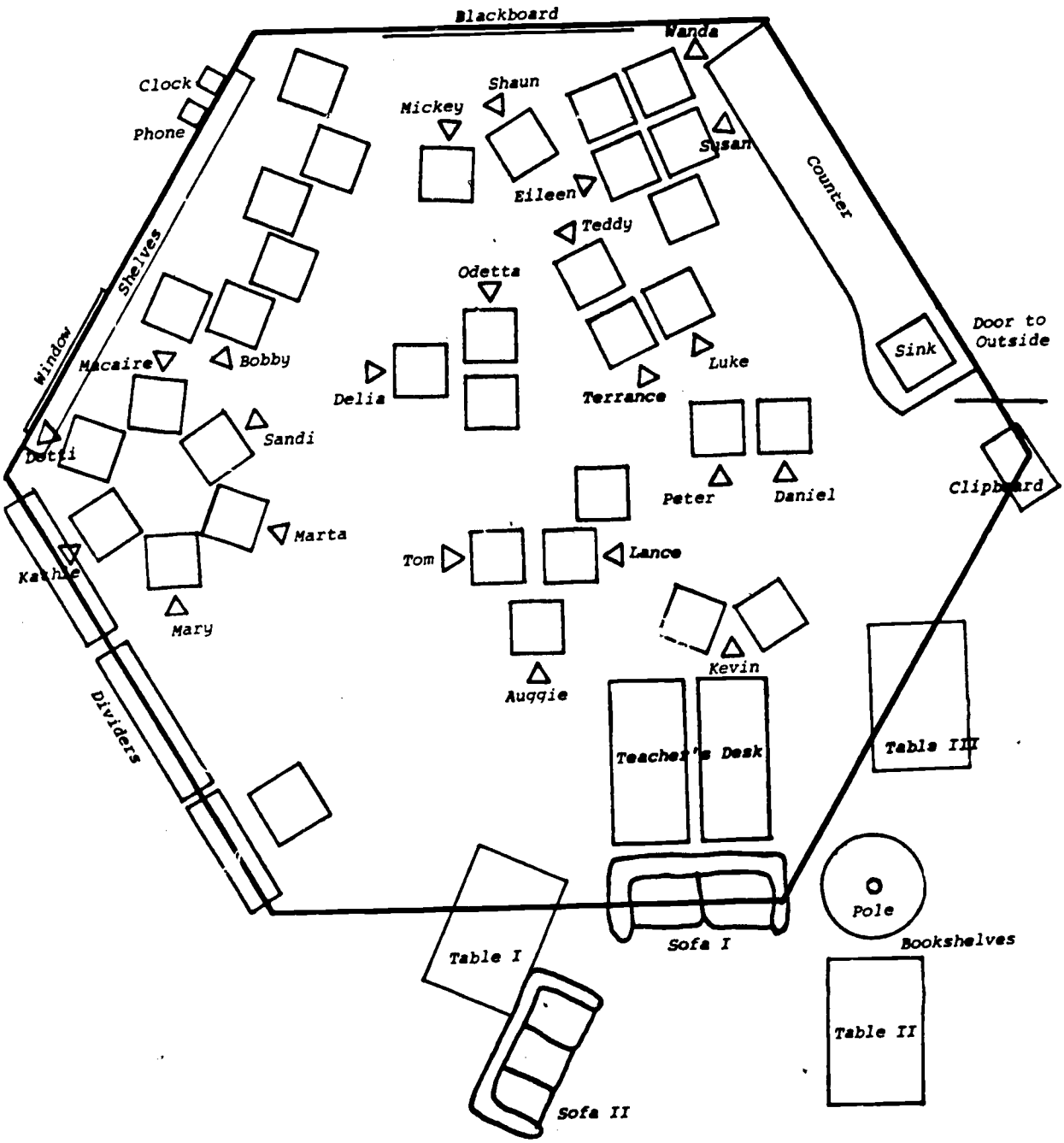
Teacher: R
Date: 4/28/80



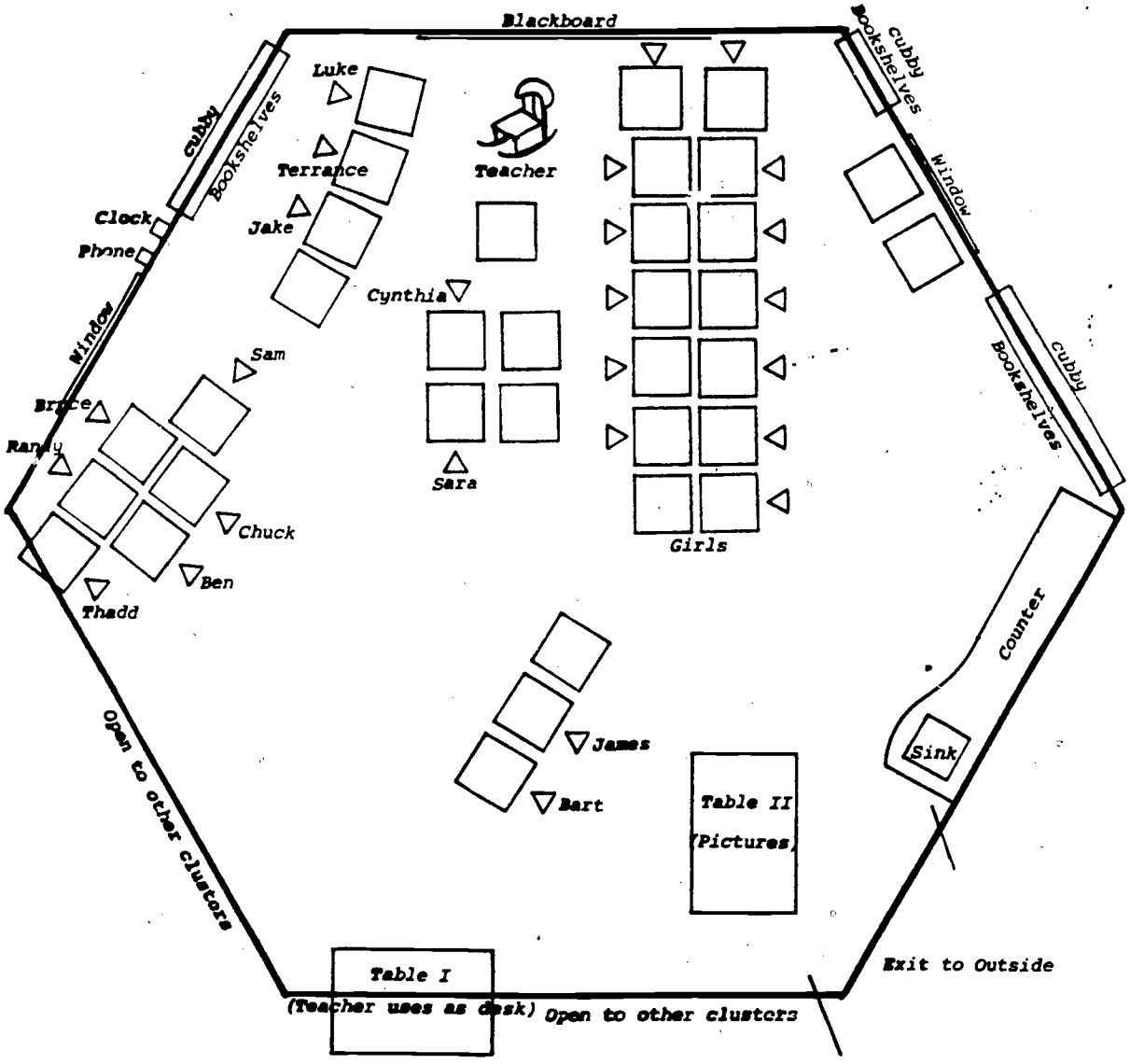
