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ABSTRACT

In December 1989, the school district in Philadelphia (Pennsylvania) and Research for Better Schools, Inc., with the support of the Pennsylvania State Department of Education, initiated a collaborative 2-year study of the district's Chapter 1 schoolwide projects. This report presents findings from the study of Taylor Elementary School (currently grades K through 4), one of the schoolwide projects initiated in 1988. Section I describes what it means to be involved in a schoolwide project on the basis of interviews with principal and staff and observations. Section II presents an overview of current instructional practices on the basis of visits to nine classrooms and interviews with eight teachers over a 2-day observation period. Section III explores the instruction received by three Taylor students over a given school day. Section IV describes the reflections of evaluators about the process, commends the teachers' dedication to change, and notes some challenges to be faced. Eleven tables and one figure present study data, and an appendix contains the daily schedules of the three students. (SLD)

AN EXPLORATORY STUDY OF A CHAPTER 1 SCHOOLWIDE PROJECT AND CURRENT INSTRUCTIONAL PRACTICE

Taylor Elementary School
School District of Philadelphia

by

Research for Better Schools, Inc.

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School District of Philadelphia

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RBS is funded by the U.S. Department of Education to be the Mid-Atlantic Regional Educational Laboratory, serving, Pennsylvania, Maryland, Delaware, New Jersey, and the District of Columbia. As one of nine federally-supported regional educational laboratories, RBS's mission for the past 23 years has been to collaborate with state, intermediate, and local educational agencies to improve district, school, and classroom practice. RBS is a non-profit corporation, governed by a Board of Directors made up of educational and community leaders from its region.

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INTRODUCTION

In December 1989, the School District of Philadelphia and Research for Better Schools, with the support of the Pennsylvania Department of Education, agreed to initiate a collaborative two-year study of the district's Chapter 1 schoolwide projects. As the first phase of the study, it was agreed that RBS would undertake an in-depth study of four schoolwide projects, in order to delve into the complexities of individual school practice. This report presents the findings of RBS's study of Taylor Elementary School, one of the schoolwide projects initiated in 1988.

This report's primary purpose is to provide Taylor's staff with a description of current practice in their school, a description that may help them further focus the improvement activities that are under way. The report will also inform an analysis of the commonalties and differences across the four schools participating in this study.

The report is written in a style and format to support the efforts of Taylor's staff to improve their performance as a school. The report is primarily descriptive; it reflects as accurately as possible what RBS staff, along with those who helped them, heard and saw. The report keeps before the reader the methods used to collect the information in order to discourage over-generalizing the findings. The findings are presented in reference to specific topics or questions. At the end of each set of findings, discussion questions are provided to help the reader process the information, and to suggest a focus for further study. In general, the report encourages the reader to consider these general questions:

- To what extent are the descriptions of practice at Taylor accurate and generalizable?
- To what extent do the descriptions suggest practices in need of further study and/or action?

The report is organized into four sections, reflecting the principal purposes of the study.

- Section I, Taylor Elementary School as a Schoolwide Project, describes what it means to be a schoolwide project, as could be gleaned from interviews of Taylor's principals and staff and from RBS staff's observations of a number of staff meetings.
- Section II, Instructional Practice at Taylor Elementary School -- A Snapshot, presents an overview of current instructional practice at Taylor, as seen during the course of a two-day visit by a team, composed of Chapter 1 educators.
- Section III, Instructional Practice from the Perspective of a Day in the Life of Three Taylor Students, describes the instruction that three Taylor students experienced on May 9, as recorded by the three RBS staff who shadowed those students for that day.

- Section IV, Some Concluding Thoughts, shares some RBS staff reflections on information presented in this report.

SECTION I

TAYLOR ELEMENTARY SCHOOL AS A SCHOOLWIDE PROJECT

The first task of the study was to collect information from school staff on what it has meant to be in a Chapter 1 schoolwide project. That information was also used to suggest how the school was implementing major components of the district's schoolwide design.

This section presents a summary of what RBS staff saw and heard about Taylor Elementary School as a schoolwide project. This summary is organized into seven parts. The first describes the components of a schoolwide project, as described by School District of Philadelphia's Central Office staff, and the study methods. The second is a brief description of the school, its staff, students, and community. The third highlights some of the recent history of the school. The fourth describes the current mission and goals of the school. The fifth provides an overview of the current organization of the school, with emphasis on the new staff groups and roles that have developed as a result of Taylor's schoolwide project. The sixth discusses the strategies and activities that Taylor has undertaken to improve its performance. The last summarizes staff perceptions of what it means to be a schoolwide project.

Components of A Schoolwide Project and Study Methods

The major components of the schoolwide project design are the following components:

- the emphasis on improving student attendance and student achievement, and in support of these outcomes, increasing parent involvement
- the creation of new groups (e.g., the leadership group) and new staff roles (e.g., program support teacher, instructional support teacher) responsible for developing and updating plans for affecting practice in ways that improved performance, budgeting Chapter 1 and other resources to support the implementation of those plans, and leading the effort to implement specific changes in practice
- the required schools' use of a systematic, data-based planning/ problem solving process to develop and update improvement plans
- the selection and implementation of an instructional model, with staff development activities to support its implementation
- use of detailed student records to monitor student progess and to identify students with specific needs
- the establishment of a pupil support committee to help staff address more effectively students with special needs.

There were other district initiatives affecting the schools during the study period, but these were not part of the schoolwide project design -- for example, the district's standardized curriculum, testing program, promotion policy, and computerized report cards.

To collect information about Taylor's approach to the schoolwide project, RBS conducted a series of open-ended interviews with Taylor's principal, program support teacher, other members of the school's leadership group, and several classroom teachers. The interviews began with two general questions: one to elicit some professional history of each informant and the second to obtain each person's perspective on Taylor as a schoolwide project.

As follow-up to these interviews, RBS staff observed meetings of the leadership group and the half-day planning meetings of the entire staff of the school. When necessary, RBS staff checked its perceptions with members of the leadership group to clarify what had been discussed and how it did or did not related to Taylor as a schoolwide project.

The School, Its Staff, Students, and Community

The school building is a four-story, brick structure built in 1908. From the outside, it is a tall, imposing structure, relative to the two-story row houses that surround it. Its lower surfaces are defaced by graffiti. Inside, the school is clean, having recently been repainted, and on its walls are displays of students' work.

The entire school staff numbers over 50 of whom approximately 25 of them are regular classroom teachers. The staff is predominantly female. It is well integrated. And, it is quite stable: having small turnover (3 or 4 staff in each of the last two school years) and having a number of staff who have been at the school for over 15 years. The principal characterized the staff as being "close."

The school enrolls over 700 students. Three-quarters of the students are Hispanic, a fifth are African-American, and the remaining are white and Asian. Significant numbers of students come to Taylor with no pre-school or kindergarten experience. Currently, over one-third of the Hispanic students are enrolled in ESOL or bilingual programs. The school experiences high student mobility. For example, during school year 1988-89, over 100 students withdrew, and their places are taken by 100 or so new students. The district in 1988-89 identified 87 percent of Taylor's students to be from low income families.

The school is located in a high crime area, an area that is actively involved in the illicit drug trade. In order to provide their children safe passage, many parents escort their children to and from school. The community has no recreational or library facilities for its children. There currently is no strong community-based organization fighting to improve conditions.

In spite of crime in the community, the school staff describe the school as a safe haven, a sanctuary for the community's children. Though the school itself is a safe place, it is subject to break-ins and to related damage or loss of property. Several break-ins occurred during the five months that RBS staff were visiting the school.

History

Several school staff who have been at the school over 15 years described the school as being reinvented each year. Over that period, Taylor has been every configuration from K-8 to K-4. There was a time when Taylor had a annex for an alternative program; however, soon increased numbers of students required the assignment of regular program classes to the annex, at least until it was closed by the fire department.

Discussions with the principal about the school becoming a schoolwide project began in early 1988. He bought into the concept before the end of the school year, and several persons who would serve on the leadership group were identified. A number of staff described the first year of the project (school year 1988-89) as extraordinarily challenging and for some, very stressful. Simultaneously, the staff were asked to:

- become goal/performance-oriented
- develop school plans for achieving those goals
- incorporate into their lesson plans a new emphasis on the processes of communication, observation, inference, and numeracy -- the processes reflecting their instructional model
- keep more detailed records on student accomplishments and achievements
- modify plans based on the strengths and weaknesses identified through the analysis of student performance on the citywide tests and the Philadelphia Mathematics Evaluation Test, and of the distribution of marking grades by class and grade.

In addition to these specific tasks, the staff was to learn new ways of working together. A leadership group, grade-level groups, and a pupil support committee all came into being, in order to address goals and problems at various levels.

The RBS study of Taylor began in the middle of its second year as a schoolwide project. As the study began, the principal of 19 years was going on sabbatical for the spring semester. Taking his place was an auxiliary principal. During the study period, RBS staff observed Taylor's staff making adjustments in its plan when it received the distribution of grades for the first report period, and then, the scores on the citywide tests administered in January. Finally, it observed Taylor staff using all of the data available at the end of April to update both its Chapter 1 schoolwide and its school improvement plans.

Mission and Goals

The staff interviewed communicated in their own words the extent to which becoming a schoolwide project had affected their sense of mission and had clarified the goals that they should be trying to achieve.

> "Our principal's message has been clear: Taylor should be the kind of school that we would want our children to attend."
>
> "We have always been a close faculty, but now we are working together toward common goals."
>
> "We have focus like never before. There is no time to waste; progress must be shown; the kids must achieve more."

Figure _ summarizes the two sets of related goals that are guiding Taylor's improvement efforts: the goals that appear in Taylor's School Improvement Plan and those that the Central Office established for schoolwide projects. Of the two sets, the first was the primary focus of staff planning activities observed between February and May. Throughout that period, staff sought ways to improve on their second report performance, so that when the data came in this summer, they will have attained or surpassed their milestones for June 1990.

> Discussion question: To what extent is the goals of Taylor's schoolwide project attainable, given the background and developmental status of the students with whom the project is working and given what is known about the effects of exemplary instructional practice?

Organization of the School and the Staff

All staff interviewed made clear the impact of the schoolwide project on school organization, and on staff roles and relationships. Five structures have come into existence over the past two years.

- During the study period, the leadership group at Taylor was made up of the principal, administrative assistant, program support teacher (PST), elementary mathematics resource teacher (EMRT), other subject matter specialists, the counselor, and the instruction support teacher (IST) from the District 7 Office. This group was responsible for developing with the staff both the school's improvement plan and its plan for how Chapter 1 resources would be used.

  The leadership group met weekly to report to each other progress being made, discuss problems encountered, and agree on next steps. During the study, the leadership group was observed planning how to involve staff in the review of data from the first grading period and from the mid-year administration of the citywide test, and how to elicit from them ideas and suggestions about improving the school's performance. The group was also observed shifting those ideas, determining which ones could be acted on immediately, which ones could be incorporated into the update of the school's improvement plan, and which ones should not be pursued.

Figure 1

Taylor 1990 Milestones and Schoolwide Project 1993 Goals

Taylor's June 1990 Milestones	Schoolwide Project Goals (to be achieved by 1993)
40 percent of students, grades 1-4, will have ten absences or less.	Attendance: 80 percent of the students will attend 95 percent of the days.
38 percent of students, grades 1-4, will be reading on grade level.	Reading level: 80 percent of students in grade 2 and above will read on grade level.
	Eighty percent of students in grade 2 and above will progress at the rate of one year's growth in reading level.
74 percent of students, grades 1-4, will receive C or better in mathematics.	Report card grades: 80 percent of the students will receive A's, B's, and C's in reading, literature, writing, mathematics, science and social studies.
80 percent of students, grades 1-4, will submit a "hands-on" project and receive a C or better.	
76 percent of students will demonstrate mastery level on the social studies section of the Citywide Test administered in June.	Citywide Test: Increase NCE's in reading and mathematics for Chapter 1 students.
	Increase kindergarten NCE's.
	Increase exit rate from Chapter 1.
	Promotion/Retention: Increase each year the promotioon rate.
	Parent Participation: An average of 20 parents per 100 students will attend each of eight meetings.

Finally, the group was observed planning how selected staff suggestions would be immediately implemented, and informing the staff of its decisions.

- A peer "supervision" team, made up of the PST, EMRT, and other subject matter specialist, was organized by the principal. Its purposes were to help teachers to implement the student record-keeping system, to provide support to teachers new to the building, to identify teachers that were having classroom management and/or instruction-related problems and to provide them individualized assistance, and, in general to help all teachers implement the district curriculum and the instructional practices presented in staff development. During interviews with the PST, EMRT, and Reading, Social Studies, Science Specialist, they shared examples of how they were working with individual teachers.

- Under its schoolwide project, Taylor has sought to strengthen its grade-level groups. It has four grade-level groups, made up of the teachers for each of the grades in the school (kindergarten, first grade, and special education teachers made up one group; the second, third, and fourth grade teachers made up the remaining three groups, respectively). During the study period, these groups met twice a month and for part of the five half-days designated for schoolwide project planning.

  These groups had two primary purposes. First, to help with the updating of Taylor's improvement plan, the grade-level groups reviewed grade-level data and determined the extent to which their grade was contributing to the achievement of the school's milestones, identified reasons for areas of strong and weak performance, and proposed actions that might be taken to improve performance. As follow-up to those planning days, the principal met with each group to review their analysis as well as to discuss individual class performance. In those meetings, she encouraged all members of each group to build on each other's strengths and to help each other address identified weaknesses in performance.

