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ABSTRACT

Home-based consultations about homework were conducted over a 12-week period with nine families of elementary students with mild handicaps to determine the extent to which consultations increased academic responding time, and to document home and school factors that contribute to work incompletion problems. The intervention was implemented by trained consultants who worked with parents in the home setting to achieve three goals: (1) increase students' acquisition of independent study habits; (2) promote effective parent-teacher relationships through cooperation, planning, and follow-through with assigned homework tasks; and (3) increase parental skill in providing structure and support for their child's academic work. Although comparisons of intervention and control group subjects failed to show significant differences in students' academic responding time in classroom settings, several home and school factors that contribute to work incompletion problems often demonstrated by students with mild handicaps were identified. Implications for developing effective homework policies in school are discussed. (Child and parent interview questionnaires are appended.) 35 references (Author)

University of Minnesota

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Abstract

Home-based consultations about homework were conducted over a 12-week period with 9 families of students with mild handicaps to: (a) determine the extent to which consultations increased academic responding time, and (b) document home and school factors that contribute to work incompletion problems. The intervention was implemented by trained consultants who worked with parents in the home setting to achieve three goals: (a) increase students' acquisition of independent study habits, (b) promote effective parent-teacher relationships through cooperation, planning, and follow-through with assigned homework tasks, and (c) increase parental skill in providing structure and support for their child's academic work. Although comparison of intervention and control group subjects failed to show significant differences in students' academic responding time in classroom settings, several home and school factors that contribute to work incompletion problems often demonstrated by students with mild handicaps were identified. Implications for developing effective homework policies in school are discussed.

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Effectiveness of Home-Based Consultation in Increasing Student Academic Responding

A debate in the literature is whether home or school is most important for increasing instructional outcomes for students in general, and mildly handicapped students in particular. Some educators argue that schools make the difference; students' opportunity to respond (Greenwood, Delquadri, & Hall, 1984; Ysseldyke, Thurlow, Graden, Wesson, Algozzine, & Deno, 1983), time needed to learn (Gettinger, 1984), and instructional effectiveness (e.g., Rosenshine & Stevens, 1986) are variables that influence positive student achievement. Other individuals argue that home factors, family and maternal stress, and the quality of the caregiving environment are at the root of many students' failure in school (Coleman, 1966; Egeland & Erickson, 1987; Pianta, Egeland & Sroufe, in press). In a major synthesis, Walberg (1985) concluded that classroom learning is a function of the extent to which student ability, motivation, and quality and quantity of instruction are supported by home, peer group, and the classroom climate. Walberg points to the home-school link as a critical variable in improving instructional outcomes for students.

From the middle sixties, research has shown that the school performance of children is strongly influenced by their home backgrounds, traditionally defined in terms of global social status variables such as parental income, occupation and education level, and family structural characteristics such as family size and birth order. Although this relationship between school achievement and home background is one of the most robust in social science research (Coleman, 1966; Mosteller & Moynihan, 1972), it has not proven to be especially useful with respect to educational policy development or for the development of strategies by which families might support and facilitate the educational development of their children.

As an extension of this research, the focus for home and family correlates

with achievement has shifted from global social status and family structural variables to more psychosocial process aspects of home and family life. For example, Marjoribanks (1972) found that family process variables such as degree of press for achievement, activeness, intellectuality, independence and language use are more highly related to mental ability scores than are gross, structural indicators such as family size, SES, and birth order. Likewise, Wolf (1964) examined 13 process variables in 3 categories (press for achievement motivation, press for language development, and provision for general learning) for their relationship to intellectual ability. Wolf found that the characteristics of parent-child interactions accounted for 50% of the variance in children's scores on intelligence tests. This emphasis on the more psychosocial, process aspects of home and family has guided researchers to focus on those variables that are potentially manipulable by parents and school personnel, such as the nature and quality of time spent on homework, the amount of leisure time allocated to reading, and parental attitudes and involvement with regard to their child's schooling.

Although it makes intuitive sense that homework represents one area in which schools and families can work cooperatively to enhance the academic achievement of students, some educators, from the earliest writings on the efficacy and desirability of homework, have opposed its use on the grounds that it is professionally unsupervised and allows children to practice mistakes. Consequently, the use of homework by teachers to facilitate the acquisition of academic skills has varied considerably, and the amount of homework actually done by students has varied according to students' motivation and the skills of parents in supporting homework requirements of teachers (Epstein, 1987; Goldstein, 1960; Hedges, 1971). This debate notwithstanding, the most extensive traditional reviews of the empirical research on homework conclude that its effects are generally favorable in

promoting the academic achievement of students (Coulter, 1979; Goldstein, 1960; Good & Grouws, 1979).

Although opinions of educators regarding the effects of homework have been equivocal over the decades, attention by researchers to homework has increased since the publication of A Nation at Risk (National Commission on Excellence in Education, 1983) and other national reports concerning the achievement of American students compared to those in other countries. In a more recent synthesis of 15 empirical studies, Walberg, Paschal, and Weinstein (1985) claimed that the effects of homework on learning by elementary and secondary students are large and consistent: when homework is merely assigned without feedback from teachers, it appears to raise (on the average) the typical student at the 50th percentile to the 60th percentile. But when graded or critiqued, homework was found to raise performance from the 50th to the 79th percentile. This graded homework effect is reported by Walberg and colleagues as one of the largest in the educational research literature.

Homework showed larger effects on reading and social studies tests than on tests of other subjects, and conferred equally beneficial effects for children of lower and middle socioeconomic groups and at various achievement levels. The researchers found treatment effects to be greatest for fourth and fifth grade students. The authors conclude that much of the substantial body of research on the effects of homework on student achievement is opinionated, indiscreet and polemic, and that given the few methodologically sound studies, additional research is needed to estimate its effect more accurately.

Hedges (1964) argued that, given the diversity of students' needs both within and between communities, the fundamental questions remaining are how much of what kind of homework, for what child, under what conditions and for what purposes. Over two decades later, Brophy (1986) contended that research is needed on

the effectiveness of different kinds of homework and the appropriate amount of homework for different types of students.

Closely associated with the process of using homework assignments to facilitate academic achievement of students is the opportunity for schools to establish focused and cooperative relations with parents. Results of studies of the effects of parent participation in raising the academic performance of students or in decreasing undesirable classroom behavior attest to the efficacy of home-school cooperation. For example, studies show that contacts with parents are effective in increasing the attendance of chronically absent students (Sheats & Dunkleberger, 1979), reducing talking in class and homework completion rates (Dougherty & Dougherty, 1977; Epstein, 1987), raising the level of daily math assignments completed (Karraker, 1972), reducing disruptive aggressive behavior of third grade students (Aylion, Garber, & Pisor, 1975), and increasing elementary students' math and reading achievement (Epstein, 1987). Children asked to read to their parents gained in reading skills, compared to controls, at all ability levels in a sample of several hundred early elementary school children (Hewison & Tizard, 1980; Tizard, Schofield, & Hewison, 1982). In a longitudinal study of the effects of parental involvement (encouraging schoolwork, listening to children read, or participating in learning activities at home) on elementary students' achievement, Epstein (1984) found significant increases over time, with the greatest gains shown in reading skills. Clearly, homework is one way to enable parents to participate with schools in the service of children's academic achievement. It appears that homework and parental involvement may have important direct or indirect effects on student achievement.

The purposes of the present study were to: (a) determine the extent to which home-based consultation about homework increased academic responding time for students with mild handicaps, and (b) document home and school factors that

contribute to the problems students with mild handicaps typically have with completing assigned work. The intervention was implemented by trained consultants who worked with parents in the home setting to achieve the following goals: (a) to facilitate students' acquisition of more independent study skills and positive attitudes toward school work; (b) to promote more effective parent-teacher relationships through cooperation, planning, and follow-through with assigned homework tasks; and (c) to promote parental skill in providing structure and support for their child's academic requirements and in facilitating their child's academic organization skills (i.e., work habits, study skills). These dynamic characteristics, unlike the more static variables of parental occupation or economic level, represent ongoing processes by which teachers and parents might work cooperatively to improve the academic achievement of students.

Method

Subjects

Nine students classified as mildly handicapped, 7 learning disabled (LD) and 2 emotionally/behaviorally disturbed (EBD), participated in the study. The students were in grades 3-6 and attended 3 schools in a suburban district. Eight mildly handicapped students (5 LD, 3 EBD) served as control subjects. These students were in grades 3-6 and attended 4 schools in the same district.

Students were recommended for participation in the 12-week home intervention by their regular education teachers. Criteria for teacher recommendation included (a) teacher belief that the student would benefit from extra academic practice, (b) the student needed to change poor work completion habits, and (c) parents would be interested and cooperative. Students were randomly selected from the recommended list of subjects.

Nine graduate assistants who had completed advanced coursework in school psychology and special education served as consultants to the parents. Eight mainstream teachers participated in the study; demographic information is available for 7 teachers. Five teachers (71.4%) were female and 2 teachers (28.6%) were male. The average years teaching experience was 23.1 (range = 17-29). All teachers held a regular education certificate, and one teacher also held a certificate for teaching educable mentally retarded students.

Procedures

All teachers involved in the study were volunteer participants. Parent permission for child participation was obtained. Subjects were randomly assigned to intervention or control groups after parent permission was received. Teachers and parents were notified of the students' selection and final verification of teacher and parent willingness to participate was secured.

Intervention design. Each consultant was assigned to a family. The target of the homework intervention was the child's parents, with the child present as needed during consultations. The goal was to assist parents in planning consistent study times and in helping the child organize study materials. Parents also were to monitor and facilitate independent homework completion, and facilitate positive attitudes toward school work through providing encouragement and feedback. Parents were not expected to teach skills to their children or to assure the accuracy of assignments. In addition to the two nights per week of homework, one 20-30 minute session each week was to be devoted to reading for pleasure (either the parent listened to the child read orally, or the parent read to the child from a book of their choice). The extracurricular reading was designed to promote positive parent-child interactions and pleasurable experiences with reading.

Pre-intervention interviews were conducted by each consultant with students, parents, and teachers to assess attitudes and current practices regarding the student's

homework. The student interview (see Appendix A) included 44 items about attitude toward school, teachers, and homework, and a self assessment of ability to be successful in school. The interview also was designed to assess student understanding of strategies used to complete school work (e.g., "When the teacher gives a homework assignment, do you write down what you are supposed to do?" "What do you do when you do not understand how to do the homework assignment"?). Most items were answered on a 1-5 (strongly disagree - strongly agree) or 1-4 (almost never - usually) Likert scale, though a few questions were open-ended.

The goal of the first meeting with the parent(s) was to establish rapport through listening to parental concerns regarding the child's school performance, and also to explain the nature of the project, why the child was selected, and expectations for all participants. During a structured interview, consultants had an opportunity to gather information related to parental concerns and needs, and to assess parental skills in providing structure, feedback, and positive reinforcement. The parent interview (see Appendix B) was comprised of 12 open-ended questions that addressed parental perceptions of the amount of homework given, the child's academic ability, attitude, and organizational skills, successful strategies implemented in the past, and the amount and type of reading in the home.