Teacher: Q
Date: 5/20/80



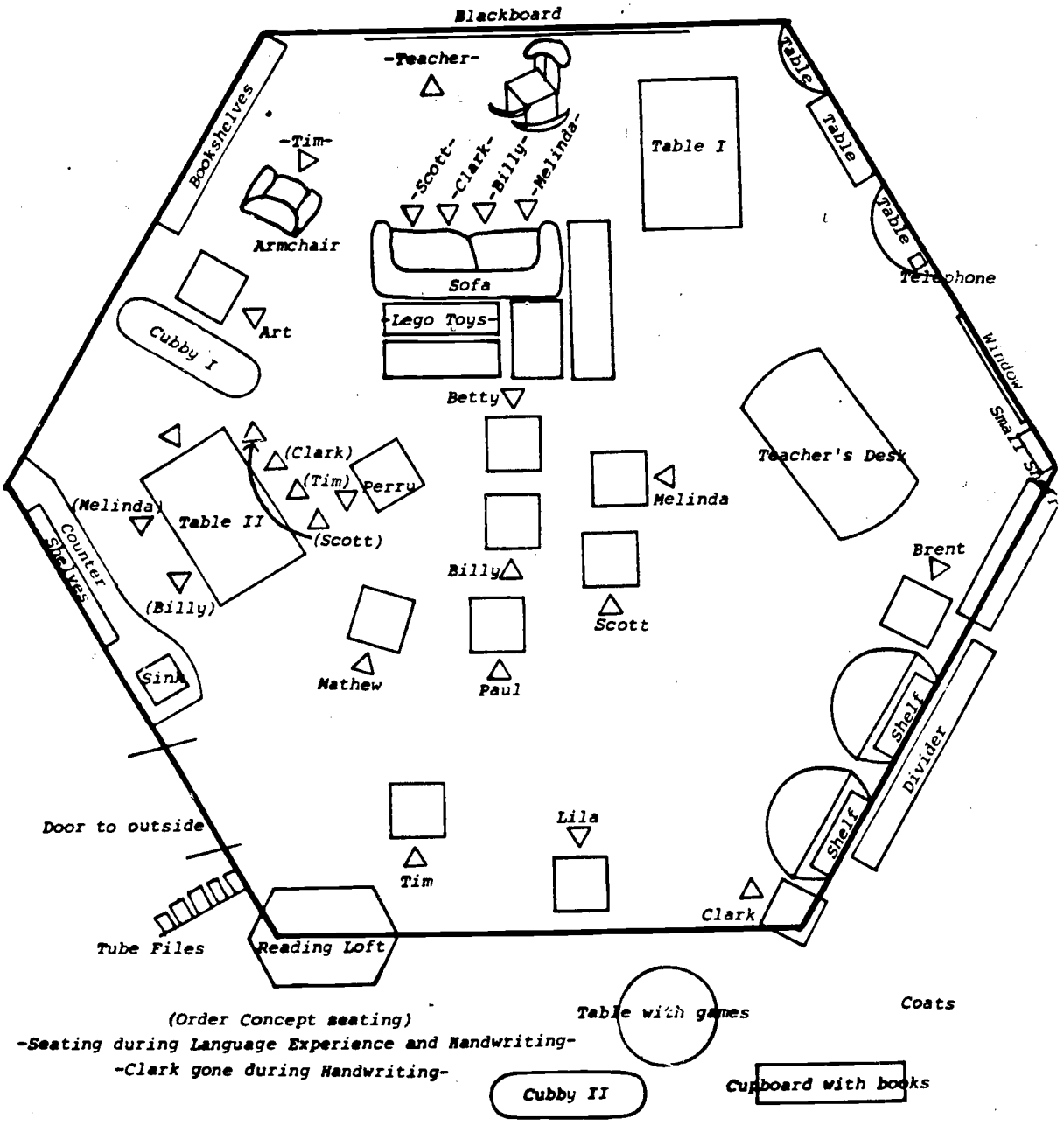
Teacher: U
Date: 11/27/79



Teacher: T
Date: 5/6/80



Teacher: V
Date: 12/4/79



Teacher: W
Date: 12/11/79