  Second, these groups met to share instructional successes and problems they were having, seeking ideas from each other on how those problems might be addressed.

- A Specialist Group was created for the March planning day. It was made up of the specialists that worked across all grades in the school -- for example, the PST, EMRT, other subject matter specialists, physical education, music, and art teachers, and the administrative assistant. Its task was to address schoolwide needs in such areas as attendance, discipline, parent involvement, and student recognition. This group reported out a number of recommendations for action in each area, many of which were incorporated into the school's improvement plan. The group is expected to continue, assisting with the implementation of a number of the recommendations that it has made.

- During the study period, the Pupil Support Committee at Taylor was made up of the principal, the PST, EMRT, the nurse, the counselor, the teacher(s) referring the student, other subject matter specialists, if appropriate, and the parent(s) of the student being referred. It met once a week to identify ways in which students who exhibited attendance, behavioral, or achievement problems might be helped.

  In preparation for a meeting on a student, the teacher, counselor, and nurse assembled information on the student. At the meeting, the information about a student was shared, the Committee then explored alternative explanations, identified steps that might be taken, reached consensus on what will be done, and assigned responsibility for implementation of those steps.

In addition to creating new organization structures, the schoolwide project has stimulated the creation of new staff roles. Among the roles established were the following.

- The Program Support Teacher (PST) this year served as member of the leadership group, played an active role in the analysis of school and grade-level performance data and in the development of the plan for school year 1990-91, helped provide reading instruction in several bilingual classes, managed and taught in the after-school whole language program, coordinated the parent workshops, worked as a member of the specialist group, and served as one of the case managers for the Pupil Support Committee.

- The Elementary Mathematics Resource Teacher (EMRT) this year served as a member of the leadership group, played a leadership role in the analysis of student performance data on the mathematics section of the citywide test and on the Philadelphia Mathematics Evaluation Test (PMET), helped grade-level groups review the data and identify ways of improving mathematics performance, helped teachers plan how they would address certain mathematics topics, helped teach difficult topics, tutored students needing special help, organized the cross-age tutoring activity, and served as one of the case managers for the Pupil Support Committee.

The schoolwide project had also modified established staff roles.

- The school's principal reported that his relationship with the staff had changed significantly. He said he now spent more time responding to the ideas of staff than directing.

- Although an established position, the home-school coordinator's role has been redefined to serve all students and to focus her energies on problems related to student attendance and parent involvement.

Finally, all staff interviewed shared their perspective that relationships among staff had changed. They were now colleagues involved in a common effort. As one interviewee said, "We now use the pronoun 'We,' when we plan and problem solve."

Discussion questions: How can the the data being collected best be stored and processed to identify strengths and weaknesses, and to facilitate planning at the levels of individual students, individual classes, groups of students with common needs, grade-level classes, and the school?

How can the planning/problem-solving process be implemented more efficiently at the levels of individual students, individual classes, groups of students with common needs, grade-level classes, and the school?

How can the school and district improve the indicators they use to monitor and measure school accomplishment and performance? to monitor and measure the contributions of grades and classes to the accomplishment of school goals? to assess the achievement of individual students? to identify individual and groups of students who need additional instruction and help? to suggest identify areas of practice in need of improvement?

Current Strategies and Activities for Achieving Its Goals

During the study period, Taylor's staff pursued and initiated a variety of activities in pursuit of its goals.

Improve the Level of Student Attendance

The leadership group was deeply concerned by the lack of progress the school was making on its attendance goal. The principal decided to send strongly worded letters to the parents of frequently absent students, to hold conferences with those parents in order to identify the problem and try to resolve it, and if necessary, to make visits to the home with the home-school coordinator. In addition, the principal encouraged teachers to make pep-talks to their classes and to set goals at the classroom level regarding attendance.

By late spring, the leadership group again determined that not much progress was being made. As part of their school improvement plan, it decided to purchase a computer calling system, to organize a network of parent block captains, and to create a reward/recognition program.

Increase Parent Involvement

From the leadership group's perspective, closely related to the student attendance problem was the parent involvement problem. The group recognized that there was very low participation in parent workshops offered by the school and that the school had not yet succeeded in discovering strategies that would build stronger bonds between many student families and the school.

To devise more effective and concerted effort to gain parental support, the leadership group decided to focus the energy of the program support teacher on parent involvement, student attendance, and the after-school program (the latter may be one possible strategy for linking Spanish-speaking

parents to the school). The other duties of the PST was be assigned to a new staff position, a second PST.

Improve School Climate

At a March staff meeting, the principal shared her concerns about current discipline in the school and about the school's climate. She asked the specialist group to explore the situation and to make recommendations to the staff and the leadership group.

In response, the group recommended a number of actions. It called for the development of a school handbook that spelled out the behavior code of the school and the consequences for inappropriate behavior. The handbook would also define the use of the office bench, after-school detentions, and suspensions. In addition, the group recommended the development of a time-out strategy, though where to find space for a time-out room will be a major problem. Finally, the group recommended more extensive use of cooperative learning and other strategies that might positively affect classroom climate and student behavior.

The group recommended consideration of a dress code and an increase in activities to celebrate school, grade, class, and individual student accomplishments as well as to showcase school-community talent. It also recommended an overall school clean-up.

The leadership group made a number of the group's recommendations part of the school's improvement plan.

Improve Student Achievement

To improve student achievement, Taylor's staff are pursuing multiple strategies that can be summarized as following: improving the quality and completeness of the data that they have on student achievement, improving the quality of the current instructional program, increasing the intensity and personal character of instruction, and providing more instruction in reading/language arts. In pursuing these strategies, the staff has initiated a number of activities. This part will highlight the principal activities related to each strategy.

Improve the quality and completeness of achievement data. The leadership group's review of the mid-year citywide test data highlighted the numbers of students who were absent during one or more of the days on which the test was administered and who did not make up the test. The group decided to track closely student participation in the June testing and schedule make-ups in a way that would increase the numbers of students completing the test.

The group also decided to seek assistance from the Central Office for the development of a measure that would provide information about the extent to which the bilingual students were mastering the content of the district curriculum to the teachers of the bilingual classes and the school. Before the end of the year, members of the leadership group had met with Central Office staff on the need.

As a result of their analysis of the data from the citywide test and PMET, grade-level groups identified a number of item format problems. They also expressed concern about the lack of correlation of information about mathematics performance of some students from citywide tests, PMET, and teacher grades; about the use of the number of completed home projects as a basis for science grades; and about the disincentives in the current system for grading reading (if a student is in a below-grade-level basal, he is limited in how high a grade he can receive). It was not clear how school leadership would communicate these problems to the Central Office.

Improve the quality of the current instructional program. One activity that Taylor's staff had undertaken to improve the quality of its current program was to purchase a significant amount of new instructional materials. During this year's planning activities, the grade-level groups called for additional instructional materials -- for example, more hands-on manipulatives in mathematics and materials supportive of the science and the social studies objectives.

Another activity was to encourage teachers in core subject lessons to use the science-related of communication, observation, inference, and numeracy derived from its adopted instructional model. During the past year, the leadership group designated certain weeks for teachers to emphasize a particular process. Several grade-level groups recommended the abandonment of this calendarized approach to the use of the processes; instead, they called for a more integrative approach to the use of the processes.

A third activity was to focus its staff development resources. Instead of proposing new topics, the leadership group, based on a survey of staff, concluded that this coming year's staff development activities should focus on helping staff incorporate strategies already introduced into their daily lesson plans (e.g., cooperative learning and process approach to writing).

Finally, several grade-level groups determined that student performance on the literature objectives of the district's curriculum was sufficiently weak to require a more extensive effort. As a result, the leadership group decided to use Chapter 1 resources to employ a "literature" teacher who would work with all teachers and classes to improve achievement on the literature objectives.

Increase the intensity and personal character of instruction. A primary activity to increase the intensity of instruction had been to employ instructional assistants. The grade-level groups reported that the assignment of an instructional assistant to each classroom teacher for the morning was having a positive effect, yet they felt the strategy would be more effective if the assistants received an ongoing program of staff development. The leadership group responded to this need by providing a staff development session in the spring for the instructional assistants and by scheduling a program for the assistants following the end of school.

In addition to the instruction that the classroom teacher and the teacher's instructional assistant could provide, Taylor staff organized themselves to provide additional tutoring to students not succeeding in their daily work. These included tutoring by specialists during the

afternoon and cross-age tutoring during the lunch/recess period (able 4th grade students tutor younger students at that time).

During the past year, the teachers in grades 1 and 3 established a common time for reading instruction and regrouped their students during the period, based on their placement in the reading series, thereby creating reading groups that could as a whole receive common instruction. Several grade-level groups recommended this practice be expanded to the entire school. In response, the leadership group made the planning of the coming year's reading program one of the principal topics for an end-of-school-year workshop. It hoped that the staff would develop a consensus on how to approach reading in the coming year and plan reading group membership, so that those groups could be implemented during the first week of school.

Finally, in recognition of the extraordinary challenge presented first grade teachers by the diversity of students they receive, the leadership group proposed turning the one room in the school that could hold more than a single class into an intensive first grade. The leadership's vision for this class was that it would be team-taught by two teachers, who would have two instructional assistants assigned to them, thus creating a one adult to ten students ratio. With the approval of the concept by the Central Office, two teachers were identified for the team. The teachers, during the end-of-year workshop, had the task of translating the vision into an operational plan.

Increase the amount of instruction in reading/language arts. Based on one year's of experience, the grade-level groups called for the continuation of the after-school reading/language arts, whole language program. The program had been supported by supplementary funds received from the Central Office. This year, the leadership group was able to make the program part of its plan for Chapter 1 resources.

Strengthen Components of the Schoolwide Project Design

The grade-level groups felt the scheduling and the allocation of resources for grade-level groups was an important component of Taylor's improvement strategy. However, they were concerned that the agenda of the grade-level group meetings were being dominated by schoolwide project tasks. They therefore recommended that the leadership group in the coming year reduce the tasks that it placed on the agenda of grade-level group meetings, so that those meetings could be devoted more to grade-level topics and concerns.

Though teachers felt the Pupil Support Committee was a useful source of counsel and assistance, members of the committee felt that they were being brought problems that could be handled better by grade-level groups. The committee decided to conduct during a staff meeting in the fall a committee meeting and then lead a discussion of the kinds of problems that were most appropriate to bring before it.

Discussion questions: How can the staff determine if the changes in practice that are planned are being implemented as intended and are having the desired effects?

Summary: Effects of Being a Schoolwide Project

To paraphrase the comments of Taylor's staff, the effects on Taylor Elementary School of being a schoolwide project may be summarized as follows.

- The schoolwide project has given the school focus. All staff know what goals the school is to achieve.
- Though Taylor's leadership has always been interested in school performance data, the schoolwide project has now made all staff interested in data and what it suggests about the performance of the school, the staff, and the students.
- The schoolwide project has given the staff a data-based improvement process that is being applied at least four different levels: the school, the grade-level group, the classroom, and the student.
- The schoolwide project has created new groups and new staff roles, but most important it is modifying relationships: how the principal works with the staff, how the staff works with each other, and how the school works with the district.
- As a school serving many students from poor homes, Taylor has always had substantial additional resources. However, as a result of being a schoolwide project, the school staff now has discretion over how those resources are used. The staff has created and modified staff roles, it has created staff groups and supported their functioning, it has obtained materials needed to implement its program or to meet special needs of its students, and it has extended its day and its program.
- As part of the process of becoming a schoolwide project, Taylor had to choose an instructional model. Its decision to adopt the integra ed science model has helped focus the staff on classroom instruction and on the processes of communication, observation, inference, and numeracy. The model has also suggested content for staff development activities.
- The schoolwide project has increased staff development activities that are more directly relevant to the needs and interests of Taylor's staff.

Thus, being a schoolwide project has resulted in extraordinary change. One of Taylor's staff who served as a facilitator of a discussion group during the district's March retreat on district goals reported to Taylor staff: "I did not realize how innovative we have been, until I heard what other schools have been doing. Nor did I realize how open-minded we are, until I listened to the negativism of other schools' staffs."

SECTION II

CURRENT INSTRUCTIONAL PRACTICE AT TAYLOR -- A SNAPSHOT

The second task of the study was to collect information that would suggest the current status of instructional practice in the school.

To this end, a team of educators who have worked with other Chapter 1 programs visited Taylor Elementary School on May 1 and 2. The school's leadership organized the team's visit, selecting the classes the team would visit and the teachers who would be interviewed. Over the course of two days, the team visited nine classes and conducted individual, 45-minute interviews with eight of those teachers. The eight teachers represented about one-third of the classroom teachers in the building.

This section summarizes the results of the visits and the interviews. It is organized into five parts. The first provides a brief overview of the classes visited. The second summarizes the framework of research-based factors used to structure the collection of information and describes the methods used to collect the information. The third, fourth, and fifth sections summarize information collected for the student-related factors, the classroom-related factors, and the school/district-related factors, respectively.

Following the summary of information for each factor, some discussion questions are suggested. In general terms, they ask:

- To what extent do the descriptions reflect instructional practices found across all classes/grades in the building?
- To what extent do the descriptions suggest practices that could benefit from further study and/or action?

Classes Visited

Table 1 provides a overview of the classes visited. They represented each of the grade levels in Taylor Elementary School. Three of the nine classes visited were bilingual classes.

Ten lessons were seen in all (the kindergarten class period was organized into two distinct lessons). They were diverse in content and in activity, as illustrated below.