The goal of the first meeting with the teacher was to establish rapport through listening to the teacher's concerns regarding the student's work habits. During this meeting, the nature of the project and expectations of the teacher, parent(s), and child were reviewed, and the teacher's willingness to participate was reconfirmed. The 10 open-ended questions asked during the pre-intervention teacher interview (see Appendix C) concerned student problems and strengths, study habits (work completion and accuracy), and behavior. Information on teacher expectations and practices regarding homework, strategies attempted in the past, and ideas for interventions were obtained.

A meeting with parents, teacher, and child, referred to as the coordination planning meeting, was held after individual interviews were completed to discuss and coordinate intervention procedures. The intervention procedures discussed are outlined as intended transactions in the Program Evaluation section. Modifications of procedure were made to meet individual student, parent, or teacher needs. For example, homework was assigned on a daily basis for one student, as opposed to the typical twice weekly assignments.

Consultants met with the family once per week in the beginning of the project, and biweekly for the remainder of the project. Consultation sessions lasted for one hour. The role of the consultant and the specific interventions attempted were tailored to meet parental skill in supporting academic activities. In all cases, the role of the consultant was to be educational and facilitative, not therapeutic.

All home consultants were trained in procedures for working with families and the evaluation methods used. In addition, consultants and the project coordinator met weekly or biweekly throughout the 12-week intervention to discuss interventions, brainstorm ideas, and deal with any problems encountered.

Data collection. Classroom observations were conducted three times. Baseline data were collected in December, midpoint data were collected in February, and post-intervention data were collected in April. A modified version of the Code for Instructional Structure and Student Academic Response (CISSAR) observation system (Greenwood, Delquadri, & Hall, 1978) was used to collect information on students' responding (active academic responding, academic engaged time, task management, and inappropriate behavior). Definitions of the 19 student response codes were those provided by Stanley and Greenwood (1980), except for "passive attending" and "waiting." In this study, one of the original CISSAR inappropriate responses (self-stimulation) was replaced by a task management response (waiting). "Waiting" was defined as time when the student is not involved in any response and the

situation involves an obvious "wait" time such as when the student is in line, teacher stops lecture to answer telephone, etc. The "waiting" responses were coded in "passive attending" in the original CISSAR system. "Passive attending" was the code used for listening, appropriately paying attention, etc., in a passive manner.

A momentary time sampling technique was used to direct the recording of each student's responses. The response made by the target student was recorded by computer every 10 seconds over the entire school day. One trained observer followed the same student all day. Observations were not conducted during breaks, such as those for lunch, recess, and bathroom. Observers did not code during the physical education, music, or special assembly programs since the observation system did not apply to those situations. Observers did follow target students when they left their homerooms to go to other classrooms. Coding was conducted in these other classrooms in the same manner as in homerooms. Regardless of the physical setting, observers attempted to position themselves to be as unobtrusive as possible and to avoid revealing the identity of the target student to that student or to other students.

Three individuals, who had used the CISSAR system for two years, were responsible for the majority of the observations. Substitute observers, project staff members who had conducted observer training sessions and monitored the regular observers, filled in for reasons of sickness, make-up observations, and scheduling difficulties.

Retraining of the observers in the observation system occurred annually. Training lasted for a 2-week period (half days) and included practice coding within actual classrooms. Fourteen inter-rater agreement checks were conducted; the average agreement for the four student responding composites was 87%.

Pre- and post-intervention achievement data were collected in October and May, respectively. The Basic Achievement Skills Individual Screener (BASIS) (Psychological Corporation, 1983) and an informal curriculum-based measure were

used to collect achievement data. The BASIS is an individually administered, norm-referenced measure of achievement in reading, spelling, and math. Test items reflect curriculum taught in grades 1-8. In addition, a one-minute oral reading sample on a standard third grade reading passage was administered (Marston & Magnusson, 1985).

Program Evaluation

Stake's (1967) model of educational evaluation was used to assess the effectiveness of the homework consultation intervention for the nine mildly handicapped students. The degree of congruence between intended and observed antecedents, transactions, and outcomes is evaluated with this model. Stake defined antecedents as "any condition existing prior to teaching and learning, which may relate to outcomes" (p. 528). Intended antecedents for the homework intervention were defined as what was expected to be occurring regarding homework practices for parents, teachers, and students prior to the intervention. The intended antecedents are listed in Table 1.

In Stake's model, transactions are the means by which outcomes are achieved. A basic set of procedures (i.e., transactions) was developed for all consultants. The intended transactions are shown in Table 2.

Intended outcomes are listed in Table 3. As a result of the project, it was expected that the student would acquire more independent study skills, a more positive attitude toward school work, and improved completion of in-class and homework assignments. The parents were expected to acquire or improve skills in structuring and monitoring homework, providing appropriate feedback about work completion, and facilitating positive attitudes toward school. It was anticipated that the intervention would promote more effective parent-teacher relationships through cooperative planning and frequent communication. In addition, intended

Table 1

Intended Antecedents for Homework Intervention

Teachers

- Teachers do not consistently expect students to complete in-class assignments at home if they are not completed within the allocated time in school.
- Teachers rarely give homework designed to provide extra practice of skills being taught in school. When they do, the assignment is the same for all students, rather than assigned according to individual students' skill levels.
- Corrective feedback on homework assignments from the teacher is inconsistent.
- Few motivational strategies are used by teachers to encourage consistent task completion by students.
- Teachers use curriculum-guided assignments that do not always match mildly handicapped students' skill levels.
- For mildly handicapped students in regular classes, expectations for work completion are not the same as for non-handicapped students.
- Teachers believe that support for academics and help with organization skills by parents can improve the academic achievement or students.

Parents

- Generally, parents are not aware of how their child is performing at school regarding completion of daily, in-class assignments or assigned homework.
- When problems with task completion come to their attention, parents feel it is their responsibility to insure that the child's work gets done.
- Parents of mildly handicapped students are not generally clear or consistent in their attempts to motivate or assist their child in developing good study habits and positive attitudes toward school work.

Students

- Handicapped students in this project are experiencing difficulty completing assigned academic tasks in school and with assigned homework.
- Inadequate organization skills constrain the academic performance of mildly handicapped students.
- Mildly handicapped students are motivated to avoid academic tasks, and they experience chronic failure with assignments.
- There is conflict between the parents and mildly handicapped students concerning the child's school performance.

Table 2

Intended Transactions for Homework Intervention

Consultation with Teacher

- The goal of the meeting with the teacher is to establish rapport through listening to the teacher's concerns regarding the student's work habits. The nature of the project, goals of the intervention, and expectations of the teacher, parent, and child will be discussed. The teacher's willingness to participate in all aspects of the project will be determined during this meeting. The semi-structured interview should be completed during this meeting.

- Homework tasks are to be integrated with ongoing regular classroom assignments for skill building and to promote the child's sense of mastery. As such, the nature of tasks should be assigned so that the child has the requisite skills to complete the assignments independently with 70-100% accuracy.

- The teachers will regularly assign, check, and provide feedback to students about their homework. They will also provide general feedback to parents concerning the child's performance on homework tasks on a weekly basis through written communication.

- Homework will be given two times a week and involve 20-30 minutes each session. The target of the intervention will be the child's parent(s) and will involve assisting parents to plan a consistent study time and to help the child with organizing and arranging materials. Parents also will monitor and facilitate independent homework completion and will provide positive support and feedback to the child.

- Teachers will inform parents of which nights they can expect homework to be assigned.

- Homework can be from any academic content area.

Consultation with Parents

- The goal of the meeting with parents is to establish rapport through listening and discussing parental concerns regarding homework and the child's performance at school. At this meeting, the nature of the project will be explained, as well as why the child was selected, goals of the intervention, and expectations of parent(s), child, and teacher. If there is time during this initial meeting, the semi-structured interview will be conducted. Otherwise, a second meeting can be arranged. It is important in these meetings to present the intervention more as a privilege than as a problem-oriented activity.

- Each consultant will be assigned one family and will meet with the parent(s) once a week for the first six weeks of the project and every two weeks for the next six weeks. Each session will generally last about one hour.

Table 2 (continued)

- Consultants will train parents in procedures for structuring, organizing, and monitoring homework completion and facilitating positive student attitude toward school work.

- Consultants will assess the skill level of parent(s) in relevant areas (structuring study time and place, providing needed materials and modeling of organization skills, providing feedback and positive reinforcement, and other relevant areas). Consultants will gather information related to parents' concerns and perceived needs.

- The role of the consultant will be partially determined by family needs and skills in supporting academic activities and facilitating the child's positive attitude toward school.

- The role of the consultant is educational and facilitative, not therapeutic.

- The target of the intervention is the parent, with the child present as needed during consultation.

- Consultants will tailor the intervention to the needs and skill level of each family. It is important for consultants to be aware of the values within the family system and use appropriate language that conveys this attitude (avoid use of jargon and making assumptions about parents' skill level or understanding).

- Parents will not be expected to develop teaching skills (such as reteaching a task if the child does not understand or assuring accuracy of assignments). Parents will be facilitators of homework completion and positive student attitude toward school work. Consultants will avoid generating family conflict.

- In addition to the two nights a week of homework, one 20-30 minute session each week will be devoted to reading for pleasure (either parent listens to child read orally or parent reads to the child from a book of their choice). The extracurricular reading is designed to promote positive parent-child interactions and pleasurable experiences with reading.

- For most parent-teacher contacts, a notebook will be used for communication and feedback between home and school.

Table 3

Intended Outcomes for Homework Intervention

Students
• The student will acquire more independent study skills and positive attitude toward school work through parental monitoring, structuring, and support of academic task completion. Students will show improved task completion of both in-class and homework assignments.
Parents
• Parents will acquire skills in structuring, monitoring, and providing appropriate feedback to their children regarding homework completion, and in facilitating their positive attitudes toward school.
Teachers/Parents
• The intervention will promote more effective parent-teacher relationships through cooperative planning and follow through with assigned homework tasks.

student outcomes included increases in academic responding, engaged times, and achievement.

Observed antecedents are the current practices with homework for the individual students. This information was recorded by consultants after the individual interviews with parents, teachers, and child. Observed transactions are a summary of the many encounters with parents, teacher or student. After each consultation with parents, consultants documented what transpired during the meeting. The plan for the week was recorded, and a copy of the agreed upon plan was given to the family after each meeting.

Data Analysis

Four composite student responding variables were formed from 19 coded student response variables for descriptive purposes and for analysis:

> Active Academic Responses: writing, playing academic game, reading silently, reading aloud, talking appropriately, asking academic questions, answering academic question.
>
> Academic Engaged Time: passive attending, writing, playing academic game, reading silently, reading aloud, talking appropriately, asking academic question, answering academic question.
>
> Management responses: raising hand, looking for materials, moving to new learning station, playing appropriately, waiting.
>
> Inappropriate Responses: disruption, playing inappropriately, inappropriate task, talking nonappropriately, inappropriate locale, looking around.

In addition to these student responding composites, changes in academic achievement were determined by comparison of pre- and post- intervention raw scores on the BASIS in reading, spelling and math. Raw scores on the BASIS were converted to percentile ranks by grade and to standard scores with a mean of 100 and a standard deviation of 15. On the informal reading achievement measure, the total number of words read correctly was determined. Task completion rate (number attempted out of number assigned) and success rate (number correct out of number

attempted) on classroom assignments also were computed for each student by separate content areas.