- The first lesson in the bilingual kindergarten class was a whole group review of content learned (e.g., English and Spanish vocabulary, consonant sound beginning English words pronounced by the teacher, counting to 100 in English, multiplication tables up to 3 in Spanish, location of continents and states on a large map, the location of ethnic neighborhoods on a Philadelphia map, choral recitation of nursery rhymes in English and Spanish).

Table 1

Lessons Seen by Team During Classroom Visits

Subject / Grade	Reading/ Language Arts	Math	Social Studies	Science	Other	Total Lessons
K	1[B]	0	0	0	1[B]	2[a]
1	0	1	1	0	0	2
2	0	2[B]	0	0	0	2
3	1	0	1	1[B]	0	3
4	1	0	0	0	0	1
Total	3	3	2	1	1	10
Number Bilingual(B)	1	1	0	1	0	3

[a]Two distinct lessons were presented during the 45-minute visit to the kindergarten class; one lesson was presented during all of the other classes visited.

During the second kindergarten lesson, students worked in three groups. One group worked with the teacher on reading activities. The second group worked with the instructional assistant on writing activities. The third group worked individually on an activity booklet on the honey bee; it was supervised by a parent volunteer.

- During a first grade mathematics lesson, students reviewed the concepts of "fraction" and "congruent," and then divided a set of objects into subsets.

- During a first grade social studies lesson, students reviewed what they had learned about city government, shared what they knew about Mayor Goode, and began to develop a class story about the mayor.

- During a mathematics lesson in a second grade bilingual class, students worked on measurement activities relating cups to pints, pints to quarts, quarts to gallons.

- During a mathematics lesson in a second grade "Anglo" class, the teacher help her students relate different measures of liquids.

- During a third grade reading/language arts lesson, one group of students worked with the teacher on sequencing a set of sentences, while the other group worked with the instructional assistant on workbook activities.

- During a science lesson in a third grade bilingual class, the students discussed the life cycle of the cricket, read orally about the cricket, observed cricket behavior in a terrarium, and made notes about what they observed. In this class, students worked in cooperative learning groups.

- During a third grade social studies lesson, students searched through newspapers to find a variety of types of information -- for example, maps, graphs, pictures of the mayor or local councilman, sales, and times for television shows. The students worked in small groups, sharing and recording on paper what they had found.

- During a fourth grade reading/language arts lesson, students were organized into three groups. One group worked with the teacher on vocabulary needed for a story to be read later. The second group was reading aloud with the instructional assistant. The third group (actually four different reading groups) was working independently on a variety of reading/language arts activities.

Framework of Research-Based Factors and Study Methods

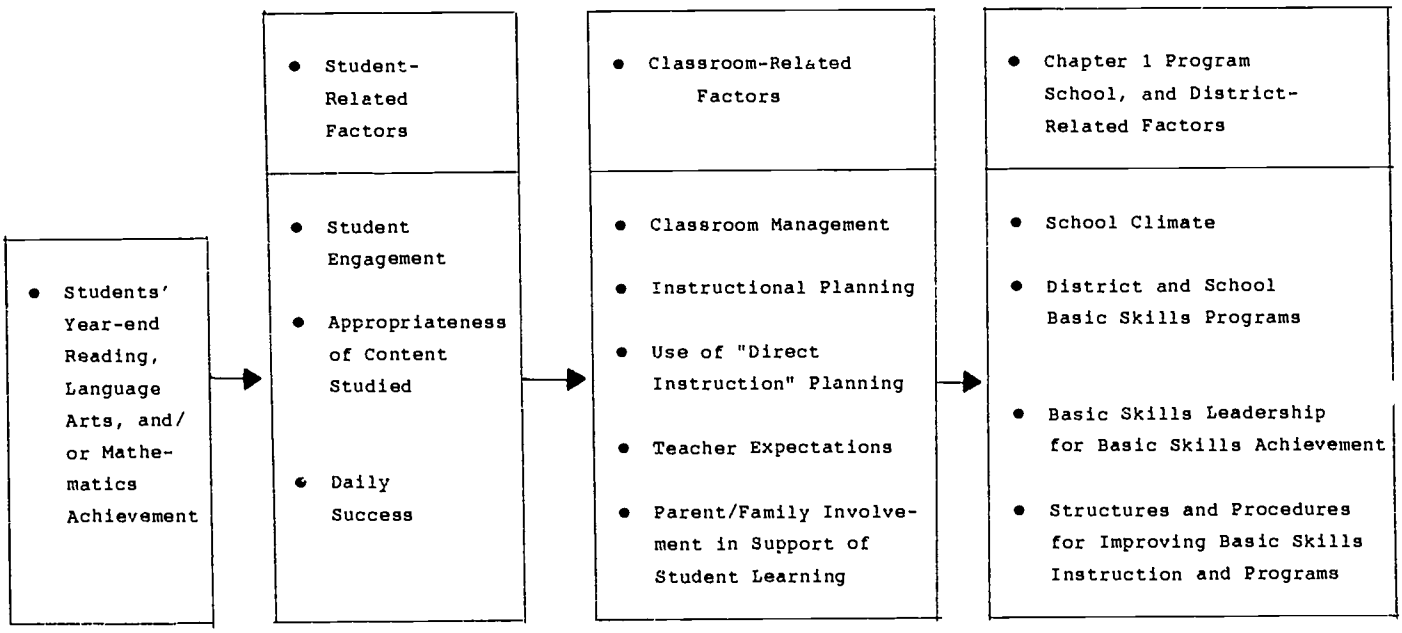
This part describes the framework of research-based factors used to collect information from the teachers and classes described above. It also provides a brief description of the methods used for collecting and analyzing the data.

The Framework

Figure 2 provides an overview of the research-based factors that were used to structure the collection of information on instruction-related practices. It was developed by the designers of the Pennsylvania Chapter 1 program improvement process, known as MAGIC.

Figure 2

Framework of Research-Based Factors



The framework should be read as follows. Research suggests that students are more apt to show high levels of achievement on unit or year-end measures, if they

- are actively engaged in learning activities during a significant part of each day
- are studying content that is appropriate, given what they have learned to date and what will be assessed on unit and year-end measures
- experience a moderately high level of daily success on their learning activities.

Current research suggests that that these factors are, in turn, influenced by what happens in classrooms and what teachers plan and do:

- how well they manage their classrooms

- how they balance in their instructional planning the requirements of the curriculum, what knowledge and skills students can demonstrate, and how individual students learn best

- the extent to which they teach in a manner that reflects the "direct instruction" approach

- the extent to which they expect that all of their students can succeed and the extent to which they take steps to provide a classroom environment and instruction that are consistent with that expectation

- the extent to which they succeed in involving parents or other family members in active support of their students' learning.

Current research also suggests that what happens in classrooms and what teachers do can be influenced by the climate of the school, the structure of the school/district program, the extent to which school leadership and the school as an organization focus on improving student achievement, and the structures and procedures that help teachers improve instruction. (The latter is addressed in this part of the study; the others have been addressed earlier.)

In summary, it must be stressed that this framework provides one way of conceptualizing the interrelationship of factors that research suggests may influence students' basic skills achievement. Even though this report presents information collected by factor, it is important to keep in mind the interrelationships among the factors. For example, high levels of student engagement may have little relationship to achievement, if students are not engaged in learning appropriate content.

Methods Used

Two methods were used to collect information. To collect information about student engagement, classroom management, and instructional approach, the team visited classrooms for approximately 45 minute periods. MAGIC forms were used by the team to observe and record student and teacher behaviors. One member of the team scanned the class every three minutes, and used the student behavior form to note the number of students who were engaged in academic tasks, and if not engaged, whether they were in-transition between academic tasks or off-task. At the end of the class visit, that team member calculated the proportion of students engaged, in-transition, and off-task. (See Table 2 for definitions and summary of student behaviors seen.) The other member used the teacher behavior form to record every 30 or 60 seconds whether the teacher was instructing, managing, or disciplining. If instructing, the member also noted whether the teacher was orienting, explaining/demonstrating, providing guided practice, monitoring practice, or providing feedback and reinforcement related to independent practice. At the end of the visit this member calculated the proportion of times the teacher was seen exhibiting the various behaviors. (See Tables 3 and 4 for definitions and summary of teacher behaviors seen.)

To collect information on the other factors, the teachers were interviewed, using modified MAGIC interview forms. Following the school visit,

the team worked together to summarize the results of its interviews on worksheets designed for that purpose (see appendix). Then using those summaries, the team drafted, critiqued, and revised a written description of what they saw and heard for each factor. These descriptions were then edited by RBS staff and appear below.

The Status of the Student-Related Factors

The framework suggests that students' level of achievement can be predicted by the extent to which students are engaged in learning activities which address appropriate content and through which they experience a moderately high level of daily success. This part summarizes information that was collected related to these factors.

Student Engagement

Table 2 lists the ten lessons according to the level of engagement observed. The table also shows for each lesson the proportion of student behavior that was coded "in-transition" or "off-task."

The level of engagement recorded fell into the following two clusters.

- During four of the ten lessons, students were observed to be highly engaged (86 to 92 percent).
- During the other six lessons, students were observed to be moderately engaged (61 to 72 percent).

It should be noted that both morning and afternoon lessons, both lower and upper grade lessons, and both reading/mathematics and science/social studies lessons fell into each of these clusters.

For the six lessons during which students were moderately engaged, there were three different patterns of non-engaged behavior.

- During three of these lessons, the students were seen more time in-transition than off-task.
- During two of these lessons, the students were seen slightly more in-transition than off-task.
- During one of these lessons, the students were seen more off-task than in-transition.

Discussion questions: To what extent do these patterns of student behavior generalize to all lessons taught every day? Why do students exhibit a higher level of engagement during some lessons than others? When students exhibit lower levels of engagement, why do they exhibit different patterns of non-engaged behaviors? To what extent do these patterns of student behavior suggest areas in need of further study and/or action?

Table 2

Distribution of Student Behaviors

Seen During Ten Lessons

(Ranked by Level of Engagement)

Lesson Number	Engaged	In-Transition	Off-Task
1	92%	2%	6%
2	91%	0%	9%
3	88%	10%	2%
4	86%	9%	5%
5	72%	24%	4%
6	71%	22%	7%
7	70%	18%	12%
8	68%	24%	8%
9	65%	19%	16%
10	61%	17%	22%

Note: Lesson numbers do not refer to the lesson numbers appearing on Tables 3 and 4. They are provided only to facilitate discussion of the data on this table.

Definitions:

Engaged: Students are engaged when they are involved in or attending to instruction in reading and/or mathematics.

In-transition: Students are in-transition when they are "in between" or preparing for the next activity.

Off-task: Students are off-task when one of these four behaviors are observed: socializing, discipline, unoccupied/observing, and out of room.

Appropriateness of Skills Studied

The teachers were asked to show their student records and to discuss how those records reflect the relationship of lessons' content to a student's prior learning and to the learning that would be assessed.

All teachers kept individual student records, using the Student Progress Record Book, supplied by the district. Many of the record books reviewed contained not only information about student performance on unit tests and citywide tests, but also on teacher-made tests and on homework assignments.

The structure of the record books reflected the content that the students were expected to learn, given the district's curriculum, and the content that would be assessed on the Philadelphia Mathematics Evaluation Test (PMET) and the citywide achievement tests.[1] The records showed which students were mastering the content and which ones were not. Teachers circled with a red pencil grades on tests and assignments on which students did not demonstrate mastery. Following re-teaching, some teachers said that they then noted with a blue pencil, if students were then able to demonstrate mastery.

In discussing the extent to which their lessons built on content previously learned, several teachers described the conflict that they faced when the test performance of some students indicated non-mastery, yet curriculum guidelines called for the introduction of new content. Two teachers said that they tended to follow the curriculum under such circumstances, while other teachers described multiple strategies that they used to provide extra help to those students who still needed to master certain content (see discussion of teacher expectations).

In summary, the district's curriculum, tests, and student record system seem to ensure that students address content appropriate to what will be assessed. However, for several teachers, this system sometimes encourages them to introduce new content before some students have adequately learned important prerequisites.

> Discussion question: How can teachers best resolve the conflict that they feel when the curriculum calls for the introduction of new content, yet the performance of students on assignments and tests indicates that some students are not ready for the new content?

Students' Daily Success

The teachers were asked to estimate the proportion of their students that experienced a moderately high level of success (75 percent or more) in their daily work.

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[1]The record books for the bilingual classes did not have citywide test data, because there is no form of the test for students who are not fluent in English.

All eight teachers reported that the majority of their students experienced a moderately high level of success on their assignments each day. Their estimates of what constitutes a majority of students ranged from 75 - 100 percent, with 4 of the 8 teacher estimates being 85 percent. The teachers emphasized, however, that their estimates did not mean that their students experienced success in every subject area each day.

In discussing the success of their students, two teachers described with pride the accomplishments of their students. One teacher said that all of the students who had been with her the full year were demonstrating the knowledge and skills needed for promotion, and that she was introducing them to skills that they would be using next year. The other teacher reported that half of her class had advanced to the next grade-level of the basal reader.

Each teacher reported having a small group of students who were not successful in their daily work. When asked why these students were not succeeding, the teachers offered these explanations:

- the students were relatively new to the school
- the students failed to attend school regularly, either due to illness, to the family's lack of interest in school, or to other family circumstances
- the students had special needs, had been referred, but had not yet evaluated for special education.

The teachers identified these unsuccessful students as those most at risk of not being promoted.

> Discussion question: Beyond what is currently being done, what additional steps might be taken to help the group of students who are consistently unsuccessful in their daily work? (For information about what is currently being done, see information provided under the factor, Teacher Expectations.)