Results

Five types of data were collected to assess the effectiveness of home-based consultation in increasing student academic responding: (a) pre- and post-measures of achievement (curriculum-based and standardized BASIS), (b) measures of student responding before, during, and after intervention, (c) measures of task completion and success before, during, and after intervention, (d) antecedents, transactions, and outcomes descriptions, and (e) consumer reactions. The first three types of data were quantitative while the second two were considered to be qualitative in nature.

Antecedents and outcomes data were examined within the framework of Stake's (1967) model of educational evaluation, with emphasis on examining the congruency between intended and observed antecedents, between intended and observed transactions, and between intended and observed outcomes. Consumer reaction data also were gleaned from consultants' records to comprise a second form of qualitative data. These data were obtained from personal conversations with participants in the consultations and interventions. Other social validity data were collected formally at the end of the year in conjunction with other intervention studies; these data are reported separately (see Thurlow, Christenson, Ysseldyke, Muyskens, & Weiss, 1989).

To provide an accurate picture of the homework consultation intervention and its interaction with idiosyncratic child, teacher, school, and parent variables, the individual cases are presented at the end of this section. The names of individuals in the case studies have been changed to protect their anonymity. The results presented here are a summary of findings pulled from the nine cases.

Achievement

Curriculum-based achievement data, recorded in terms of number correct on a standard reading passage, a set of calculation problems, and a dictated spelling list, were collected before and after the intervention. For reading raw scores, six cases increased their scores (average increase was 23.2 words), two cases stayed the same (within 5 words), and one case decreased (by 7 words). In math, six cases increased in number of correct calculations (average increase was 21.5 calculations), two stayed the same (within 5 calculations), and one decreased (by 14 calculations). For number of correct letter sequences in spelling dictation, two cases increased their scores (average increase was 26.5 letter sequences), six cases stayed the same (within 5 letter sequences), and one case decreased (by 22 letter sequences). These changes compare to similar changes for a group of students tested with these same measures at the same times that did not receive any intervention For reading raw scores, 6 cases increased their score (average increase was 32.2 words), 1 case stayed the same (within 5 calculations), and 1 case decreased (by 6 calculations). In math, 6 cases increased in number of calculations (average increase was 21.6 calculations), 1 case stayed the same (within 5 calculations) and 1 case decreased (by 8 calculations). For number of correct letter sequences in spelling dictation, four cases increased their scores (average increase was 38.2 letter sequences), three cases stayed the same (within 5 letter sequences), and 1 case decreased (by 14 letter sequences).

Norm-referenced data from the BASIS revealed more conservative trends from pre to post in both percentile ranks and standard scores. For reading standard scores, three cases showed increases (average increase was 8.7), three cases showed decreases (average decrease was 34.0), and two cases stayed about the same (within 5 points). In math, three cases showed increases (average increase was 22.3), four showed decreases (average decrease was 9.2), and one case stayed about the same

(within 5 points). In spelling, no cases showed increases, one case showed a decrease (by 7 points), and the rest stayed about the same (within 5 points).

Two of the cases showed strong, positive trends in achievement data in reading and math on both curriculum-based measures and the BASIS. One case was a fourth grade boy (Daniel, Case #4) and one was a sixth grade boy (Brent, Case #7). In both cases, it was reported that significant changes were observed in the skills of the home contact in monitoring homework. This, however, was noted for other cases as well. In both cases, it was reported that significant problems in cooperation between home and school existed.

Analyses of variance for achievement data for intervention subjects and a group of control subjects failed to show significant differences in achievement from pre to post on either curriculum-based or standardized measures. A within-subject analysis of performance on the curriculum-based reading measure did reveal a significant finding from pre to post, $F(1, 15) = 22.59$, $p = .000$.

Task Completion and Success

The notion that task completion rates and success rates could be expected to improve as the homework intervention proceeded was difficult to test given the minimal amounts of data collected. In general, the lack of data was related to the nature of instruction observed. Collection of completion and success rate data was possible only when permanent products were available during the time that an observation was conducted. Analysis of trends was further impeded by the finding that rates generally were quite high. No attempt is made here to summarize the minimal task completion and success rate data.

Student Responding

Student responding data were collected before, during, and after intervention. Trends in the percentages of student responding times indicate little consistency. Only one case (Brent, Case #7) showed an increasing trend in active academic

responding time (ART); one case (Kyle, case #3) showed a decreasing trend in active academic responding time; all other cases showed either variable trends (up then down or down then up) or no change. For academic engaged time (AET), two cases showed increases, two cases showed decreases, and the other cases were variable in trends. Management (M) responses showed either decreasing trends (for three cases) or variable trends (for five cases); an increase was observed for one case. Inappropriate responding (I) similarly was most often variable in trend (for five cases). It decreased in one case and increased in three.

Analyses of variance involving intervention and control groups failed to show significant differences in ART, AET, M, or I.

Antecedents, Transactions, and Outcomes Descriptions

Intended antecedents, transactions, and outcomes were presented in Tables 1-3. Observed antecedents, transactions, and outcomes are presented in detail in each of the case studies at the end of this section. In accord with Stake's evaluation model, an attempt was made to examine the congruence between the intended and observed antecedents, transactions, and outcomes.

Antecedents. Consultants reported a fair degree of variability between intended and observed antecedents for teacher practices related to the problem of task completion and the use of homework assignments for skill building or for the development of study habits in students. While teachers rarely assigned homework specifically designed to provide extra practice for skills being taught in the classroom, the majority reported their expectation that students complete classroom assignments at home if not completed within the allocated time in school. While some teachers reported grading and providing corrective feedback to students on assignments completed at home, most did not do so consistently. Their attempts to use motivational strategies to facilitate task completion in students were generally unsuccessful, and typically these were negative consequences for failure to complete

assignments, such as isolation of the student in a study carrel or withdrawal of privileges. Several of the teachers held different expectations for the handicapped students, such as adjusting the assignment for length, or accepting lower performance quality, than they held for nonhandicapped students. Otherwise, teachers did not report adapting curricular assignments according to the skill levels of the handicapped students. All of the teachers felt that parental monitoring and support of academic progress would facilitate student performance, especially in the area of developing organizational skills and more effective and consistent study habits.

Congruence between intended and observed antecedents with respect to parent practices in monitoring and promoting their child's academic progress also was variable across the nine case studies. While some parents had developed workable strategies to motivate their children to be successful in school, in most cases these strategies were not applied consistently, primarily due to inadequate knowledge of the teacher's daily expectations for the child's productivity and the child's day to day performance on assigned tasks. Many of the parents reported that the child's school performance had become a focal point of conflict within the family.

Virtually all of the students in the project were experiencing difficulty completing assigned academic tasks in school and with assigned homework. All had significant problems with organizing time and materials; none had developed consistency or independence in study habits. While most of the students had experienced various degrees of chronic failure with academic assignments, consultants did not report observable task avoidance.

Transactions. As indicated in the intended transactions outlined in Table 2, parents and teachers of students had agreed to specific responsibilities concerning homework assignments. These included such things as structuring and monitoring

homework on specified days, provision of systematic feedback and motivational contingencies to students, and consistent communication between the parent and teacher regarding students' weekly performance on assigned academic tasks.

With regard to the fidelity of teacher compliance with intended transactions, in most cases, congruence between intended and observed transactions was high during the early weeks of the intervention. In the majority of cases, by the third week of the study, assignments were not being provided as planned, work that was assigned was not being corrected and returned to the student in a consistent way, and teacher communication with the parent and the student became less frequent, or was focused on persistent problems or failures of the student, rather than in ways that preserved student and parental motivation to continue systematic effort for the child's academic progress. In several of the cases, the focus of parent-teacher contact became peripheral to the tasks of the homework intervention, focusing on other issues, such as the legitimacy of the child's IEP or issues related to behavior or social problems displayed by the child in the school setting.

In half of the cases, congruence was low between intended and observed transactions occurring in the home. Parents did not consistently monitor or provide structure for completion of tasks at home, and had difficulty making contact with the child's teacher concerning the consistency or nature of homework assignments coming home. In several of the cases, parents began to use the contact with the consultant to elaborate peripheral concerns related to child development or family issues, and consultants had difficulty maintaining parental focus on the specific intents and activities of the homework intervention.

Outcomes. Intended qualitative outcomes of the intervention are presented in Table 3. In most cases, a fair degree of congruence was noted between intended and observed outcomes of the intervention. In the majority of cases, students in the study reportedly improved in their ability to organize time and materials for task

completion and in their attitude toward the demands of task completion. Although consultants reported that parents gained some skill in facilitating the academic progress of their children, the degree to which these skills were applied varied notably across families. Parents reportedly became more focused and assertive in approaching school staff to address their concerns about their child's educational program and progress.

Students' responses to both the pre- and post- intervention self-report attitude survey were available from five of the nine students in the study. Four of the students were not accessible for the post-intervention interview. Based on a comparison of the responses of the five students on the student interview, very little change in student attitude was observed, with the exception of one student, whose responses indicated a significant drop in positive attitudes and an increase in negative attitudes toward school work from the beginning to the end of the study.

With respect to the degree to which the homework intervention increased classroom academic responding and achievement gains, analysis of variance between treatment and control groups failed to show significant differences in active academic responding rates, academic engaged time, task management, inappropriate behavior, or achievement gains on standardized or curriculum-based measures. As noted previously, the single significant result was observed through pre-post within-subject analysis of performance on the curriculum-based measure in reading.

Case #1: Bill

Bill, a fourth-grader, receives learning disability resource room services. He lives at home with his parents and only sibling, a brother who attends junior high school. They are one of few black families in a predominantly white, middle class suburb. The father is a war veteran currently employed full time while also working on his college degree. The mother works part time outside the home and has completed high school. Both parents were raised in inner-city environments.

The parents expressed concern that Bill's lack of exposure to other blacks makes it difficult for him to relate to members of his race outside the family. They would like him to more fully experience their black cultural heritage. The need to address this issue became apparent to the parents as the family was driving through a predominantly black section of the city and Bill became quite fearful of those on the street.

According to the parents, Bill did not interact with strangers during the early primary school years, but he has gradually adjusted to school, and now enjoys it very much. The parents no longer view Bill as socially delayed. They described their son as an individual who needs a high degree of structure, is unmotivated to start assignments, becomes easily bored, and is easily distractible but not disruptive. They described how he uses his good sense of humor to manipulate others. They frequently read at home, and believe Bill enjoys reading. Bill's other interest is computing; he has a computer at home and participates in a computer club.

Observed Antecedents

Teacher. Bill's classroom teacher, Mrs. Thompson, verified that Bill is cooperative and enjoys school. While he is not a behavior problem, she indicated that Bill has poor organizational skills and difficulty completing classroom assignments. All incomplete classroom assignments are expected to be completed at home and returned the next day. She explained that Bill often forgets to take incomplete assignments home. When he did take them home, he completed about 40% of them, with approximately 75% accuracy. Mrs. Thompson also stated that Bill has difficulty following directions, yet he seldom requests assistance.

Mrs. Thompson believes Bill is aware that peers work faster than he does. Bill is well liked in class, and his classmates frequently help him with class work. Despite bowel problems that occasionally result in classroom odor, his peers accept him and do not ridicule him. However, Mrs. Thompson expressed much concern about Bill possibly losing peer support when he enters junior high school. She believes that Bill needs to learn how to express his feelings and improve his self-concept.

Student. During the interview, Bill noted that he usually forgets to bring home his incomplete assignments. He indicated that much of his school work is hard to understand and that he is afraid to seek help in the classroom. He did contend that he is pretty good at school work and that he works hard. He enjoys school and gets along well with his teachers.

Parents. When contacted to arrange for an initial interview, the student's father indicated that Bill had received only one homework assignment since school had begun two months ago. This was disturbing to the father because he remembered teachers regularly assigning homework when he was a child. When

informed that the teacher had reported assigning incomplete classwork as homework, the father questioned the appropriateness of contacting the teacher before contacting the parents. He also indicated that Bill had received Chapter 1 services for several years. He spoke at length of his own childhood in the inner-city, his war experiences, and his work demands.

Coordination planning meeting. The parents and Bill's teacher agreed that 25 minutes of homework would be given two specific evenings per week. Bill was to work at the kitchen table after dinner. The parents were to read to or with Bill for about one half hour per week. They agreed that a notebook would be a convenient means of communication about homework assignments and related matters; this notebook was provided at the meeting. During this meeting, the father was asked to sign a consent form for psychoeducational assessment. It took some encouragement from Mrs. Thompson to obtain consent. The parents stated that previous assessments had not been productive; their son always has remained in the Chapter 1 program.

Observed Transactions

Consultation occurred by phone throughout the intervention since weekly meetings in the family home were not practical due to the family's busy schedule. Homework was assigned for almost all scheduled homework days. However, the parents did not read with/to Bill because "He's 10 years old and doesn't need us there. We'll help him with a word when he needs help." Bill regularly read school library books at home.

In the early weeks of the intervention, Bill was assessed by the school psychologist and placed in a social skills group at school. The parents questioned the value of the assessment, maintaining that Bill did not belong in the social skills group. The mother indicated she and her husband were both frustrated and confused by this intervention. They wanted the school to focus on basic academic skills. They did not view their son as socially discrepant from his peers. When Bill complained to his parents that he did not enjoy participating in the group, they told him that he could decide whether to attend the group. He informed them that he would no longer attend. However, the next day at group time, Mrs. Thompson reminded him to attend group. He did so, but later that day he complained to his parents. The parents requested a meeting to discuss their concerns with school personnel.

At this meeting (attended by Mrs. Thompson, the school psychologist, and Bill's mother), the mother explained that Bill had no need for the group and that she was concerned that school personnel were trying to change her son's personality. She also commented on Mrs. Thompson sending Bill to group after he had decided not to attend. Mrs. Thompson explained that she had not been informed of the parents' arrangement to let Bill make this decision. School personnel explained that they were not attempting to change Bill's personality, but rather were trying to help him be more comfortable in social situations.

After the meeting, the mother commented, "They're more bewildered than me. They concentrate on social, but we're more concerned about the academics than his interactions." She continued to believe that Bill did not have social problems. But she noted that her son is "treated as a second class student because he is black."

At one point during the intervention, the mother expressed concern that Bill was not receiving enough homework in math. At the suggestion that she convey her

wishes directly to the teacher with the notebook, she did so, and Bill was assigned more math homework.

Observed Outcomes

Interview data. At the end of the intervention, the parents indicated that Bill is now given the "right amount" of homework, and he does it on his own initiative. They stated that he only forgot his homework on two occasions. In contrast, Bill stated that he almost never remembers to start his homework and that he does not have a set time and place to do his homework. He did say that he is much less likely to forget homework.

According to Bill's mother, Bill also improved in reading. He developed the habit of checking out many school library books and reading them at home, and he also joined a book club at school. Bill also indicated that he enjoys reading more than he had previously. The teacher stated that Bill had improved his decoding skills, but that comprehension remained a problem.

According to Mrs. Thompson, Bill is now more likely to share his feelings with others. Bill reported that he now enjoys school even more than he had previously, and that he is now more likely to seek teacher assistance when he is confused. However, he also stated that he is now doing less well at school work. Mrs. Thompson stated that Bill more readily complies with taking home incomplete in-class assignments to finish at home on non-homework days.

Overall, it appeared that the parents became actively involved in the school (e.g., attended meetings, communicated with teacher and school psychologist). They became advocates for Bill within the school environment.

Student data. Bill's responses to instruction before, during, and after the intervention appear in Table 4. Data are provided for actual minutes and percentages of time spent in active academic responding (ART), academic engaged time (AET), management (M), and inappropriate behavior (I). Bill's active academic and engaged time increased and management and inappropriate responses decreased from pre- to post- intervention. However, data obtained during the intervention did not support this trend.

Available task completion and task success data were minimal. Trends cannot be determined from these data.

Achievement data suggest that Bill's reading decoding skills improved. The lack of consistency in reading performance between the curriculum-based and the standardized measures may be due to the fact that the BASIS includes comprehension, an area of difficulty for Bill. The data on Bill's math performance reveal little growth and justification for parental desire for more math homework. His spelling performance improved, perhaps reflecting much homework assigned in this area throughout the intervention.

Factors Influencing Outcomes

Facilitators. Open communication that fostered an atmosphere of trust was critical for the intervention with this family. The consultant listened to complaints,

Table 4

Student Responding, Task Completion and Success, and Achievement Data for Bill (Case #1)

	Before Intervention		During Intervention		After Intervention	
Student Responding[a]	Mins.	%	Mins.	%	Mins.	%
ART	68.0	38	45.5	21	75.2	48
AET	130.2	72	135.5	62	140.7	89
M	25.3	14	51.7	24	6.7	4
I	24.8	14	30.3	14	9.8	6
Task Performance[b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling	100	18.8	--	--	100	84.6
Language	0	0.0	--	--	--	--
Reading	--	--	--	--	--	--
Math	--	--	--	--	--	--
Social Skills	--	--	100	31.3	--	--
Science	100	80.0	--	--	--	--
Computer	--	--	--	--	--	--
Achievement						
Curriculum-Based[c]						
Reading	72				106	
Math	18				24	
Spelling	40				62	
BASIS[d]	PR	SS			PR	SS
Reading	49	100			35	94
Math	19	87			7	78
Spelling	15	84			14	84

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

issues, and feelings, with an understanding of the frustration with their son's lack of academic achievement.

Periodic visits to the school to discuss the intervention with Mrs. Thompson provided the consultant with the teacher's perspective. They also provided the consultant with the opportunity to address her concerns, and to stress the importance of the project. Mrs. Thompson's genuine concern for Bill helped her to communicate with parents who have long felt frustrated by the educational system.

Inhibitors. Parental concern that school personnel were unduly focused on social rather than academic development resulted in some parent resentment toward school. Likewise, school personnel expressed their frustration, which impaired the flow of communication between home and school.

Case #2: Lisa

Lisa is a third grade student who has received level 3 services for learning disabilities for two years. She receives specialized help in math (30-40 minutes per week), reading (30 minutes per week) and speech.

Lisa has a twin sister who attends the same school and is in a different third grade classroom. Both children reside with their natural parents. There are no other children in this intact family. Lisa's sister has no history of special education services. The mother attributes Lisa's learning disabilities to birth trauma from delivery.

Observed Antecedents

Teacher. Lisa's classroom teacher, Mrs. Miller, expressed concern about Lisa's progress, even though she was working hard. She stated that Lisa rarely raises her hand in class. She also acknowledged that in being taken out of the classroom for daily support services, Lisa was barely able to keep up with the regular class assignments, even with taking home incompleted work. Mrs. Miller did not think that Lisa needed to be given homework. Lisa initiated taking home incomplete assignments, but the teacher rarely checked Lisa's completed work or offered her feedback on it.

Student. Lisa reported that she enjoyed school. She reads on her own for enjoyment and enjoys writing stories. Lisa occasionally has reported to her mother that she is upset with not having enough time to complete assignments given to other students when she is out of the classroom receiving special services.

Lisa reported that she finds her school assignments interesting and does not find going to school a waste of time. She enjoys it when the teacher calls on her in class. Frequently, homework is completed after supper at the kitchen table. When assignments are brought home, Lisa reported spending approximately 10 minutes on the assigned work. Lisa expressed her belief that the intervention would improve her skills.

Parents. Lisa's parents had met with the school staff regarding her progress on a number of occasions prior to this intervention. However, there remained a number of questions regarding the effectiveness of the present IEP. Lisa's mother stated that she suspects that Lisa's reading skills have improved enough that special assistance with reading, which requires time out of the mainstream classroom, is no longer necessary and is instead further delaying gains. It was noted that when homework was brought home, Lisa did not seem to hesitate to ask her mother for help if necessary.

Coordination planning meeting. At the beginning of December, the teacher and consultant met at school to identify the procedures of the intervention. It was decided homework would be sent home beginning in early January. Lisa's mother indicated that the homework intervention would not improve Lisa's study skills because her self-initiated skills required no improvement.

Observed Transactions

Weekly consultation occurred over a six-week period with Lisa's mother, who served as the contact for the intervention. Lisa's mother indicated that there were none of the expected practice problems for math in the initial homework folder. The assigned homework included language, sentence construction, and word use; one assignment seemed beyond Lisa's skill level. The parent was encouraged to contact the teacher directly regarding any questions about homework assignments.

The teacher expressed her view that the parent was overly concerned with the LD classification and did not have sufficient insight into Lisa's special needs. The teacher also indicated that she did not believe Lisa could perform adequately without continuing all of the special services.

Lisa's IEP was reviewed by school staff and parents. Lisa's mother requested that Lisa be placed back into the regular classroom for reading. The school staff agreed and special services for reading were discontinued. The parent expected the teacher to prioritize the homework sent home, with work not completed in class given a priority before sending home practice assignments. The teacher commented to the parent that Lisa was now spending more time than before the intervention socializing with other students in the classroom without completing assigned work; she seemed to be waiting for the homework days to complete work.

Lisa was asked by her mother to make more of an attempt to complete assigned work in class. Mrs. Miller reported that Lisa was feeling better about math; the teacher attributed this gain to the extra flash card practice with the parent. Gradually the homework sent home was perceived by the parent to be more on track with expectations.

However, the parent continued to express dissatisfaction with the results of the review of Lisa's IEP. The parent feared the teacher would allow Lisa to fail in the new reading group she attended with other students in the classroom. She was still not aware of what it would take to end LD services for her child, which she wanted to see happen by the following fall. The mother had thought about and discussed with her husband the possibility of obtaining an independent outside assessment of Lisa's skill level. The parent often asked the consultant to offer an opinion regarding assessment of Lisa's skills; this was not done.

The parent was encouraged to meet with the teacher and other staff about what exit criteria would have to be met before Lisa could return full time to the classroom. In a later meeting, the teacher expressed concern about the lack of current assessment information on Lisa's academic performance, and even more generally about the manner in which the IEP was written. The teacher noted that a new diagnostic teacher for LD assessment had been assigned to evaluate and update the IEP.