The Status of Classroom-Related Factors

The framework suggests that what teachers do can influence how engaged students become, how appropriate the content is that they study, and what level of success they experience. This part summarizes information collected related to classroom management, instructional planning, use of alternative instructional approaches, teacher expectations, and involvement of parents and family members.

Classroom Management

One indicator of how well students and instruction are managed is the extent to which students are observed to be engaged, in-transition, and off-task (see Table 2). Another indicator is the extent to which teachers spend their time instructing, managing, and disciplining.

Table 3 lists the ten lessons seen according to the amount of instructional behavior observed. The table also shows for each lesson the proportion of teacher behavior that was coded "managing" and "disciplining."

The amount of instruction recorded fell into the following two clusters.

- In five of the lessons, teachers were observed instructing most of the time (77 to 87 percent). These teachers spent only a modest proportion of time setting up the lesson and managing changes in activities, and very little time disciplining.

- In the other five lessons, teachers were observed instructing a little more than half of the time (53 to 62 percent). Three of these teachers spent more of the remaining time managing (24 to 33 percent) than disciplining (10 to 16 percent), while the other two teachers spent more time disciplining (26 to 35 percen) than managing (3 to 12 percent).

The team saw the five teachers who spent most of their time instructing use a variety of methods for managing student behavior. The four methods seen were:

- pacing instruction and changing the instructional activity based on levels of student engagement (e.g., one teacher felt her students were becoming restless, and so she stopped the current activity and began a new one)

- use of preventive management (e.g., a teacher during a lesson involving independent seat work, would check with any student beginning to show non-engaged behaviors to make sure that he or she had another learning activity to undertake)

- use of a signal system when students began to exhibit off-task behavior (e.g., one teacher asked students to put their hands on their heads, when she noted increases in off-task behavior)

- use of assertive-discipline procedures (e.g., one teacher had rules and consequences for not following them clearly posted; she noted infractions of the rules verbally and on the board in ways that did not disrupt the flow of instruction, and most important, she noted positive changes in behavior both verbally and by removing names from the board).

In discussing the method she used (preventive management), one teacher reported that she had spent the first month of school training her students how to operate when she had the class working in multiple groups.

The teachers who spent considerable time disciplining (over 14 percent) were asked to describe their classroom management systems. Each of these teachers had rules, had them displayed, and had discussed them with their students at the beginning of the year. However. each of these teachers also expressed frustration about the extent to which some students refused to follow the rules.

Table 3

Distribution of Teacher Behaviors

Seen During Ten Lessons

(Ranked by Amount of Instructional Behavior Observed)

Lesson Number	Instructional	Management	Discipline
1	87%	11%	2%
2	86%	12%	2%
3	83%	14%	3%
4	83%	14%	3%
5	77%	17%	6%
6	62%	12%	26%
7	62%	3%	35%
8	57%	33%	10%
9	55%	24%	16%
10	53%	33%	14%

Note: Lesson numbers do not refer to the lesson numbers appearing on Tables 2 and 4. They are provided only to facilitate discussion of the data on this table.

Definitions:

Instructional: Teachers are instructing when one of these five behaviors is observed: orienting, explaining, providing guided practice, monitoring independent practice, and providing feedback and reinforcement on independent practice.

Management: Teachers are giving and clarifying directions, passing out papers, or undertaking other tasks which organize students for instructional activity.

Discipline: Teachers are attending to off-task student behavior -- for example, socializing or unoccupied/inattentive behavior.

Discussion questions: To what extent do these patterns of teacher behavior generalize to all lessons taught each day? Why are some teachers able to spend significantly more time instructing? Should the topic of classroom management be considered at staff development and grade-level group sessions?

Instructional Planning

The teachers were asked to describe what influenced their instructional plans, both in general and with specific reference to the class visited. They were also asked how they balanced what the curriculum required, what knowledge and skills students can demonstrate on tests, and what they knew about how individual students learned best.

The influence of the district curriculum. All eight teachers reported that the District Curriculum Guide not only influenced the content of their plans, but also ensured that teachers in the same grade were covering the same content at approximately the same time. For example, one teacher said, "You will see that all of us second grade teachers are teaching measurement this month."

Several teachers provided the following contrasting views of the curriculum.

- One regarded the curriculum as a listing of topics that for her were a mere "springboard from which she taught." She saw her task as one of enriching the district curriculum to make it come alive and be challenging for her students.

- Another teacher described the curriculum as a list of topics that were difficult to cover in the time available and were also difficult to interrelate or integrate. (Integration of the curriculum is one of the strategies the principal of the school recommends for dealing with the coverage challenge.)

- Two other teachers expressed some concern regarding the pacing of content in the curriculum. They felt that for some months, they just had too much content to cover.

The influence of student performance on tests. All eight teachers reported that they used information from PMET and their own tests to identify content they needed to re-teach and students who needed extra help. Five teachers also reported using information from the citywide tests to help them make those decisions. In contrast, the three bilingual teachers stressed that they did not have the benefit of information from the citywide tests for their students.

The influence of the way individual students learn best. When asked how they addressed the needs and learning styles of individual students, the teachers shared a variety of general strategies. These included:

- moving from concrete experience to general concept

- use of manipulative, hands-on materials

- use of visuals as an integral part of any instructional activity
- use of games and other motivational materials to encourage practice of skills or use of new knowledge
- organizing the students into pairs for the purpose of peer tutoring
- organizing the students into cooperative learning teams
- grouping and regrouping students based on level of mastery of particular knowledge and skills.

Other comments. Three teachers made additional comments about their respective approaches to planning. One teacher said that the composition of her classes changed so much from year to year that she always had to revise and adapt previously used lessons. Another teacher said that she believed that the content of her lessons should challenge all of her students; therefore, she selects content and plans her lessons so that they challenge her class "geniuses." She then deals with individual student differences by using multiple materials and strategies to teach the content. The third teacher said that she primarily attended to individual differences in the design of her reading and mathematics lessons; in contrast, her social studies and science lessons tended to be whole group activities.

Discussion questions: How can teachers develop a common approach to using the district curriculum in planning and to dealing with the concerns of coverage and pacing? Do teachers need to have a common set of decision rules about when the information from tests requires re-teaching and when it requires them to provide or obtain special help for specific students? To what extent does each teacher have an adequate set of strategies to address the diverse ways in which students learn best?

Instructional Approaches Used

Table 4 lists the extent to which five instructional behaviors were seen during each of the lessons. The first seven lesson listed in the table reflect the direct instruction approach, in that teachers oriented, explained/demonstrated, and provided guided practice. In five of those lessons, the teachers also provided for some independent practice, though in two lessons that practice was just begun. Though all seven teachers exhibited all three direct instruction behaviors, the amount of time devoted to each varied: orienting (3 to 15 percent), explaining/demonstrating (12 to 67 percent), and providing guided practice (24 to 73 percent).

The other three lessons used other approaches. One was a guided practice lesson designed to demonstrate to the team the range of content being learned. One was an independent project lesson that required extensive explanation at the beginning. And, one was a lesson organized around three activity centers through which the children rotated. The adult with each group (teacher, instructional assistant, and parent volunteer) exhibited a different pattern of behavior, one appropriate to their role and to the nature of the activity in each center.

Table 4

Pattern of Instructional Behaviors Seen During Ten Lessons

	Direct Behaviors				Indirect Behaviors		
Lesson Number	1. Orienting	2. Explaining	3. Providing Guided Practice	Total Direct Behaviors	4. Monitoring Independent Practice	5. Providing Feedback and Reinforcement on Independent Practice	Total Indirect Behaviors
1	15%	35%	50%	100%	0	0	0%
2	6%	62%	32%	100%	0	0	0%
3	10%	12%	73%	95%	0	5%	5%
4	3%	67%	24%	94%	3%	3%	6%
5	3%	34%	28%	65%	13%	22%	35%
6	6%	36%	17%	59%	22%	19%	41%
7	6%	16%	32%	54%	32%	14%	46%
8	0	0	100%	100%	0	0	0%
9	0	46%	0	46%	23%	31%	54%
10	0	8%	92%	100%	0	0	0

Definitions:

1. Orienting: the teacher provides students with an overview of the lesson.
2. Explaining: the teacher demonstrates, models, explains, and/or discusses lesson content.
3. Providing guided practice: the teacher asks the students to practice the skill or apply a concept, rule, etc.
4. Monitoring independent practice: the teacher collects information about student understanding and ability to demonstrate specific skills.
5. Providing feedback and reinforcement on independent practice: the teacher gives students information on their performance, along with appropriate praise and reinforcement.

Definitions:

Direct instructional behaviors: orienting, explaining, and providing guided practice.

Indirect instructional behaviors: monitoring independent practice, and providing feedback and reinforcement on independent practice.

Note: Lesson numbers do not refer to the lesson numbers appearing on Tables 2 and 3. They are provied only to facilitate discussion of the data on this table.

All lessons but the last one were "whole class" lessons.

Discussion questions: To what extent is the whole class, direct instruction approach used in every class, every day? If it is the instructional approach that is primarily used, should other approaches be considered/used?

Teacher Expectations

Teachers were asked about their expectations regarding the ability of all students to learn the content of the curriculum, to learn higher order thinking skills, to be motivated to achieve in school, and to be successful in their daily work.

Expectations regarding the ability of all students to learn the content of the curriculum. All eight teachers said they believed that all students except those with special needs, could learn the content of the district's curriculum. They talked about three primary obstacles that stood in their way of achieving that goal. First, many students came to the school with very few of the experiences needed for successful school learning. To help these students in four or five short years acquire the knowledge and skills that they needed in order to be successful in grade-level material was extremely challenging. Second, many students did not reside in the community for any length of time, thus teachers did not have, in reality, four or five years to work with many of the students who attended the school. And third, many students did not attend school regularly, even though the school staff was expending a great deal of energy trying to improve student attendance.

Expectations regarding all students learning higher order thinking skills. All eight teachers believed their students could and should learn higher order skills. They all talked about the school's instructional model, which emphasizes the incorporation of four processes associated with science into their daily lessons. Those processes are: communication, observation, inference, and numeracy (referred to as COIN by the school staff). The team saw the processes being used in a number of the classes that it visited.

Several teachers shared personal thoughts regarding COIN. One said that this instructional orientation was in direct opposition to the way in which she had been taught. She indicated, however, that she had been making a conscious effort to include these skills in both the oral and written activities in which she involved her students. Another teacher described how she learned through observation activities with her students that they do not see the same things that she sees; she now realizes that one of her primary tasks is help her students to see what she sees.

The teachers seemed to differ in their belief as to when high order tasks are appropriate. Several teachers were emphatic that such skills as problem solving should be part of the routine of daily lessons. Other teachers expressed their belief that their students needed to master certain basic skills, before they engage in certain types of problem solving. One of these teachers also felt that higher order thinking tasks were more suited to reading and science than the other subjects.

Expectations regarding all students being motivated to achieve in school. All eight teachers said that they needed to help many of their students develop the commitment and motivation to achieve. The teachers shared strategies they used to develop student motivation.

- One teacher meets with students individually to help them review the progress that they are making and to set personal learning goals.

- Another teacher talked about the motivational quality of rich, stimulating content -- content that was both interesting and challenging.

- Several teachers talked about using manipulative materials and games as motivational tools.

- Several teachers talked about how they designed their lessons to be highly structured and fast paced, a design intended to be more motivational.

- One teacher thought her use of cooperative learning was motivational, as it ensured that all students were to help each other learn and that each student's learning could contribute to a team's success.

- One teacher described how she shared personal history and experiences, so that her students would understand that she knows personally their community and culture, and the problems and challenges they face. She believes that this sharing was motivational.

- Finally, several teachers described the extrinsic rewards and recognition that they provided their students. For example, one teacher rewarded students with free time when they completed a task on time or did high quality work. Students used this time to read books, play math games, or to do some other appropriate kind of activity.

Expectations regarding all students being successful in their daily work. All eight teachers expressed their commitment to help students be successful, in spite of the obstacles they faced. They shared the variety of strategies they were using to help unsuccessful students.

- All eight teachers indicated that they re-taught knowledge and skills that students had not mastered. One teacher reported that as part of her planning, she modified the recommended schedule for the teaching of certain content, based on how well her students were learning that content. Several other teachers emphasized that the amount of time that they could devote to re-teaching was limited by the curriculum.

  Most teachers reported that when they re-taught, they tried to modify the instruction they offered -- that is, they did not repeat the lesson in the same form or with the same materials.

- All eight teachers reported using some form of tutoring to assist those students who needed more help learning the content of a particular lesson. Most teachers used their instructional assistants to provide tutoring. Others described the use of successful students as tutors, either by organizing their class into learning pairs or cooperative learning teams, or by obtaining tutoring from upper grade students who had been selected and trained. One teacher reported that she regularly spent an hour after school to help students who were failing.

- One teacher said that she had acquired or developed multiple materials and games to help her students master specific knowledge and skills. She felt that she could find some material that would help each student learn certain knowledge and skills.

- Several teachers reported involving the parents in providing extra help.

- Several teachers also reported referring their students who were most at risk to the Pupil Support Committee. That committee had helped them get additional help for those students or referred them for psychological evaluation.

Discussion questions: Is the school most successful with students who come to Taylor having had pre-school experiences? who attend school regularly? who spend multi-years at Taylor?

Assuming that the answers to the above questions are affirmative, are there steps the staff can take that might more effectively address the needs of the students who have not had pre-school experiences? who will be at the school for only a short time? who will not attend school regularly?