The parent reported that she had been in contact with the new diagnostic teacher. She believed there would be considerable cooperation from this teacher in getting some of the answers she wanted regarding declassification criteria. It was at this point the intervention project ended.

Observed Outcomes

Interview data. Lisa did improve in math skills and did maintain her placement in the regular education classroom reading group. She also became more independent in taking work home, rather than completing assigned work in school, which was viewed as a negative outcome by the parent in the post-study interview. Some of the conflict over the parents' perception that the IEP was no longer effective seemed to be in the process of resolution with the school's update of assessment information.

Student data. Lisa's responses to instruction before, during, and after intervention appear in Table 5. Data are provided for actual minutes and percentages of time spent in academic responding time (ART), academic engaged time (AET), management (M), and inappropriate (I) responses. Most types of responses remained about the same across the duration of the study. Academic engaged time was highest during the middle of the intervention; management and inappropriate behavior responses were highest at the end of the intervention.

Task completion and success rates were calculated for each content area when applicable. Rates generally were quite high, with completion rates higher than success rates (see Table 5).

Achievement data revealed limited benefits of the intervention for the student's skills. It did appear that Lisa gained in math skills and possibly with the additional support of the homework, was able to maintain her placement in the regular classroom reading group. In general, however, there is not evidence of strong academic gains across pre-post curriculum-based or BASIS measures.

Factors Influencing Outcomes

Facilitators. Lisa appeared to have many study and self-help skills prior to the start of the intervention. She did not display some of the characteristics that typically interfere with learning among LD students, such as learned helplessness or significant lack of self esteem regarding school performance.

The actions of Lisa's mother in advocating for her child's best interests were an important factor in facilitating the academic gains of the student and in obtaining results that produced changes in the student's IEP. These changes, however, did not seem to result directly from the homework intervention. During the post-intervention interview, the parent stated it was her belief that the student's performance had taken a turn for the worse since the implementation of the intervention. Prior to the intervention, Lisa completed work in school or homework on her own initiative, and did not require her mother's involvement. She now wastes her time in school, socializes with other students, and waits to take the work home. Lisa continues to initiate the completion of the assigned work. Her mother further stated that Lisa is prone to lose materials and believes Lisa learned (during the study) that she gets attention for being off task. According to the parent's report, the teacher did not provide Lisa with feedback on completed homework or consequences for incomplete work. Lisa, according to the parent's report, continues to enjoy school. Lisa's mother stated that she believes the school district has worked hard to stress self esteem in the schools, but it's gone to an extreme. "If the kids feel so good about themselves, why work?"

Table 5

Student Responding, Task Completion and Success, and Achievement Data for Lisa (Case #2)

	Before Intervention		During Intervention		After Intervention	
Student Responding[a]	Mins.	%	Mins.	%	Mins.	%
ART	59.7	32	70.8	32	66.0	32
AET	156.8	83	195.8	88	149.0	72
M	22.0	12	15.2	7	29.5	14
I	6.8	4	8.3	4	28.5	14
Task Performance[b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling	100	75	100	100	--	--
Reading	100	75	100	100	--	--
Math	100	100	100	100	91	83
Social Studies	--	--	--	--	100	77
Reading Resource	100	75	--	--	--	--
Math Resource	--	--	100	100	--	--
Achievement						
Curriculum-Based[c]						
Reading	85				89	
Math	11				17	
Spelling	71				76	
BASIS[d]	PR	SS			PR	SS
Reading	69	107			66	106
Math	50	100			30	92
Spelling	50	100			38	95

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

Inhibitors. Several intervening factors may have limited the success of the homework intervention for Lisa. The parents seemed to be interested in the project primarily as an independent assessment of the school's delivery of LD services to Lisa. In addition, the teacher's view of Lisa as a low and slow achiever seemed to be a real barrier.

It also was apparent that the teacher did not believe that homework would be beneficial for a third grade student who was struggling with assigned work. Even though the teacher, Lisa, and the parent all recognized that it was impossible for Lisa to maintain the pace and completion rate of other students because of the excessive amount of time she was served out of the classroom, little was done by the teacher to advocate for a change in this situation.

Case #3: Kyle

Kyle, a 10-year-old fifth grader, has received services from the emotional/behavioral disabilities program since first grade and from the learning disability and adaptive physical education programs since third grade. He currently receives learning disability services for language and is integrated almost full time in mainstream classes. Kyle is in the low reading and math groups.

Kyle has lived with his father, stepmother, and an older stepsister since the age of six. He has occasional contact with his biological mother. Kyle's stepmother was the primary contact during the study.

Observed Antecedents

Parents. Both parents were aware of Kyle's difficulties in completing homework assignments. However, no consistent program had been developed to address the issue. With the exception of formal school conferences, the family and school personnel have had few contacts.

During the initial parent interview, Kyle's stepmother reflected on Kyle's rebellious, sassy behavior, and his tendency to lie when asked whether homework assignments had been given. She described Kyle as manipulative and extremely hesitant about sharing feelings. Frequently, Kyle bottles up his feelings, later overreacting with intense anger to minor incidents. She also described differing discipline styles, with herself being the relatively strict enforcer of rules; she believes Kyle's father finds it very difficult to discipline him. Despite a positive father-son relationship, conflict arises when the father assumes some responsibility for encouraging Kyle to complete assigned work.

Teacher. At the interview with Mrs. Keaton, Kyle's teacher, which followed the parent meeting, Mrs. Keaton identified Kyle's homework completion difficulties as primarily motivational in origin. She has been unable to identify any consistent, strong reinforcers to improve Kyle's task completion. Praise only results in inappropriate comments or strange body contortions, behaviors that the teacher believes are best ignored. Mrs. Keaton indicated that Kyle requires clear, consistent expectations. He is expected to complete the same amount of work as his peers, but at a slightly lower level of quality.

Student. Kyle was interviewed during class. He was quite angry that day because he had been pulled out of gym class due to task incompletion issues. Overall, he exhibited a negative school attitude, strongly validating such items as "going to school is a waste of time" and "I would leave school tomorrow if I could." However, he also acknowledged that reading could be interesting and that he was liked by his teacher. He admitted that he sometimes lies about not having homework, but is under the impression that his parents take him at his word.

Coordination planning meeting. Two meetings were held, one with Kyle and Mrs. Keaton, and the other with Kyle's stepmother, due to teacher and parent scheduling constraints. At each meeting, the problem was identified and a plan established.

The identified problem was that Kyle did not write down assignments and take the appropriate materials home. He lied to his parents when homework was assigned,

making it difficult for them to follow through. The procedures agreed upon to attempt to improve Kyle's task completion included sending a notebook of assignments between home and school, having Kyle make sure his assignments were recorded each day (by himself or the teacher), having the appropriate subject area teacher initial the assignment to verify that it was recorded accurately and completely (to avoid the issue that Kyle may be lying), and having the parents check the homework each night and write appropriate comments to the teacher (including times when Kyle legitimately did not have time to do his work, or specific difficulties Kyle had with the assignments). A space was provided for teachers to write comments about Kyle's progress. It was also agreed that completed homework would be corrected by the teachers, and indicated by teacher signature. Kyle was to complete his work at the kitchen table. Extra computer time was selected by Kyle as a reward for completing acceptable work three out of five days. Homework was to consist of unfinished school work as a first priority. If all work was completed in school, Kyle was expected to study spelling words and/or read a library book at home for a minimum of 30 minutes.

Observed Transactions

Twelve home-based consultation sessions were held with Kyle and one or both parents. After the first week, the mother reported that Kyle consistently was bringing the notebook home and that teachers were recording homework assignments. Kyle was allowed to complete his work in his room where he had access to a television set. According to the stepmother, the kitchen table was not always a convenient place to complete homework. When it became evident that a method was needed to ensure that Kyle was actually studying his spelling words when he did not have other homework, a decision was made to encourage Kyle to write down the words as an extra study aid. The mother volunteered to reward a grade of C or better on spelling tests with baseball cards.

During the following weeks Kyle was writing down his spelling words, his mother was drilling him on spelling words, and Kyle was fairly consistent in bringing the notebook home. However, assignments were not always recorded, Kyle's stepmother had not yet purchased the baseball cards to reinforce acceptable performance on spelling tests, and Kyle had not achieved criteron to earn computer time.

Contact with Mrs. Keaton at this point indicated that she was not finding time to write down the assignments. It was agreed that Kyle would assume responsibility for recording his own assignments so that teachers would only need to check the notebook quickly to verify assignments. Near the end of January, need for revising the intervention was indicated by changes in Kyle's behavior (attributed by his stepmother to a recent emotional visit Kyle had with his biological mother). Kyle's teachers were most concerned with his refusal to have the notebook signed, which was the only way to verify that assignments were written down and completed. Mrs. Keaton believed this behavior was Kyle's method of saying, "If I don't comply, I won't have to do this anymore." She was hesitant about making changes at this time. A meeting was held with Mrs. Keaton and Kyle to again stress that Kyle was capable of completing the work, that homework was an important issue, and that we would follow through with the plan.

At the next consultation with Kyle's stepmother, the need for consistency and firm expectations regarding homework completion were discussed (his teachers had

indicated frustration that stronger measures were not used in the home to ensure homework completion). Kyle's stepmother indicated that outdoor activities were a strong reinforcer for Kyle. It was suggested that Kyle be allowed to play outside immediately after school on days he used the homework notebook appropriately; homework would be completed after supper. Otherwise, homework would have to be done immediately after school.

When Kyle was grounded for nonacademic reasons, it was decided that rewards and consequences for homework completion and other behaviors would be dealt with separately. If Kyle had his assignments written down and notebook signed, he would earn outside time regardless of other behaviors. Some improvement was observed with respect to writing down assignments and completing homework. However, there was some question about the consistency with which the reinforcement plan was carried out in the home. At this point (March), Kyle still had not received baseball cards for acceptable performance on his spelling tests. Also, his progress was not substantial. An attempt to offer a responsible job as a reinforcer, such as kindergarten helper, attendance monitor, or peer tutor, was declined by Kyle, who stated that he had been a monitor in the past and it was boring.

Kyle's stepmother indicated that she was attempting to find a counselor for Kyle to address his behavioral concerns. When contacted, the school social worker offered to assess the family situation and provide parent education. The social worker wrote to the family twice to request an appointment. No contact had yet been made by the end of the intervention.

Near the end of the intervention, Kyle acknowledged that he enjoyed spending time with his father and that he missed a good friend who had moved to another school system. As a social reward, it was agreed that Kyle could earn time to go out to breakfast with his father on Sundays when his homework was complete for the week. He also would be taken for a visit to his friend's house. By the last session, Kyle had earned breakfast, but the visit had not yet been made.

Observed Outcomes

Interview data. Mrs. Keaton reported fewer lost/misplaced papers as well as a greater number of completed papers at the end of the intervention. She noted that Kyle's study habits were "greatly improved this year." However, the stepmother was less positive in her evaluation of the intervention. She stated that Kyle was inconsistently cooperative. The effectiveness of the program was greatly influenced by Kyle's mood. He continued to exhibit poor organizational skills, waited for parental prodding to complete his work, and balked at writing down his own assignments. However, the mother noted that he appeared somewhat more aware of his responsibility in completing work.