To what extent does the staff hold different perspectives as to when higher order skills should be taught? If there are real differences, should the staff explore the bases for these differences and seek a common perspective?

To what extent has the staff developed shared strategies for helping students who have not developed the commitment and motivation to achieve in school and/or who are unsuccessful in their daily work? How effective are the different strategies?

Parent/Family Involvement

The teachers were asked to estimate the percentage of their parents who participated in class-related activities -- for example, attended to teacher communications, participated in parent conferences, made contributions to classroom activities. They were also asked to estimate the percentage of parents who were actively supporting their children's learning at home.

The eight teachers provided a wide range of estimates. Five teachers estimated that 85 percent or more of their parents were participants in class-related activities, while three teachers estimated that 60 percent or

less of their parents were participants. Similarly, five teachers estimated that 75 percent or more of their parents actively supported their children's learning, while three estimated 50 percent or less of their parents provided such support. Three of the five teachers that provided the higher estimates were teachers of bilingual classes.

When asked why their parents did not participate or did not help their children, the three teachers providing the lower estimates suggested the following reasons:

- their inability to communicate with parents whose background and culture were very different from theirs
- the parents' lack of understanding of schooling, lack of ability to help with the tasks the school presents their children, lack of time and energy to participate in school-related activities
- the failure of the school to mount a program that serves parent needs.

As part of the interview, the teachers were asked how they tried to gain parental participation and support. All eight teachers described their efforts at the beginning of the year to introduce themselves, provide information about their program, and encourage parental support. Most of the teachers reported sending home letters or descriptive materials. Most teachers also described efforts they made to involve parents when they had a problem with a student: they sent notes, made telephone calls, and when parents were difficult to reach, asked the home-school coordinator to help.

Some of the unique efforts teachers made to reach parents included the following.

- One teacher convened parents at the beginning of the year, and explained to them that she could not succeed with their children unless she had their active support. She specifically asked parents to ensure that their children did their homework. She also recruited parents to help in her classroom. She said that over 30 percent of her students' parents spent time helping in her classroom.
- Several teachers provided parents with take-home instructional materials, along with directions on how to use them with their children.
- Several teachers described their efforts to meet informally with parents before and after school. These teachers reported that they used these brief contacts to describe accomplishments, share expectations related to specific assignments, or to discuss a problem.
- One teacher sent home "good news" notes, enabling the parents to reinforce their children's "good" behaviors and academic accomplishments.

- Another teacher sent an interim report, so that parents would know how their children were progressing well before report cards were issued and parent conferences were held.

Discussion questions: To what extent are the estimates of parent participation and parent/family support of student learning generalizable across the school? Why are some teachers able to obtain much higher parental participation and support? How might those teachers help other teachers gain similar levels of parental participation and support?

The Status of School/District-Related Factors

The framework suggests that what teachers do can be influenced by the climate of the school, the structure of the school/district program, the extent to which school leadership focuses staff energy on the improvement of student achievement, and the structures and procedures in place for helping teachers improve instruction. Section I of this report described the priority that the school gives to the improvement of student achievement and elements of the school's climate. In discussing instructional planning, the district's curriculum and the related citywide tests were described. This section will therefore focus on the structures and procedures that are in place to help teachers improve instruction. Specifically, this section will summarize information provided by the eight teachers about staff development, cooperative teacher planning, and supervision.

Staff Development

Seven of the eight teachers spoke positively about the staff development provided by the district and the school. They reported that, for the most part, it was concrete and directly relevant to their classes. Individual teachers reported using the following practices introduced in recent staff development activities:

- the integrated mathematics and science activities (AIMS)
- techniques for teaching multiplication tables using one's hands
- plans for measurement lessons
- the strategies of KWL and SQ3R in reading
- the design of lessons and materials that are responsive to different learning styles
- cooperative learning strategies
- strategies for developing students' test-taking skills.

For them, effective staff development had to provide practical ideas that they could implement. Teachers noted their frustration when staff development focused on the use of new materials that were unavailable to them.

The one teacher who spoke less enthusiastically about recent staff development activities described how she had developed a network of resource persons with whom she exchanged ideas about more effective practices.

Cooperative Teacher Planning

All eight teachers reported participating in grade level planning groups. In general, these teachers credited the schoolwide project for the development of these groups. For example, one teacher described how prior to the schoolwide project, she and the other teachers worked basically alone. With the establishment of the schoolwide project, she had now developed close friendships with the other teachers in her grade group, and they shared lesson ideas, materials, and discussed student problems.

Most of the teachers felt that the grade level planning groups were still developing. They reported that many of their meetings were structured by schoolwide project tasks rather than grade-level needs. As the project evolves, they hope that more grade-level meetings will be devoted to sharing practices and solving problems that especially confront them in that grade.

Teacher Supervision

For most of the teachers, "supervision" was something that the principal was required to do. They did not view supervision as an instructional improvement process. Only one of the eight teachers described supervision as a process that had helped her improve instruction. This teacher reported that when she had been a new teacher, the principal had visited her room almost daily and had given her a multitude of ideas about how to organize and manage her class.

However, some teachers discussed the support that they received from the school's Program Support Teacher and two specialist teachers. Those teachers reported how the specialists gave them ideas about alternative ways of presenting specific lessons, materials, and suggestions for working with particular problem children. From the perspective of the principal and the leadership group, this support is a form of "supervision."

Discussion questions: How can grade-level meetings be designed to support instructional improvement?

SECTION III

CURRENT INSTRUCTIONAL PRACTICE FROM THE PERSPECTIVE OF A DAY IN THE LIFE OF THREE TAYLOR STUDENTS

The third task of the study was to describe the status of instructional practices from the perspective of individual students.

RBS staff shadowed three students for one school day in May to gather this descriptive data. The school's leadership organized the shadowing visit by selecting three primary grade classes for RBS staff to visit. They also selected three students from each class who would be eligible for Chapter 1 services, if they had not been in a schoolwide project, and who were not students with special needs.

Three RBS staff members visited Taylor Elementary School on May 9 to serve as shadowers. After meeting the teacher of the class and identifying the three students who had been recommended, each RBS staff member selected the student that he/she would shadow. Students tended to be selected because they was sitting where they could be observed discreetly.

This section summarizes the results of the shadowing. It is organized into five parts. The first presents the framework of questions that guided the shadowing activity. It also describes the methods used to record and analyze observations. The four remaining parts summarize information collected regarding the structure of three students' days, the instructional tasks, student response to the instructional tasks, and student/teacher interactions.

Following each part, some discussion questions are suggested. In general terms, they ask:

- To what extent can/should the observations be generalized, beyond the experiences of these three children on this one day?
- To what extent do the observations suggest areas that might benefit from further study and/or possible action?

In reviewing the descriptions of the days each of the students experienced, it is important to keep in mind that these students were shadowed for only one day. On another day, the data could look very different, depending upon the daily schedule, the instructional tasks presented, and the patterns of interaction that developed.

Guiding Questions and Study Methods

As a way of describing the student's experience, shadowing data are discussed according to four categories. For each of these categories, a set of questions was designed to guide the description of this one day in May. The first category serves to describe the flow of instructional activities and settings that students experienced.

- What was the structure of each student's day? For example, how much of the students' time was devoted to core subjects (e.g., reading/ language arts, mathematics, social studies, science); what proportion of the day was spent on other subjects (e.g., art, music, library); how much time was spent in transition activities such as moving from class to class, changing from one subject to another, or starting up and finishing the day; how do the days each student experienced compare? What instructional formats did each student experience (e.g., presentation, recitation,discussion, guided seatwork, unguided seatwork, surrogate, testing, management)? In what kinds of instructional groups did each student participate (e.g., whole class, sub-group, individual)? With which instructors did they spend their day (e.g., regular teacher, resource teacher, instructional assistant, parent volunteer)?

The last three categories of questions reflect various conditions that might influence student motivation and learning:

- On what instructional tasks did each student work? For example, to what extent did those tasks introduce new content? To what extent did they require higher order thinking processes?

- How did students respond to the instructional tasks? For example, from the student's perspective, how clear was each task? To what extent did each task engage the student?

- How did each individual student interact with his/her teacher? For example, what types of interactions occurred. What was the affect of those interactions? In what group setting were interactions most likely to occur?

The shadowing process is based upon a modification of a method developed by the Far West Laboratory, which was used as part of its study of Chapter 1 programs (Lee & Rowan, 1986).[2] RBS staff were instructed to shadow their student from the first to the last bell of the day. They shadowed their student in all classes (including, for example, physical education and library) and during transitions between classes. They observed the nature of the transitions that occurred before and after lunch and recess.

The process requires the shadower to record two kinds of observations. One set of observations is called structured coding, and involves keeping track of a specific set of features of a lesson. These features include: the instructional focus of the lesson, the physical location of the lesson,

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[2]Lee, G. & Rowan, B. (1986). The management and delivery of instructional services to Chapter 1 students: Case studies of twelve schools. San Francisco, CA: Far West Laboratory for Educational Research and Development.

variations in grouping, group size, type of instructor, the format of the instructional activity (e.g., presentation, recitation, discussion, seatwork, work at computer, testing) and the time devoted to a lesson. These observations were used to describe the structure and the instructional context of the student's day. These are summarized in chart form in the appendix. They are discussed in the next two parts of this section.

The other set of observations are focused field notes. In taking focused field notes, the shadower writes descriptions of the instructional tasks presented and the student's response to those tasks as well as descriptions of any interactions that occur between the teacher and the student being shadowed. These descriptions were summarized and coded (see Tables 10 and 11). The results of the analysis of those descriptions appear in the last three parts of this section.

In presenting the data collected by the shadowing, each student will be identified only by a letter (A, B, or C).

Structure of the Three Students' Days

This part presents an overview of each student's day. (A summary of each student's day in chart form appears in the appendix.) This part then compares how much time each student spent with the core subjects, other subjects, in transition, and at lunch and recess. It also compares the instructional formats, instructional groupings, and the instructors that each student experienced.

Overview of Each Student's Day

Student A spent all morning involved in mathematics and science activities. The activities began with the students sharing their preferences for one of three flavors of ice cream. Each student and cooperative learning group were assigned the task of developing graphs that compared the extent to which the students preferred each of the flavors. Student A worked initially on his own on the task. After creating a graph, he discussed it with the other members of his group. He then helped another member of the group put their group's graph on the chalkboard. After receiving feedback from their teacher on their graph, he and the rest of the class worked on two graphing problems in their mathematics workbook. At the end of the mathematics lesson, he listened to a resource teacher present a filmstrip on dental hygiene. Following the filmstrip, he went to work on an assignment to graph some of his group's observations of crickets; he compared his approach to the task with those taken by other members of the group. While they were working on this assignment, he and his group received their terrarium and crickets. They turned to observing the crickets, noting behaviors that related to what they had learned about the life cycle of the cricket. At the end of the morning, he and his classmates met the frogs that would be part of the science unit on which they were working. At noon, he and his class went to music, where they learned about the instruments in the orchestra and listened to part of "Peter and the Wolf." Following lunch and recess, he and his classmates returned to their class for a reading/language arts lesson. During the lesson, he listened to

a pre-reading discussion of the feelings that one might have when one goes to a new school as well as to a discussion of the vocabulary that they would find in the story. He read a section of the story aloud and listened to his classmates read other sections. Following the reading, he answered one of the questions that the teacher asked about the story. He then completed a language arts worksheet. After school, he stayed for Encore. He and his classmates read aloud a short book. He answered a number of questions that the teacher asked about the book. He then worked on an illustration for the end of the story.

Student B began his day copying sentences from the chalkboard and working on some subtraction problems. After chorally reading a list of words from a chart on the wall, he turned to an exercise in his language arts workbook on "real" and "make-believe." Following these activities, he and the class generated a list of objects that they might weigh in ounces and in pounds. He then tried to estimate the weight of a set of objects that the teacher had selected, recording his estimates on a worksheet. When the objects were weighed by the teacher, he recorded the actual weights on his worksheet and made corrections in his estimates. He and his class then turned to additional language arts activities. He tried to identify the silent letter in each word that was listed on a worksheet. He tried to say the words aloud, as the class read them. After lunch and recess, he participated in a word game that involved reading words from flashcards. He then listened to the teacher read The Lorax by Dr. Seuss and to the class answer questions about the story. For the last activity of the day, he teamed up with a friend and tried to put a set of pictures/statements representing key events in the story into a sequence.

Student C began her day writing out spelling words multiple times. She then listened to the teacher and the class review the answers to language arts homework assignments. She tried to say aloud some of the words that the class was reading chorally. She and her classmates then went to work on an exercise in their language arts workbook on making new words by changing the vowel in them. After reviewing the exercise and practicing both the generation and pronunciation of words with a long "o" sound, she listened to the teacher read descriptions of animals and her classmates identify, "Who am I?" She and the class turned to a story that they had read and answered, "Who is in the story?" After a short mathematics game involving the identification of the numbers that when added, would equal a given sum, she and the class worked through a set of activities related to fractions. These included listening to the teacher review the concept of fraction; folding paper into two halves, three thirds, and four fourths; completing two exercises in the mathematics workbook; and reviewing the answers to those exercises. After lunch and recess, she and her classmates were guided through the completion of a worksheet that summarized what they had learned about Philadelphia. Under the guidance of a resource teacher, she and her classmates read aloud the numbers 1 to 100; they then wrote out those numbers as they appeared on a chart on the wall. When the teacher returned, she and the class reviewed how a seed changed as it grew into a plant. She and the classmates then cut out four pictures of a plant and ordered them by the number of leaves each had. After school, student C went to Encore, where she answered questions about a story the class had read, shared something

"special" she found in the story, and drew a favorite picture from the storybook.

Allocation of Time

Table 5 shows how time was allocated to the core subjects (reading/ language arts, mathematics, social studies, and science), the other school subjects, transitions from one activity to another and from one classroom to another, and lunch/recess/bathroom.

Table 5

Distribution of Time

Student (total time shadowed)	Core Subjects (basic skills, social studies, science)	Other Subjects (physical education, art, music, library)	Transition (moving from class to class, changing content area, morning start up, finishing day)	Lunch, recess, bathroom
A (350 min.)	(175) 50%	(70) 20%	(32) 9%	(73) 21%
(405 min.)[a]	(220) 54%	(70) 17%	(42) 11%	(73) 18%
B (348 min.)	(240) 69%	--	(50) 14%	(58) 17%
C (343 min.)	(227) 66%	--	(59) 17%	(57) 17%
(398 min.)[a]	(274) 69%	--	(67) 17%	(57) 14%

Note: Time is represented by minutes and percentage of the total time shadowed.

[a]These students had an extended day: 45 minutes of additional reading/language arts instruction.

This table shows that the distribution of time among the core subjects; other subjects; transitions; and lunch, recess, and bathroom was similar for students B and C. In contrast, student A experience two other subjects: health and music, and he spent less time in transition and more time in lunch/recess. The table also shows that students A and C had extended days, since they participated in an after-school, whole language program.

Table 6 shows how time allocated to the core subjects was distributed to reading/language arts, mathematics, science, and social studies.

Table 6

Distribution of Time Among the Core Subjects

Student (total time in core subjects)	Reading/Language Arts	Mathematics	Science	Social Studies
A (175 min.)	(47) 27%	(53) 30%	(75) 43%	--
(220 min.)[a]	(92) 42%	(53) 24%	(75) 34%	--
B (240 min.)	(193) 80%	(47) 20%	--	--
C (227 min.)	(97) 43%	(92) 41%	(24) 10%	(14) 6%
(274 min.)[a]	(144) 53%	(92) 33%	(24) 9%	(14) 5%

Note: Time is represented in minutes and percentage of total time in core subjects.

[a]These students had an extended day: 45 minutes of additional reading/language arts instruction.

This table shows that the distribution of time among the core subjects on this day was very different for the three students. Student A experienced lessons in three core subjects: 42 percent in reading/language arts, 34 percent in science, and 24 percent in mathematics. Student B spent most of the time in reading/language arts (80 percent), though he also had a mathematics lesson. Student C experienced lessons in all four core subjects; 80 percent of her day was split between reading/language arts and mathematics, while the remainder was split between science and social studies.

Discussion questions: To what extent does the allocation of time recorded reflect the daily allocation of time across the school year? If it does, does this allocation represent the relative importance of the various subjects?

Do the differences in how time was used (e.g., transition) suggest areas that might benefit from further study and/or possible action?

Instructional Format

Shadowers recorded when each student experienced the following instructional formats during the core subject periods.

- Presentation: Shadowed student listens to and watches teacher presentations, explanations, demonstrations, and/or reading of a story.

- Recitation: Shadowed student and class respond to teacher questions and/or teacher-presented exercise.

- Discussion: Shadowed student and classmates exchange information and perspectives on a topic. They listen to each other and build off each other's comments.

- Guided Seatwork: Shadowed student practices what he/she is to learn, while being actively monitored by the teacher. These activities frequently involve the use of worksheets or workbooks. Students may work on the exercises alone, in pairs, or as a member of a small group.

- Unguided Seatwork: Shadowed student does seatwork activity that is not actively monitored by the teacher.

- Surrogate: Shadowed student receives instruction through a surrogate (e.g., microcomputer, listening center, VCR, or film).

- Testing: Shadowed student takes a test or completes an exercise that will be used to assess his/her level of learning.

- Management: Shadowed student follows management directions of teacher (e.g., waits for papers and materials being distributed, take out a book and open to a certain page, assembles materials needed for an activity, moves to form a group).

Table 7 shows the proportion of time that each student experienced the different instructional formats during the core subject periods.

Table 7

Distribution of Time of Core Subjects By Instructional Format

Student (total time in core subjects)	Presentation	Recitation	Discussion	Guided Seatwork	Unguided Seatwork	Surrogate	Test	Management
A (175 min.)	--	(35) 20%	--	(139) 79%	--	--	--	(1) 1%
(220 min.)[a]	--	(60) 27%	--	(159) 72%	--	--	--	(1) 1%
B (240 min.)	(10) 4%	(94) 39%	--	(121) 51%	--	--	--	(15) 6%
C (227 min.)	--	(107) 47%	--	(63) 28%	(13) 6%	--	--	(44) 19%
(274 min.)[a]	--	(135) 49%	--	(80) 29%	(13) 5%	--	--	(46) 17%

Note: Time is represented in minutes and in percentage total time in core subjects.

[a]These students had an extended day: 45 minutes of additional reading/language arts instruction.

This table shows that the distribution of core subject time among instructional formats was quite different for each student. Student A spent 72 percent of the core subject time in guided seatwork and the rest of the time in recitation. Student B spent 51 percent of the core subject time in guided seatwork, 39 percent in recitation, and the remainder of the time listening to a story and in management-related activities. Student C spent 49 percent of the core subject time in recitation, 29 percent in guided seatwork, 17 percent in management, and 5 percent in unguided seatwork.

Instructional Grouping

Shadowers recorded the extent to which each student works with the teacher on the core subjects as a member of the whole class, as a member of a sub-group of the class, or as an individual. "Whole class" refers to those situations when all the students in a class are receiving the same instruction or are engaged in the same activity. "Sub-group" refers to when the teacher or other instructor is teaching a sub-group of the class, such as a small group reading lesson. "Individual" refers to when a student is being tutored or receiving instruction alone.

Table 8 shows the proportion of time during the core subject periods that each student experienced the different instructional groupings.

Table 8

Distribution of Time of Core Subjects By Instructional Grouping

Student (total time in core subjects)	Whole Group	Sub-Group	Individual
A (175 min.)	(175) 100%	--	--
(220 min.)[a]	(175) 80%	(45) 20%)	--
B (240 min.)	(198) 83%	(42) 17%	--
C (227 min.)	(227) 100%	--	--
(274 min.)[a]	(227) 83%	(47) 17%	--

Note: Time is represented in minutes and in percentage of total time in core subjects.

[a]These students had an extended day: 45 minutes of additional reading/language arts instruction.

This table shows that all three students experienced instruction during core subject time primarily as members of a whole class. Student B was a member

of a sub-group during the reading/language arts time; students A and C were members of a sub-group as a result of participating in the after-school program. None of the students worked one-on-one with a teacher that day.

Types of Instructors

Shadowers recorded the extent to which each student worked with the regular classroom teacher, a resource teacher, an instructional assistant, or a parent volunteer.

Table 9 shows the proportion of time allocated to the core subjects that each student worked with each type of instructor.

Table 9

Distribution of Time of Core Subjects by Instructor

Student (total time in core subjects subjects)	Teacher	Resource Teacher (Reading, Math, Science, Social Studies)	Instruc. Assist.	Parent Volunteer
A (175 min.)	(175) 100%	--	--	--
(220 min.)[a]	(220) 100%	--	--	--
B (240 min.)	(198) 83%	--	(42) 17%	--
C (227 min.)	(172) 76%	(45) 20%	(10) 4%	--
(274 min.)[a]	(172) 62%	(92) 34%	(10) 4%	--

Note: Time is represented in minutes and percentage of total time in core subjects.

[a]These students had an extended day: 45 minutes of additional reading/language arts instruction.

This table shows that all three students spent most of core subject time working with their regular teacher. Student A also spent the extended day period with his regular teacher. Student B did spend time with the instructional assistant during the reading/language arts period. Student C worked with a resource teacher for a mathematics lesson and with another teacher for the after-school program.

Discussion questions: To what extent is recitation and seatwork the predominant instructional formats used? If they are, should other formats be considered? If so, how might their use be encouraged?

To what extent is treating students as members of a whole class the predominant way of grouping students for instruction? If it is, should other ways of grouping students be considered? If so, how might they be encouraged?

Instructional Tasks During the Core Subjects

This part describes the instructional tasks on which each student worked during their core subject periods. The tasks are described from two perspectives: the extent to which they introduce new content, and the extent to which they ask the student to use higher order thinking processes.

Tasks Introducing New Content

Table 10 lists the instructional tasks on which each student worked that day. Those tasks that represented opportunities for students to learn new content are noted with a "X" in the first column. The tasks that are not marked with an "X" asked students to review or practice using previously introduced content.

- Of the 15 tasks that student A worked on, six involved new content. He observed the behavior of crickets in a terrarium; he met a frog; he was asked to share what feelings one might have when one goes to a new school; he was introduced to some new vocabulary; he listened and read sections of two new stories.

- Of the 13 tasks that student B worked on, six involved new content. He was introduced to the concepts of "real" and "make-believe," he was involved in estimating weights of various objects, he was asked to identify silent letters in words, he listened to a new story being read, and he was introduced to the task of putting events from the story into a sequence.

- Of the 26 tasks that student C worked on, none introduced new content.

Tasks Requiring Higher Order Thinking Processes

Those tasks listed on Table 10 that asked the student to use higher order thinking processes are noted with a "X" in the second column. These tasks asked students to go beyond recognizing and recalling content and to engage in such processes as analyzing, comparing, inferring, and evaluating.

Of the 15 tasks that student A worked on, nine required the use of higher order thinking processes.

- During three math/science activities, the student individually and with his cooperative learning group graphed four sets of data, in order to facilitate the analysis of each set of data.

- During two science activities, the student, his cooperative learning group, and the class as a whole compared their observations of crickets in their terrariums with what they had learned about the life cycle of the cricket.

Table 10

Characteristics of Instructional Tasks Experienced By Each Student

		New Content	Higher Order Thinking	Clarity of Task		Student Engagement		
				Clear	Not Clear	H	M	L
Student A								
1. Graph a set of data drawn from class from class response to a question.	(35 min.)		X	X		X		
2. Graph two sets of data provided in math workbook.	(14 min.)		X	X		X		
3. Graph data from science activities.	(40 min.)		X	X		X		
4. Observe crickets; relate observations to information previously introduced about crickets' life cycle.	(15 min.)	X	X	X		X		
5. Answer questions about observations.	(10 min.)		X	X		X		
6. Meet frogs that had arrived for science activities.	(10 min.)	X		X		X		
7. Answer pre-reading question: how does it feel to go to a new school.	(5 min.)	X	X	X		X		
8. Become familiar with vocabulary in story.	(12 min.)	X		X		X		
9. Read section of story aloud, listen to others read.	(8 min.)	X		X		X		
10. Recall facts about story; share opinions.	(12 min.)		X	X		X		
11. Complete workbook exercises; review answers.	(15 min.)			X		X		
12. Recall Roman numerals.	(3 min.)			X		X		
13. Read section of story allowed; listen to others read.	(10 min.)	X		X		X		
14. Recall facts about story; share opinions.	(15 min.)		X	X		X		
15. Draw picture illustrating a part of the story.	(20 min.)		X	X		X		
TOTAL	(224 min.)	6/15 (40%)	9/15 (60%)	15/15 (100%)	0/15 (0%)	15/15 (100%)	0/15 (0%)	0/15 (0%)

*H, M, L = High, mixed, and low engagement

Table 10 (Cont'd)

		New Content	Higher Order Thinking	Clarity of Task		Student Engagement		
				Clear	Not Clear	H	M	L
Student B								
1. Copy sentences from chalkboard (2 sets).	(33 min. for tasks 1 & 2)			X			X	
2. Compute answers to 12 subtraction problems on chalkboard.					X			X
3. Read list of words from chart on wall with the class.	(12 min.)			X			X	
4. Discriminate between "real" and "make-believe" statements in workbook exercise.	(15 min.)	X	X		X*		X	
5. Suggest objects whose weight would be described in ounces and objects whose weight would be described in pounds.	(47 min. for tasks 5,6, and 7)	X	X	X		X		
6. Estimate weights of specific objects and record estimates on worksheets.		X	X		X	X		
7. Record actual weights on worksheet.				X		X		
8. Underline silent letters in words on worksheet.	(13 min.)	X	X	X			X	
9. Read aloud words on worksheet.	(10 min.)				X		X	
10. Read aloud words on flash cards.	(15 min.)				X	X		
11. Listen to story being read.	(10 min.)	X		X		X		
12. Answer questions about story that ask for predictions of consequences.	(10 min.)		X	X			X	
13. Put eight pictures/statements that represented key events in the story into the correct sequence.	(60 min.)	X	X		X*		X	
TOTAL	(225 min.)	6/13 (46%)	6/13 (46%)	7/13 (54%)	6/13 (46%)	5/13 (38%)	7/13 (54%)	1/13 (8%)

*An asterik is used to note tasks that a student gave up on.