Kyle demonstrated a more positive attitude toward school at the conclusion of the intervention. He described school as less boring, found his assignments more interesting, and validated trying harder at school. At the conclusion of the study, he strongly disagreed with the statement, "I would leave school tomorrow if I could."

Student data. Kyle's responses to instruction before, during, and after intervention are provided in Table 6. Minutes and percentages of time spent in active responding time (ART), academic engaged time (AET), management (M), and

Table 6

Student Responding, Task Completion and Success, and Achievement Data for Kyle (Case #3)

	Before Intervention		During Intervention		After Intervention	
Student Responding[a]	Mins.	%	Mins.	%	Mins.	%
ART	92.8	44	51.3	24	46.8	31
AET	170.3	80	159.8	75	104.3	68
M	18.5	9	20.2	10	9.8	6
I	23.7	11	28.3	13	39.0	25
Task Performance[b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling						
Reading	100	94	100	60	100	75
Math	100	100	100	50	100	100
Social Studies	0	0	100	63	100	88
Reading Resource	--	--	--	--		
Math Resource	--	--	--	--		
Achievement						
Curriculum-Based[c]						
Reading	119				129	
Math	21				17	
Spelling	80				58	
BASIS[d]	PR	SS			PR	SS
Reading	67	107			62	105
Math	41	97			27	91
Spelling	25	90			26	90

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

inappropriate (I) responses are provided. Academic resonding appeared to decrease over time while inappropriate behavior increased.

Kyle's task completion and success rates were high. During intervention, success rates were much lower.

Pre and post achievement results for both BASIS and curriculum-based measures (with the exception of spelling) were essentially the same. The number of letter sequences Kyle correctly spelled in two minutes decreased by 22 calculations from pre to post testing.

Factors Influencing Outcomes

Facilitators. The attitude and cooperation of the homeroom teacher was very positive. She showed genuine concern for Kyle and was willing to accommodate several changes in the homework plan. She also gave good suggestions for structuring the homework intervention. Although Kyle subsequently refused, Mrs. Keaton took the initiative to find Kyle a responsible job in the school in order to foster his sense of self worth.

The parents' concern for Kyle and willingness to participate also were facilitators that accounted for some short-term improvements.

Inhibitors. The parents' contrasting styles of behavioral management resulted in inconsistent reinforcement of Kyle's positive efforts. Furthermore, inconsistencies among Kyle's several teachers acted as inhibitors. Although the teachers consulted with each other, they had a somewhat different approach for assigning and enforcing homework assignments. Furthermore, Kyle made comments to them that decreased their motivation for adhering to the plan. In the long run, Kyle may have been reinforced for failure to comply with the plan.

Probably the major inhibitor to successful outcomes was that Kyle had little reason to comply. His parents volunteered him for the study; he did not volunteer on his own. Moreover, neither Kyle, his parents, nor teachers could identify strong extrinsic or intrinsic reinforcers as a starting point.

Follow through at home was inconsistent because this family was dealing with many other issues, including temper outbursts, visits with the biological mother, and Kyle's tendency to reject his stepmother's right to set limits. Kyle had a long history of being labeled as a behavioral problem. The attribution for the homework completion difficulties have primarily been directed at Kyle. He continues to be identified by the school and parents as a difficult child to motivate. His verbal comments suggest he is a child with a poor self concept and few friends.

The short term nature of the homework intervention and the emphasis on behavioral contingencies were insufficient for establishing lasting behavioral changes and academic progress. Kyle had limited opportunities within his home environment to learn responsible, independent behaviors, and to experience intrinsic motivation for responsible actions. His father and stepmother, although concerned and caring, have inconsistently followed through with established expectations. Additionally, there may be a need for parent education to clarify what reasonable expectancies are for children Kyle's age.

Case Study #4: Daniel

Daniel is a nine-year-old fourth grade student who receives learning disabilities services 150 minutes per week for reading and written language instruction. Daniel lives with his mother, father and 13-year-old sister. Both parents work full-time.

Observed Antecedents

Parents. School performance did not appear to be a source of conflict for Daniel and his parents. They seemed supportive and concerned about him, and had firm expectations for work completion. They believed it was their responsibility to ensure that homework was completed and were willing to assist with, monitor, and correct homework. Encouragement, praise, and rewards often were used, and structured interventions had been used in the past with some success to improve his math achievement. Daniel's parents generally were not aware of his current performance in school. They stated that they had received little feedback from the teacher about her expectations for quantity and quality of work. Daniel's parents did not believe he was held accountable for school work because a large number of incomplete papers were reviewed with them at conferences.

Teacher. Daniel's teacher, Mrs. Curtis, stated that she did not give homework regularly, except for in-class work that was not completed during the school day. Mrs. Curtis indicated that she had not monitored his work completion as much as she wished she had done. Although completed work was corrected, Daniel received little feedback. Few motivational strategies were used to assist work completion and accuracy. When Daniel did complete his work, it was with at least 85% accuracy. Neither Daniel nor his parents felt that the work was too difficult. Mrs. Curtis believed that parental support for academics and help with organization skills would help Daniel improve his academic achievement.

Student. Daniel rarely completed in-class assignments and often failed to complete homework assignments. He had poor organization skills; he often forgot to bring materials and work home, or forgot to return work to school after it was completed. Daniel has had difficulty with task completion since first grade. His parents and teacher indicated that he was fairly motivated and was not a behavior problem.

Coordination planning meeting. The coordination planning meeting with parent, teacher, and student had to be cancelled due to scheduling conflicts for the teacher. As an alternative, a meeting was held with the parents and student. Daniel's mother contacted the teacher to discuss structured home-school communication and plans for the intervention.

The goals of organization/completion of homework and extra reading practice were addressed in the intervention. Mrs. Curtis was to send work home once per week in a folder containing work for two days and feedback from the teacher on completion and accuracy of the previous week's work. Additional communication between the parents and teacher occurred via telephone. Assigned work could be from any subject area, but reading and spelling were assigned most frequently. Homework was expected to be completed on Tuesday and Thursday, and it was done at the kitchen table before dinner. Daniel's father answered questions about the

homework, checked the work, and monitored the charting system. Daniel's mother read with him once per week and made all contacts with the school.

Observed Transactions

Consultation began during January and ended in April. The home consultant met with the family or with the mother every two weeks, with phone contact during the other weeks. Seven home visits were made, with Daniel and both parents present at four, and only Daniel's mother at three meetings. Three phone contacts were made with Daniel's mother.

In addition to implementing the program as planned, Daniel's parents developed a self-charting system for Daniel. He put stars on a chart when he brought work home, completed it, had neat papers, read 20 minutes/week and did extra reading or school work. When he achieved stars in each category (except extra work), for four days, he received a treat of his choice, such as going out for pizza or a movie. A chart also was posted on the bathroom mirror to help him remember to return homework to school in the morning.

Several changes were made as the program progressed. Daniel's mother asked Mrs. Curtis to send work home twice per week on the specified days instead of once per week because homework was not being sent home regularly. Even after this change was made, Daniel's mother had to call Mrs. Curtis several times to request that work be sent home. By the sixth or seventh week of the program, work was being sent home two times per week with notes to the parents. If work did not come home, Daniel's mother developed work for Daniel to do at home, such as reading from books or practicing spelling words. Toward the end of the project, Daniel became accustomed to bringing his spelling book home if no homework was given on the specified days. Also, if work was assigned and Daniel forgot it, he and his mother retrieved it after school.

During the third week of the intervention, a plan was implemented to address the concern that Daniel often did not complete in-class assignments. Daniel received bonus stars for completing work at home that did not get finished during class, and for extra independent reading. Daniel's mother asked Mrs. Curtis to remind him to take incomplete work home. His teacher also suggested independent reading books that would be interesting and at an appropriate reading level. When Daniel's problems with work completion continued, Mrs. Curtis agreed to write the day's assignments on an index card (or have Daniel write them) and tape the card to his desk so that he could check off assignments as they were completed. It was agreed that these index cards would be sent home in the folder to his mother so that she could monitor Daniel's work completion. However, this plan was not implemented by the teacher. She later told Daniel's mother that it was not appropriate, since each child worked at his/her own pace. Daniel's mother questioned whether Mrs. Curtis' expectations for Daniel were at a sufficiently high level.

Halfway through the program, Daniel was assessed and diagnosed by an outside agency as having attention deficit disorder (ADD). Ritalin trials were implemented during the last 8 weeks of the program. Neither the teacher nor parents noted much change in his behavior or attention while on Ritalin. A change in Daniel's mother's attitude was noted however. Before Daniel was labeled as ADD, Daniel's mother often talked about how Daniel had to work harder than other children, but that was fine as long as he was doing his best. After the assessment, she talked of how the teacher

should take into account Daniel's ability level in grading him, and the unfairness of grading him on the same "curve" as other children.

Two child-study meetings were held toward the end of the homework program at the request of Daniel's mother. In addition to problems mentioned previously, she was dissatisfied that Daniel was not receiving social skills group as stated in his IEP and was frustrated at not being informed of his educational progress and level in relation to his peers. As a result of the meetings, it was determined that Daniel no longer qualified for LD services. He was reclassified as emotionally-behaviorally disturbed and was to receive social skills training and monitoring of his work completion.

Observed Outcomes

Interview data. Overall, the program was viewed as effective in helping Daniel complete homework two times per week. According to Mrs. Curtis and parents, the program was not particularly helpful in increasing work completion at school, though his parents planned to continue the intervention for this after the intervention program ended. Daniel continued to need help with organization skills. Reminders from his teacher and parents often were necessary to help him remember to bring work home, although he did show more initiative toward the end of the program. By the seventh week, Daniel was reading independently 20-30 minutes each night. He won a free pizza during a school read-a-thon for completing four books in a month. He also reminded his mother when they did not read together during the week. He often brought spelling work home when homework was not assigned.

During a follow-up interview, Mrs. Curtis reported several beneficial results of the program for Daniel. She stated that Daniel's accuracy on assignments and independent work habits improved, as did his attitude toward homework. She identified two interventions, specific time for homework and the self-charting and reward system, as particularly helpful. In addition, she believed the notebook for assignments and homework had been a helpful organizational aid. Daniel's attitudes toward school and homework remained essentially unchanged after the intervention; they were neutral to slightly positive.

Daniel and his parents planned to continue the program after the project ended, especially in the areas of spelling and written language, regardless of the teacher's participation. Mrs. Curtis indicated to the consultant her willingness to continue with the program. However, during the last week of the project, the teacher told Daniel that she would not be sending homework with him in the future because the project had ended.

Student data. Daniel's responses to instruction were measured before, during, and after the intervention. Minutes and percentages of time spent in academic responding time (ART), academic engaged time (AET), management (M), and inappropriate responses (I) are provided in Table 7. Although academic engaged time (in percentages) decreased somewhat during the intervention, active academic responses remained the same, about 30%. Inappropriate behavior increased from 10% pre-intervention to 24% post-intervention (17% middle observation). Task management responses also increased, from 14% pre and 13% middle to 25% post-intervention.

Table 7

Student Responding, Task Completion and Success, and Achievement Data for Daniel (Case #4)

	Before Intervention		During Intervention		After Intervention	
Student Responding[a]	Mins.	%	Mins.	%	Mins.	%
ART	42.5	30	45.3	29	55.8	30
AET	105.7	75	109.7	69	93.0	50
M	19.0	14	20.5	13	46.3	25
I	14.2	10	26.0	17	45.0	24
Task Performance[b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling	100	13	100	88	--	--
Reading	--	--	59	73	100	0
Math	--	--	100	90	100	27
Social Studies	100	50	--	--	--	--
Science	--	--	--	--	73	100
Achievement						
Curriculum-Based[c]						
Reading	66				87	
Math	19				28	
Spelling	80				79	
BASIS[d]	PR	SS			PR	SS
Reading	32	93			47	99
Math	19	87			63	105
Spelling	12	82			5	75

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

Daniel's task completion and success rates showed variability during the intervention. Not enough data are available (see Table 7) to draw conclusions.

Scores on curriculum-based measures of achievement and on the BASIS administered pre- and post-intervention indicated that Daniel improved in math and reading, but not spelling (see Table 7). These changes were consistent on the two measures.

Factors Influencing Outcomes

Facilitators. Several factors facilitated implementation. Daniel and his parents were very involved, with consistent follow through. When homework was assigned, Daniel usually remembered to bring it home, complete it, return it to school and self-chart. When meetings with the consultant were held in his home, Daniel always chose to participate, and agreed to all plans before they were implemented.

The parents' skill level in providing praise, encouragement, rewards and consistent routines was high, as was their skill in developing and implementing specific charting systems. They also served as effective advocates for Daniel when homework was not sent home consistently. His mother persistently worked with Mrs. Curtis to remedy this problem, and when this was not effective, she met with the school principal to discuss the problem and other issues regarding Daniel's educational program. As a result of this, two child study meetings were held and problems with Daniel's instructional program were addressed.

Inhibitors. The major factor that impeded progress was inconsistent assignment of homework. Work was not given regularly; sometimes work would not be sent at all during the week, sometimes once a week, and sometimes on days other than those specified in the plan. It was only after Daniel's mother involved the school principal that work was sent home consistently. The teacher stated in a child-study meeting that the program was not too much work, so the reasons for this problem were unknown. Daniel and his parents were very frustrated by inconsistent homework assignments. They never knew when to expect work; the parents had to question Daniel when work did not come home as to whether Daniel forgot it or Mrs. Curtis forgot to send it. Another factor that impeded progress was that Daniel rarely brought work home that was not finished in class, even with the additional incentives. His problems with in class work completion continued throughout the study.

Case #5: Bob

Bob, a fifth grader, received help from the special education teacher along with the rest of the low reading group. He also received some special education help in math at an informal level. According to his classroom teacher, Mr. Mackey, Bob does not legally qualify for special education.

Bob lived with both parents and a fourth grade sister in an apartment near school at the beginning of the intervention, but moved to a townhouse in early January. After the move, Bob was transported to and from school by his parents or grandparents, who live near school. The family was very involved in church activities.

Observed Antecedents

Parent. Bob's mother indicated that homework was done consistently at home, and that she facilitated homework and checked answers. She used some basic learning techniques, such as rhymes and songs for spelling aids. She expressed positive attitudes about Bob's school, talking about the importance of school and mentioning that she attends conferences to be involved.

Teacher. Mr. Mackey has used different strategies with Bob, including rewards, study halls, and tutoring. Mr. Mackey reported that Bob did not use time well at school, and his problems with in-class task completion resulted in homework. He was described as a "good, honest, scatterbrained, easily distracted kid." Mr. Mackey expressed a positive view of Bob's family. His classroom, totally individualized and self-paced, is characterized by much freedom and movement by students and minimal structure.

Student. Bob was very positive about school, indicating that he finds school interesting, and has a good relationship with Mr. Mackey. He likes to read but admitted to needing frequent reminders to do his homework. Bob typically worked on homework while lying on the floor in front of the television.

Coordination planning meeting. Separate meetings were held with Mr. Mackey and with Bob's mother, who did not attend the scheduled 3-way meeting. The focus of the meetings was on getting acquainted, scheduling days for homework and future meetings, setting goals, and making up a notebook for assignments and communication.

Observed Transactions

The main goals of the intervention were to provide a consistent, organized structure for the successful completion of homework and increased communication between the school and home. The development of Bob's responsibility for assigned work was a related goal of the intervention. Consultations were with Bob's mother. Eleven contracts were made between January and April. Meetings with the teacher were held on three occasions.

Initial discussions with Bob's mother were about establishing a consistent routine and environment for homework. The main vehicle for the accomplishment of the goals was a homework folder. This folder contained places to put homework,

and sheets designed to aid in clear assignments, teacher/parent comments, and evaluations. As the intervention progressed, different aspects of these sheets were emphasized, and they were revised in order to better enable easy, objective evaluations of homework and homework related performance. Areas emphasized in the folder included comments between home and school, remembering to bring the folder home, neatness, and beginning homework without reminding. Graphs and contracts also were added as motivational aids.

Initially there was good use of the homework folder. This was followed by inconsistent use, and then during the last few weeks, the folder was neglected. Toward the end of the intervention, the folder was consistently unavailable for viewing; Bob's mother did not indicate it was not being used.

Observed Outcomes

Interview. Bob's mother reported being pleased with the intervention, saying it was helpful, and that the other family members were becoming involved in rewarding Bob for successful school work. She also began a similar intervention with her daughter, and asked whether there will be anything like this next year. Her pre- and post-intervention comments about Bob's homework situation were very similar. They reflected Bob's positive attitude toward school and his difficulty initiating homework. During the post-interview, she did mention some of the techniques used in the intervention.

The teacher's summary of the intervention was that "it was a disaster." He believed he was having to do too much reminding for too little results during the final weeks of the intervention. He implied that the home stopped actively participating and he became discouraged with the family. As a result, he discontinued taking the initiative for sending the folder home.

Bob was quite positive during the post interview. He reported good student-teacher relations and interest in school work and reading. While he stated that he had the right amount of homework, he indicated that it was usually just busy work and he continued to have some difficulty remembering it. Bob also mentioned that he sometimes was too scared to ask for help when he did not understand something in class.

Student data. Observational data on the CISSAR system were gathered before, during, and after the intervention (see Table 8). These data indicated some increase in academic engaged time and decrease in management time during the intervention. Academic responding time and inappropriate behavior were fairly similar throughout the intervention.

Task completion and task success rates were calculated by subject area and are provided in Table 8. In both reading and math, there was an apparent increase in task completion that was accompanied by some loss of accuracy.

Achievement data gathered pre- and post- intervention with use of curriculum-based assessment and with the BASIS achievement test gave somewhat inconsistent results (see Table 8). Improvements are suggested by the curriculum-based assessment in reading and spelling. Improvements are not indicated by the BASIS data.

Table 8

Student Responding, Task Completion and Success, and Achievement Data for Bob (Case #5)

	Before Intervention		During Intervention		After Intervention	
Student Responding [a]	Mins.	%	Mins.	%	Mins.	%
ART	58.7	28	87.2	42	55.2	28
AET	119.5	58	144.3	70	148.3	75
M	50.5	24	29.2	14	19.5	10
I	36.7	18	31.0	15	29.0	15
Task Performance [b]	Compl	Succ	Compl	Succ	Compl	Succ
Reading	50	100	100	80	--	--
Math	--	--	100	60	100	30
Achievement						
Curriculum-Based [c]						
Reading	86				90	
Math	26				12	
Spelling	47				78	
BASIS [d]	PR	SS			PR	SS
Reading	46	98			21	17
Math	20	87			5	75
Spelling	17	86			--	--

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

Factors Influencing Outcomes

Facilitators. Bob's mother was open to new ideas and cooperative. Mr. Mackey was an active participant for most of the intervention, reminding Bob about homework frequently.

Inhibitors. It was very difficult to contact Bob's mother by phone, and she consistently missed or was late to meetings. The extent to which Bob's mother followed through with interventions was difficult to determine because of her vague responses. She seldom had materials available at the later consultation sessions. Mr. Mackey became discouraged and stopped reminding Bob to use the notebook toward the end of the intervention. His comments in the folder were generally negative at that point.

Difficulty in establishing and maintaining effective communication was a primary inhibitor. Assurance of investment by the parents and teacher in the intervention seems to be a crucial part in a successful program.

Case #6: Roy

Roy, a 12-year-old male in fifth grade, receives learning disabilities and speech and language services. He spends 75% of his time in the mainstream setting, which is a combined fourth/fifth grade class. Learning disabilities services are provided four days per week for 40 minutes per day for specialized help in spelling and math.

Roy lives with his paternal grandparents. Both grandparents are retired. He spends approximately every other weekend with his father, who is his legal guardian. The grandparents, however, act as his guardian for most school-related purposes.

Observed Antecedents

Parents. Roy's grandparents helped him with assigned homework; his grandmother typically helped with spelling and reading work, and his grandfather helped with math. Homework was usually done after the evening meal, except when there was a scheduled activity (e.g., Cub Scouts), and then homework was done before the activity. Roy's special education teacher, Mrs. Casey, sent a notebook home with assignments from both the mainstream and special education settings.

Viewing homework as necessary and important, both grandparents reported sincere interest in helping Roy improve homework performance. They expressed concern that Roy was sometimes confused by his assignments, and that sometimes he was asked to complete tasks that were beyond his skill level.

The grandparents and father gave Roy a weekly allowance. They "adjusted" the amount given for adequate or inadequate performances on school work through the week. They did not set specific amounts for certain accomplishments or for specified undesirable performance. No other reward/consequence system was used in relation to homework performance.

While Roy completes his homework willingly, there is variability in the time he spends working on an assignment and in his approach to the work. The grandparents stated that when Roy was in a rush or not interested in the assignment, his work was a 'haphazard' effort. He will sometimes pretend to be completing work, but instead fill his paper with nonsense scribbling.

Teacher. Roy's regular education teacher, Mrs. Korman, gave a similar description of Roy's homework. She described Roy as being quite "manipulative" at times with homework tasks. The work that Roy did not complete, did not understand, or did not have an interest in, was often "lost" or forgotten. Homework from mainstream classes was typically carryover work from in-class assignments. The amount of homework given to Roy was often adjusted in length because Mrs. Korman was concerned with his limited capability. A notebook system was used when Mrs. Korman wanted Roy to complete work at home. At the end of the school day, she would send Roy to Mrs. Casey with the day's assignments. Mrs. Casey transferred these assignments to the notebook, and Roy took it with him at dismissal. The grandparents indicated homework completion by signing the notebook. Homework was collected by Mrs. Korman and checkmarks were given for completed work. A point system for rewards (usually some special weekly activity) was used

occasionaliy. Specific points per reward or criterion were not typically predetermined.

Student. Roy stated that he did, in fact, work hard when he felt like it, but did not think homework was very important. He sometimes hurried through homework "just to get it done." He typically did not complain about the amount of homework. At home, he asked his grandparents for help on assignments, but he did not ask either teacher for help or clarification of work. He liked the notebook system, but explained that the rushing around at the end of the day was sometimes a hassle. He said sometimes he has trouble remembering his books and papers from school, and often cannot find materials needed to complete homework. Roy did not know what type of success he was having on homework and did not think his teachers usually checked his work. He said he did not bother to check over his work before he handed it in, or after he got it back from the teacher.