Table 10 (Cont'd)

		New Content	Higher Order Thinking	Clarity of Task		Student Engagement		
				Clear	Not Clear	H	M	L
Student C								
1. Write spelling words out multiple times.	(13 min.)			X		X		
2. Review answers for homework exercises on the sound "a" makes in certain words.	(8 min.)			X			X	
3. Read aloud words on flashcards.	(13 min.)			X			X	
4. Change vowel in a word fits the sentence context.	(13 min.)		X	X		X		
5. Give examples of words with a long "o" sound.	(4 min.)			X				X
6. Read aloud words on flashcards with long "o" sound.	(4 min.)			X			X	
7. Identify "Who am I," given a description of an animal, which was read by the teacher.	(5 min.)		X	X			X	
8. Use table of contents, along with some teacher clues, to find a story.	(4 min.)			X		X		
9. Recall who is in the story.	(2 min.)			X		X		
10. Listen to poem; tell who is in the poem.	(4 min.)			X		X		
11. Identify two numbers, which if added, equal a given number (math game).	(12 min.)			X				X
12. Write spelling words.	(8 min.)			X		X		
13. When asked, spell aloud a word.	(2 min.)			X				X
14. Given part of a whole, name the part (half, third, fourth).	(3 min.)			X		X		
15. Fold a piece of paper in half, third, and fourth.	(3 min.)		X	X		X		
16. Given pictures of divided objects in workbook, identify and color the half, third, and fourth.	(19 min. for tasks 16 and 17)			X		X		
17. Given an object partly shaded, circle the correct name of the part.				X		X		

Table 10 (Cont'd)

		New Content	Higher Order Thinking	Clarity of Task		Student Engagement		
				Clear	Not Clear	H	M	L
Student C (Cont'd.)								
18. Recognize correct answers to questions about Philadelphia, following class discussion of each question.	(14 min.)			X		X		
19. Read numbers 1 to 100 from wall chart.	(4 min.)			X		X		
20. Write numbers 1 to 100.	(31 min.)			X			X	
21. Recall sum or two single digit numbers on flashcards.	(2 min.)			X				X
22. Recall what they observed of a "growing" seed.	(7 min.)			X		X		
23. Cut out four pictures of a plant and put in a sequence based on number of leaves.	(17 min.)			X		X		
24. Recall information about a story read in previous class.	(9 min.)			X		X		
25. Share something "special" about story.	(19 min.)		X	X		X		
26. Draw a favorite picture, found in the story.	(17 min.)			X		X		
TOTAL	(142 min.)	0/26 (0%)	4/26 (15%)	26/26 (100%)	0/26 (0%)	17/26 (65%)	5/26 (19%)	4/26 (15%)

- As part of story-related activities, the student and his classmates were asked prior to reading the story, to share personal perspectives on what feelings one might have when starting a new school, and following the story, to recall what happen and consider why it happened.

- As part of the after-school program, the student and his classmates discussed a story and then created an illustration for part of that story.

Of the 13 tasks that student B worked on, six required the use of higher order thinking processes.

- During a workbook exercise, he was asked to discriminate between "real" and "make believe."

- During a mathematics lesson, he was asked to estimate the weight of various objects, some in pounds and some in ounces.

- On a worksheet, he was asked to identify the silent letter in each word on a list.

- After listening to a story, he was asked to explain what happened and to predict possible consequences, given from what happened. He was also to put eight pictures/statements that represented events in the story into a sequence.

Of the 26 tasks the student C worked on, four required the use of higher order thinking processes.

- In a workbook exercise, she was asked to make a word that fit the context of a sentence by changing the vowel in the word.

- After being read a description of an animal, she and her classmates were asked to identify the animal.

- As part of a mathematics lesson, she was asked to figure out how to fold a paper into two equal parts, three equal parts, and four equal parts, and to identify each of those parts as a fraction of the piece of paper.

Discussion questions: To what extent do/should students experience each day a mix of tasks that involve the review and application of previously introduced content and the introduction of new content?

To what extent do/should students experience tasks that ask them to use higher order thinking processes?

Student Response to Tasks

This part describes the student's response to the instructional tasks. Response is viewed in two ways: the extent to which the student seemed to

have difficulty understanding the task and the extent to which the student engaged in the task.

Clarity of Task

In the third column on Table 10, there is a notation about the extent to which students appeared to understand the task. Tasks noted as "clear" were those tasks that the student appeared to understand (e.g., did not ask any questions about how to do them, and responded to them, at least initially, with appropriate task-related behaviors). Tasks noted as "unclear" were those about which the student asked for help, either from a fellow student or from a teacher. A task was also identified as unclear if a student felt the need to check continuously his or her work with another student or the teacher. A "*" was used if the student gave up on a task, expressing in words or behavior that "I cannot do this." Thus, this perspective uses student behavior to infer task clarity; it does not involve any judgment of how well the student actually understood and did a task. Indeed, in a few instances, a shadower noted that a student appeared to understand the task, but was, in fact, doing the task incorrectly.

Table 10 shows that students A and C appeared to understand all of the tasks that they were given. In contrast, student B did not appear to understand 6 of the 13 tasks. Though the student did seek help with a number of those tasks, he did give up on two of them: discriminating between "real" and "make-believe" and putting eight pictures/statements from the story, The Lorax, into a sequence.

Task Engagement of Students

In the last column on Table 10, there is notation as to how each task engaged the student. A task was coded "H" for high engagement if the student attended to a task and exhibited the kinds of behaviors required for the student to complete the task. Examples of engaged behaviors are:

- reading, writing, speaking, listening, watching, drawing
- raising one's hand in response to a question; answering a question
- participating in a choral response to a task
- talking with fellow students about a task.

A task was coded "L" for low engagement if the student did not attend to task and exhibited such off-task behaviors as just sitting, socializing, acting out, and being disciplined. A task was coded "M" when a student exhibited a mix of engaged and off-task behaviors.

- Of the fifteen tasks that student A worked on, all highly engaged him for most of the allocated time.
- Of the thirteen tasks that student B worked on, five highly engaged him. These tasks related to the estimation activit , the drill and practice of sight words, and listening to the Dr. Seuss story. Of

the remaining tasks, one did not engage him at all: doing the subtraction problems on the chalkboard. The remaining seven tasks engaged him only part of the time.

- Of the 26 tasks that student C worked on, 17 highly engaged her. Of the remaining tasks, four did not engage her. These involved a review of homework, giving examples of words with a long "o" sound, spelling words aloud, recalling addition facts aloud. The other five tasks engaged her part of the time. These involved a review of homework, reading aloud words on flashcards, inferring the animal from a description, and writing numbers 1 to 100.

Discussion questions: To what extent do the patterns of student response to the instructional tasks (e.g., the extent to which students appear to understand a task and the level of student engagement) suggest areas that might benefit from further study and/or possible action?

Student/Teacher Interactions During the Core Subjects

This part describes the personal interactions that occurred between the individual student and his or her teachers during the core subject periods. It describes the types of interactions that occurred, the affect of those interactions, and the relationship between those interactions and the group context.

Types of Student/Teacher Interactions

Table 11 lists the interactions that each student had with his or her teachers. The first column notes interactions of two types: those related to the content of the instructional tasks and those related to the behavior considered to be appropriate for the task. Interactions related to task content include the teacher asking the student a direct question, the teacher providing feedback to the student on an answer given or on seatwork done. Interactions directed towards task-relevant behavior include the positive reinforcement given by the teacher to the student for appropriate behavior, (e.g., contributing to a discussion, completing a worksheet, organizing the desk materials needed for an exercise, or the corrective feedback given to the student for inappropriate behavior (e.g., not following directions, talking to neighbor, walking around). A third type of interaction that was looked for but not observed, was informal personal communications between the student and the teacher about subjects not directly related to school work.

Table 11 shows that during the core subjects, student A and C interacted with a teacher eleven times, ten times in relation to task content and only one time in relation to task-relevant behavior. In contrast, student B interacted 25 times with a teacher, 11 times in relation to task content and 14 times in relation to task-relevant behavior.

Table 11

Individual Student/Teacher Interaction During Core Subjects

	Related to		Affect			
	Content	Behavior	positive	neutral	corrective	Small Group
Student A						
1. Teacher gives feedback to student's group on graph that they had developed as a team.	X		X		X	
2. Teacher gives student a sticker for being cleaned up first.		X	X			
3. Teacher directs question to student about story; student answers correctly; teacher acknowledges correct answer.	X		X			
4. Teacher directs question to student about story; student is not able to answer; teacher turns to other student.	X			X		
5. Teacher gives student sticker for completing worksheet.	X		X			
6. Student reads answer from worksheet; teacher acknowledges correct answer.	X		X			
7. Student reads section of story; teacher acknowledges quality of reading.	X		X			X
8-11. Teacher asks questions about story; student answers four of them during period; teacher acknowledges student's contributions.	X[4]		X[4]			X[4]
TOTALS	10/11 (91%)	1/11 (9%)	10/11 (91%)	1/11 (9%)	1/11 (9%)	5/11 (45%)
Student B						
1. Student raises hand; teacher passes by and says, "I won't grade handwriting."		X		X		
2. Student raises hand and waits; teacher recognizes student and gives permission to get scrap paper.		X		X		
3. Teacher looks at student's paper and says, "You have finished sentences, but not math. Do them during free time."	X			X		
4. Instructional assistant: "Don't shout out!"		X			X	X
5. Instructional assistant reprimands student for moving around.		X			X	X
6. Instructional assistant calls on student to say a word; student answers.	X			X		X
7. Student tracking with other students a flea; instructional assistant: "Are you working?...Put down the vial." Puts student name on board.		X			X	X
8. Teacher gives student raffle ticket; takes name off board.		X	X			X
9. Teacher gives sticker to student for being on task.		X	X			X

Table 11 (Cont'd)

	Related to		Affect			
	Content	Behavior	positive	neutral	corrective	Small Group
10. Student asks for help; instructional assistant says, "Read the sentence and think about it!"	X				X	X
11. Teacher holds up flash card; asks student; student responds.	X			X		
12. Student holds up hand; teacher recognizes student; student answers; teacher acknowledges correct answer.	X		X			
13. Teacher puts student's name on board for calling out answer.		X			X	
14. Instructional assistant tells student to put name on worksheet; student writes name.		X		X		
15. Student asks teacher to wait; teacher says, "Okay."		X		X		
16. Student asks teacher if he can estimate 100 pounds; teacher says, "It is up to you."	X			X		
17. Teacher monitors student's work; tells student that, "Bottom items are hard; they are only for superstars." Student asks, "Should I do them." Teacher responds, "No, we will do them together."	X				X	
18. Student reads word on flash card, corrects himself; teacher says, "Right, good; you didn't give up."	X		X			
19. Student reads another word (not quite accurately); teacher accepts student's answer.	X		X			
20. Students asks teacher if he can work on task with somebody; teacher says he should work alone.		X			X	
21. Teacher asks student how he is doing. Student asks if he can put pictures anywhere. Teacher responds, "Put them where they make sense."	X			X		
22. Teacher stops and coaches; she suggests a change in pictures; student complies.	X			X		
23. Teacher passes out jellybeans to students who complete work; student doesn't receive any (except from neighbors, who received some).		X			X	
24. Teacher tells student to return to seat.		X			X	
25. Student tells teacher his work was not collected; teacher tells student to put it in a folder.		X		X		
TOTALS	11/25 (44%)	14/25 (56%)	5/25 (20%)	11/25 (44%)	9/25 (36%)	7/25 (28%)

Table 11 (Cont'd)

	Related to		Affect			
	Content	Behavior	positive	neutral	corrective	Small Group
Student C						
1. Teacher tells student she gave packet of review materials to her mother that morning; student says, "O.K."	X			X		
2. During choral reading exercise, teacher says to student, "I want to hear everyone."		X			X	
3. Teacher asks question; student answers, and says, "Very good."	X		X			
4. Teacher monitoring student helps student find correct page	X			X		
5. Teacher asks question; student answers; teacher says, "Yes."	X		X			
6. Resource teacher puts star on paper and says, "Very good."	X		X			
7-10. Teacher asks question about a story; student offers four answers over next few minutes. Teacher builds on student's answers.	X[4]		X[4]			X[4]
11. Teacher asks students to share what they found "special" in the story; student shares.	X			X		X
TOTALS	10/11 (91%)	1/11 (9%)	7/11 (64%)	3/11 (27%)	1/11 (9%)	5/11 (45%)

Affect of Interactions

In the second column on Table 11, the affect of each interaction was coded: positive, neutral, or corrective.

- Of student A's eleven interactions with a teacher, ten were positive in their affect, one was neutral, and one was corrective. The one corrective interaction related to feedback that the teacher gave on a graph student A's cooperative learning group had developed. That feedback also included positive comments.

- Of student B's 25 interactions with a teacher, five were positive, reinforcing task-relevant behaviors, eight were corrective of task-relevant behaviors, and one was corrective of task content. The remaining 11 were neutral; they related to both task content and task-appropriate behaviors.

- Of student C's eleven interactions with a teacher, seven were positive in their affect, three were neutral, and only one was corrective. That latter dealt with the student's lack of participation in a choral reading task.

Group Context

In the second column of Table 11, those interactions that occurred in the context of a sub-group are noted.

- Both student A and C experienced five of their eleven interactions with a teacher during the after-school Encore program. These interactions all related to task content. They were all positive in affect, except for one neutral one.

- Student B experienced seven of his 25 interactions (28 percent) while he was working in a language arts sub-group with the instructional assistant. Five of the seven interactions addressed task-relevant behavior. Four of the seven interactions were corrective, two were positive (when the teacher interceded), and one was neutral.

Discussion questions: To what extent do/should teachers and individual students interact over the course of a school day?

What is the ideal balance between positive and corrective interactions? What can teachers do to achieve that balance?

SECTION IV

SOME CONCLUDING THOUGHTS

The first three sections of this report have presented highlights of what RBS staff saw and heard during their visits to Taylor Elementary School between January and June, 1990. In this section, we share some of our reflections on the information provided in those sections.

Section I suggests the nature and scope of the changes that Taylor's staff have made over the past two years. Those changes have affected school organization and staff roles; the ways in which staff relate to one another; the monitoring and assessment of student progress; the planning and problem solving processes that staff are using at school, grade, class, and student levels; and instructional resources and practices. The fact that a number of staff in the first year found this amount of change stressful is not surprising; the fact that Taylor's staff has survived this experience and are still motivated to continue and expand their improvement efforts is impressive. From RBS' perspective, the challenges for Taylor's staff for the coming year are to focus staff energy on those practices that hold the most promise for improving school performance and to collect the information that will help them decide which practices to continue, refine, or discontinue.

Section II provides a snapshot of instructional practice at Taylor. It suggests that there are teachers on Taylor's staff who:

- develop instructional plans that balance the requirements of the district's curriculum and the ways in which their students learn best
- manage their classes efficiently, so that most of their time is devoted to instruction and most of their students' time is spent on task
- motivate their students to learn
- design and present lessons in ways that ensure that most of their students experience a moderately high level of daily success
- help students who are having difficulty attain mastery of specific knowledge and skills
- involve parents in support of the learning outcomes they are seeking.

And, it suggests that there are teachers who can still improve their skills related to these professional tasks. From RBS's perspective, the challenge for Taylor's staff is how to tap the knowledge and skills that reside within it in ways that will strengthen instruction throughout the school. Grade-level groups and school-based staff development are potential vehicles for the staff to use to learn from each other. However, for such learning to affect instruction in classrooms, the staff will need to have opportunities

to visit each others' classes to help each other implement and assess the effectiveness of specific practices.

Section III describes the varied experiences that individual students can have on a given day. Specifically, the information in that section suggests that some students, but not others,

- experience an integrated set of lessons
- are involved in a well-balanced mix of instructional tasks -- that is, tasks that introduce new content and tasks that review or provide practice of previously introduced content, and tasks that ask students to recognize or recall content and tasks that ask students to use higher order thinking processes
- are highly engaged by those instructional tasks
- have frequent, positive interactions with their teachers
- experience lessons during which a minimum amount of time is spent on management
- experience days during which only a modest amount of time is spent in transition.

From RBS' perspective, this information challenges Taylor's staff to find ways of looking at schooling from the perspective of the individual student:

- how the school day is structured for each student
- what tasks each student undertakes, the extent to which those tasks interrelate, how engaging each task is
- the number of interactions that occurs between individual students and staff each day, and the content and the affect of those interactions.

Such a perspective should help Taylor's staff to pinpoint just what practices must be affected if the school is to continue to make progress in achieving its goals.

APPENDIX

Students' Daily Schedule
May 9, 1990

APPENDIX

Student A
Daily Schedule
May 9, 1990

Time	Lasts	Lesson[1]	Location[2]	Grouping[3]	Size	Instructor[4]	Format[5]
9:00 a.m.	35 min.	Math	Classroom	Whole Class	27	Teacher	Seatwork
9:35 a.m.	1 min.	Math	Classroom	Whole Class	27	Teacher	Management
9:36 a.m.	14 min.	Math	Classroom	Whole Class	27	Teacher	Seatwork
9:50 a.m.	10 min.	Transition	Classroom	Whole Class	27	Teacher	Management
10:00 a.m.	25 min.	Health	Classroom	Whole Class	27	Res. Tchr. (Health)	Presentation
10:25 a.m.	5 min.	Transition	Classroom	Whole Class	27	Teacher	Management
10:30 a.m.	75 min.	Science	Classroom	Whole Class	27	Teacher	Seatwork
11:45 a.m.	13 min.	Other	Hall & Bathroom	Whole Class	27	Teacher	Other
11:58 a.m.	2 min.	Transition	Hallway	Whole Class	27	Teacher	Other
12:00 p.m.	45 min.	Music	Library	Whole Class	27	Res. Tchr. (Music)	Recitation/ Presentation
12:45 p.m.	60 min.	Lunch/Recess	Cafeteria/ Playground	Whole Class	27	Other	Other
1:45 p.m.	3 min.	Transition	Hallway	Whole Class	27	Teacher	Other
1:48 p.m.	32 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Recitation
2:20 p.m.	15 min.	Reading/LA	Classroom	Whole Class	21	Teacher	Seatwork
2:35 p.m.	1 min.	Transition	Classroom	Whole Class	21	Teacher	Management
2:36 p.m.	3 min.	Math	Classroom	Whole Class	21	Teacher	Recitation
2:39 p.m.	11 min.	Transition	Classroom	Whole Class	21	Teacher	Management
2:50 p.m.	10 min.	Dismissal/Transition	Classroom	Sub Group	21	Teacher	Other
3:00 p.m.	25 min.	Reading/LA	Classroom	Sub Group	13	Teacher	Recitation
3:25 p.m.	20 min.	Reading/LA	Classroom	Sub Group	13	Teacher	Seatwork

Total minutes: 405

[1]Lessons/Minutes:

Reading/LA (92 min.)
Math (53 min.)
Science (75 min.)
Music (45 min.)
Health (25 min.)
Lunch/Other (73 min.)
Transition (32 min.)
Dismissal/Transition (10 min.)

[2]Locations/Minutes:

Classroom (282 min.)
Library/Music (45 min.)
Cafeteria/Playground (60 min.)
Other (18 min.)

[3]Grouping/Minutes:

Whole Class (350 min.)
Sub Group (55 min.)

[4]Instructors/Minutes:

Teacher (275 min.)
Resource Teacher (70 min.)
Other (60 min.)

[5]Formats/Minutes:

Presentation (25 min.)
Recitation (60 min.)
Recitation/Presentation (45 min.)
Seatwork (159 min.)
Management (28 min.)
Other (88 min.)

Student B
Daily Schedule
May 9, 1990

Time	Lasts	Lesson[1]	Location[2]	Grouping[3]	Size	Instructor[4]	Format[5]
9:02 a.m.	33 min.	Reading/LA Math	Classroom	Whole Class	26	Teacher	Seatwork
9:35 a.m.	3 min.	Transition	Classroom	Whole Class	26	Teacher	Management
9:38 a.m.	12 min.	Reading/LA	Classroom	Sub-Group	12	Instruc. Assis.	Recitation
9:50 a.m.	5 min.	Reading/LA	Classroom	Sub-Group	12	Instruc. Assis.	Management
10:05 a.m.	15 min.	Reading/LA	Classroom	Sub-Group	12	Instruc. Assis.	Seatwork
10:20 a.m.	8 min.	Free time	Classroom Hallway: Water Bathroom	Whole Class	26	Teacher	Unguided Seatwork Other Other
10:28 a.m.	47 min.	Math	Classroom	Whole Class	28	Teacher	Recitation
11:15 a.m.	12 min.	Transition	Classroom	Whole Class	28	Principal	Other: Awards
11:27 a.m.	13 min.	Reading/LA	Classroom	Whole Class	28	Teacher	Seatwork
11:40 a.m.	10 min.	Reading/LA	Classroom	Whole Class	28	Teacher	Recitation
11:50 a.m.	10 min.	Transition	Classroom	Whole Class	28	Teacher	Game
12:00 p.m.	45 min.	Lunch	Cafeteria & Playground	Whole Class	28	Other	Lunch/Recess
12:45 p.m.	5 min.	Transition	Hallway	Whole Class	27	Teacher	Other
12:50 p.m.	15 min.	Reading/LA	Classroom	Whole Class	27	Teacher	Recitation
1:05 p.m.	10 min.	Reading/LA	Classroom	Whole Class	27	Teacher	Presentation
1:15 p.m.	10 min.	Reading/LA	Classroom	Whole Class	27	Teacher	Recitation
1:25 p.m.	5 min.	Bathroom	Bathroom	Individual	1	Teacher	Other
1:30 p.m.	60 min.	Reading/LA	Classroom	Whole Class	27	Teacher	Seatwork
2:30 p.m.	20 min.	Transition	Classroom	Whole Class	27	Teacher	Management
2:50 p.m.		Dismissal					

Total minutes: 348

[1]Lessons/Minutes:

Reading/LA (160 min.)
Math (47 min.)
Reading/LA & Math (33 min.)
Transition (50 min.)
Other (13 min.)
Lunch/Recess (45 min.)

[2]Locations/Minutes:

Classroom (285 min.)
Cafeteria/Playground (45 min.)
Other (13 min.)

[3]Grouping/Minutes:

Whole Class (301 min.)
Sub Group (42 min.)
Individual (5 min.)

[4]Instructors/Minutes:

Teacher (249 min.)
Instruc. Assis. (42 min.)
Other (57 min.)

[5]Formats/Minutes:

Presentation (10 min.)
Recitation (142 min.)
Seatwork (121 min.)
Unguided Seatwork (8 min.)
Management (35 min.)
Other (32 min.)

Student C
Daily Schedule
May 9, 1990

Time	Lasts	Lesson[1]	Location[2]	Grouping[3]	Size	Instructor[4]	Format[5]
9:07 a.m.	13 min.	Reading/LA	Classroom	Whole Class	26	Teacher	Unguided Seatwork
9:20 a.m.	2 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Management
9:22 a.m.	3 min.	Other: Dental Exam	Nurse's Office	Sub Group	4	Dental Asst.	Other
9:25 a.m.	8 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Recitation
9:33 a.m.	2 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Management
9:35 a.m.	1 min.	Other	Nurse's Office	Sub Group	2	Dental Asst.	Other
9:36 a.m.	4 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Management
9:40 a.m.	13 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Recitation
9:53 a.m.	2 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Management
9:55 a.m.	13 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Seatwork
10:08 a.m.	2 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Management
10:10 a.m.	13 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Recitation
10:23 a.m.	2 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Management
10:25 a.m.	10 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Recitation
10:35 a.m.	3 min.	Reading/LA	Classroom	Whole Class	20	Teacher	Management
10:38 a.m.	12 min.	Transition	Classroom	Whole Class	26	Teacher	Management
10:50 a.m.	5 min.	Math	Classroom	Whole Class	26	Teacher	Management
10:55 a.m.	12 min.	Math	Classroom	Whole Class	20	Teacher	Recitation
11:07 a.m.	13 min.	Bathroom	Bathroom/Hall	Whole Class	26	Teacher	Other
11:20 a.m.	10 min.	Reading/LA	Classroom	Whole Class	26	Instruc. Assis.	Recitation
11:30 a.m.	6 min.	Math	Classroom	Whole Class	20	Teacher	Recitation
11:36 a.m.	5 min.	Math	Classroom	Whole Class	20	Teacher	Management
11:41 a.m.	19 min.	Math	Classroom	Whole Class	20	Teacher	Seatwork
12:00 p.m.	5 min.	Transition	Classroom	Whole Class	20	Teacher	Other
12:05 p.m.	40 min.	Lunch/Recess	Cafeteria & Playground	Whole Class	26	Other	Other
12:45 p.m.	13 min.	Transition	Hall	Whole Class	26	Teacher	Other
12:58 p.m.	14 min.	Social Studies	Classroom	Whole Class	26	Teacher	Recitation
1:12 p.m.	8 min.	Transition	Classroom	Whole Class	20	Teacher	Management
1:20 p.m.	4 min.	Math	Classroom	Whole Class	26	Resource Tchr.	Recitation
1:24 p.m.	8 min.	Math	Classroom	Whole Class	20	Resource Tchr.	Management
1:32 p.m.	31 min.	Math	Classroom	Whole Class	20	Resource Tchr.	Seatwork
2:03 p.m.	2 min.	Math	Classroom	Whole Class	20	Resource Tchr.	Recitation
2:05 p.m.	3 min.	Transition	Classroom	Whole Class	20	Teacher	Management
2:08 p.m.	7 min.	Science	Classroom	Whole Class	20	Teacher	Recitation
2:15 p.m.	9 min.	Science	Classroom	Whole Class	20	Teacher	Management

Student C (Cont'd)
Daily Schedule
May 9, 1990

Time	Lasts	Lesson[1]	Location[2]	Grouping[3]	Size	Instructor[4]	Format[5]
2:24 p.m.	8 min.	Science	Classroom	Whole Class	20	Teacher	Recitation
2:32 p.m.	18 min.	Transition	Classroom	Whole Class	26	Teacher	Management
2:50 p.m.	8 min.	Dismissal/Transition	Classroom	Whole Class	26	Teacher	Other
2:58 p.m.	28 min.	Reading/LA	Classroom	Sub-Group	15	Resource Tchr.	Recitation
3:26 p.m.	2 min.	Reading/LA	Classroom	Sub-Group	15	Resource Tchr.	Management
3:28 p.m.	17 min.	Reading/LA	Classroom	Sub-Group	15	Resource Tchr.	Seatwork
3:45 p.m.		Dismissal					

Total Minutes: 398

[1]Lessons/Minutes:

Reading/LA (144 min.)
Math (92 min.)
Science (24 min.)
Social Studies (14 min.)
Transition (59 min.)
Dismissal/Transition (8 min.)
Other (57 min.)

[2]Location/Minutes:

Classroom (328 min.)
Cafeteria/Playground (40 min.)
Other (30 min.)

[3]Groupings/Minutes:

Whole Class (347 min.)
Sub Group (51 min.)

[4]Instructors/Minutes

Teacher (252 min.)
Resource Tchr. (92 min.)
Instruc. Assis. (10 min.)
Other (44 min.)

[5]Formats/Minutes

Recitation (135 min.)
Management (87 min.)
Seatwork (80 min.)
Unguided Seatwork (13 min.)
Other (83 min.)