Coordination planning meeting. Several decisions were made by grandparents and teachers. Changes in Roy's homework tasks were made by his teachers. Homework was geared more toward remediation than toward completion of class assignments and was limited to reading, spelling, and math; homework was to be assigned on Tuesdays and Thursdays for 20 to 30 minutes. The notebook system was modified. Preprinted pages that contained spaces for daily assignments, signature of grandparents to verify homework completion, quantitative and qualitative feedback from the teacher, and comments or questions from the grandparents concerning assignments were to be used. In addition, Mrs. Korman wrote assignments in the notebook, avoiding the extra step of Roy returning to the special education teacher's classroom. The notebook was used throughout the intervention.

Observed Transactions

Consultation sessions (nine sessions total) began in December and ended in April. Contingency contracts were applied to homework performance with the goals of establishing a steady and acceptable rate of homework completion and accuracy, and improving neatness of written homework assignments. The latter goal was a mutual request of home and school.

The existing system of weekly allowance was tied to contract performance. Attempts to agree upon alternative reward systems seemed unnecessary since the grandparents and student thought the allowance system was workable. Contracts were initially negotiated between the student and consultant, who modeled the procedure for the grandparents. Contracts were made for a period of one week (the time between consultant visits) and included both of the goals. Criteria for successful performance were explained, and put in writing. The student and grandparents signed each negotiated contract. The sliding allowance was tied directly to successive levels of performance, to ensure that some portion of the contract could be met by the student. Each week, the contract from the previous period was reviewed with the grandparents and student. Appropriate "payment" was made by the grandparents or father. Unfulfilled contracts were renegotiated or extended. The consultant faded his involvement in contract negotiation during the first three full weeks of consulting. By week four, all negotiations and reviews were conducted among the family members. Contracts were used only in the home.

Roy's grandparents were supportive of the notebook communication system. Their initial communication with Mrs. Korman consisted only of their signatures.

They were encouraged to write comments or questions about the assignments, and to request or relay additional information about homework to Mrs. Korman. Their use of the notebook for qualitative communication increased during the project. Roy's grandfather especially was interested in the use of the notebook. He stated that its use eliminated much of the confusion about homework assignments and helped them better approach homework tasks.

Mrs. Korman maintained continual contact through the use of the notebook, but was not involved in any of the contract negotiations. The focus of consultation efforts was on the home; Mrs. Korman understood this orientation and provided the necessary steady assignment of homework and feedback about homework performance.

Student reading for leisure also was included as a secondary goal of the project. The contract system was used for this activity. Typical reading consisted of newspaper articles or scouting magazine articles, which were sometimes read aloud to his grandmother. Roy and his grandmother reported enjoying their reading sessions, and Roy usually surpassed his required quota of reading for successful contract completion.

During the eighth week, Roy's grandparents expressed concern about his next year's placement, hoping that Roy could remain in his present school building through sixth grade. They requested advice from the consultant who, in turn, explained they should make their concerns known to Roy's teachers, seek information about possible alternative placements from the district's social worker or the staff of the possible placement site(s), and attend any meetings held concerning Roy's placement.

The consultant helped the grandparents to focus and clarify their concerns by encouraging them to verbalize their viewpoints, acknowledging the legitimacy of their concerns, and reflecting their content in paragraph or question form. Roy's grandmother subsequently expressed satisfaction with the openness of communication she had with Roy's teachers and believed that attending the placement meeting to express her views and ask questions had been worthwhile.

Finally, to supplement the reward/motivational system, Roy was encouraged to attend to positive statements made by teachers and adults about him and his work. Overdependence on concrete contingencies was a possibility, and the consultant believed that it was important to highlight praise statements. Therefore, Roy listed five to ten positive statements made weekly about his school performance.

Observed Outcomes

Interview data. Roy and his grandparents adopted the use of contingency contracting for many activities involving both home and school tasks. Both Roy and his grandparents reported satisfaction with contingency contracting and were using it frequently at the end of the project. Roy's grandparents and Mrs. Korman made extensive use of the communication notebook; at the end of the project the notebook was used for reporting qualitative information and questions about Roy's performance. Both grandparents decided they wished to see the system used again next year with Roy's teachers, and said they believed much miscommunication was avoided through direct contact with Mrs. Korman.

There was a generally favorable increase in Roy's homework performance, and the stability of task completion moderately improved. Homework neatness improved when it was introduced as a negotiable item, and remained generally satisfactory. Roy and his grandmother shared reading time regularly, and Roy was always in compliance with contracted reading goals. By project's end, the grandparents were in direct communication with school personnel concerning Roy and school-related issues on a regular basis. His grandparents were more likely to express their views and concerns.

Mrs. Korman reported no change in Roy's degree of disorganization. She indicated that Roy still "forgets" what he doesn't wish to do. She reported that she changed several strategies to improve homework performance. By the end of the intervention, she was using more task analysis procedures to break down assignments into more manageable and systematic units. She provided regular feedback on work quality and neatness and made criteria for successful performance explicit. The regular teacher had increased the amount of homework which was remedial in nature, focused on skill-building, and decreased the amount of carryover assignments from the school day.

Roy reported that he was now very likely to ask his teacher for help or clarification of work he did not understand in class. Overall, Roy's attitude toward school and schoolwork was positive at the beginning and remained generally so throughout the intervention.

Student data. Roy's responses to instruction are provided in Table 9. Overall, there was little change in total engaged time (average 85% of observed time), but active academic responding varied from a low of 24% (43 minutes) to a high of 53% (93 minutes) per day of observation.

Task completion and success rates for different content areas also appear in Table 9. Roy's task completion rates were 100% while his task success rates were more variable.

Pre- and post-achievement data on Roy's performance in reading, math, and spelling indicated improvements in reading and math, but no change in spelling.

Factors Influencing Outcomes

Facilitators. Undoubtedly, the single largest facilitating factor was the cooperation among the teachers, grandparents, student, and consultant. Both teachers agreed to try the new notebook system, and to provide appropriate amounts of homework in remedial and supplemental skills. Mrs. Korman used the notebook from the beginning to end of the project. Assignments were organized with easy to follow instructions, and were chosen in a manner that aided completion and success rates. Carryover assignments from the school day were avoided.

Grandparents attempted each agreed upon plan that was arranged during home consultations. They had sufficient time to assist Roy with assigned homework tasks and to listen to Roy read aloud and/or help him with reading material he had selected for enjoyment. They also followed the contract terms fairly rigidly. Though they were unfamiliar and uncomfortable with the negotiation process at first, they tried to use it from the beginning of the consultation. Later, they were designing contingency contracts independently.

Table 9

Student Responding, Task Completion and Success, and Achievement Data for Roy (Case #6)

	Before Intervention		During Intervention		After Intervention	
Student Responding[a]	Mins.	%	Mins.	%	Mins.	%
ART	78.5	36	93.0	53	43.7	24
AET	180.7	83	154.2	87	153.3	86
M	16.8	8	11.2	6	10.8	6
I	19.3	9	10.3	6	12.7	7
Task Performance[b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling	100	30.4	100	100	--	--
Reading	100	62	100	40	100	93
Math	100	100	100	78.7	--	--
Language	100	89.4	100	88.2	--	--
Speech	--	--	--	--	100	100
Achievement						
Curriculum-Based[c]						
Reading	102				120	
Math	26				51	
Spelling	82				83	
BASIS[d]	PR	SS			PR	SS
Reading	36	95			65	106
Math	19	87			36	95
Spelling	15	85			15	85

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

Roy was generally cooperative throughout the project. He almost always remembered the notebook and his materials for homework. The consultant did not notice the reported tendency to "lose" difficult or uninteresting work, though it possibly occurred.

Other facilitating factors were the motivation and enthusiasm of family members. Grandparents stated positive opinions of the process. Roy worked hard to comply with contracts and, in fact, on some occasions superseded their terms. The attention Roy received was generally positive in nature, and he expressed satisfaction with the control he felt through the negotiation process over his own work efforts and performance. The increased direct communication between Mrs. Korman and the home aided project goal attainment.

Inhibitors. During several phases of the project, Roy's grandparents voiced their hesitation in believing that they could bring about change. It was necessary to legitimize their concerns and power, particularly during the initiation of contract use and the period involving the placement decision for Roy. Although they wanted to help in any way possible, they seemed to view school as a "hands-off" domain. They were somewhat resigned to a passive rather than active role in Roy's schooling.

Also, Roy's own approach to homework tasks was susceptible to widely varied emotional swings. He was at times overly zealous about homework, and at times completely indifferent about his performance. Contracting for consistency and stability was thus introduced. Emotional swings seemed to coincide with outside issues such as the concern about future placement. Roy's performance during some of that time period was unsatisfactory and inconsistent.

Case #7: Brent

Brent, an 11-year-old sixth grade boy, is classified as emotionally/behaviorally disturbed (EBD). He receives special education services in a pull-out program less than 50% of the school day.

Most of the school day is spent in a mainstream classroom of 23 students. Regular contact with a special education teacher was for implementation of goals to increase on-task behavior, increase work completion, increase organization skills (i.e., work habits), improve relationships with peers and adults, and improve math skills. A structured behavior modification program was used.

Brent lives with his divorced mother and two younger brothers in a small apartment near the school. His mother works full time outside the home; he has no regular contact with his biological father. Ongoing financial problems were reported by his mother. The family has some social support from extended family who live nearby. Brent's mother described him as a "high IQ" student with low motivation to do well at school. She had just made arrangements for counseling at a local child guidance clinic due to school problems, poor peer relationships and ongoing conflict and noncompliance at home.

Brent showed steady growth in academic skill development and school adjustment in the early elementary grades. However, by the end of grade 4 and throughout grade 5, Brent's records revealed a steady decline in academic performance, work habits, and relationships with peers and adults within the school setting. His present teachers describe him as a high ability student with chronic problems with task completion and work habits, aggression and noncompliance.

Observed Antecedents

Both the mainstream teacher and the parent conveyed their interest and willingness to participate, based on their perceptions of Brent's need. The initial meeting with the parent took place in the family home with Brent present. The project, procedures and responsibilities were clarified for Brent, who agreed to participate since he thought it would be "neat to be involved in a research project."

Parent. The mother did not consistently monitor Brent's task completion or school peformance. She reported having no awareness of task completion problems until Brent is a week or more behind in assignments, when a note from his teacher comes home. It was noted that task completion problems had become a focal point of conflict between Brent and his mother, who reported inconsistent use of negative consequences at home for work completion problems but no other motivational strategies. Brent's mother reported feeling more "defeated" than anxious regarding Brent's school problems. She also expressed negative attitudes about the efforts of school staff, especially with regard to EBD services Brent received.

Teacher. Mr. Klausen, Brent's classroom teacher, does not assign homework as a usual practice; incomplete in-class assignments were expected to be completed at home and were checked and returned the next day. All students received the same content and amount of academic assignments; modifications were not made for particular students. Mr. Klausen notifies parents and uses isolation of students in a study carrel for task completion problems, but no other motivational strategies are

used. Both regular and special educators reported that most of Brent's school problems result from his home situation.

Student. Brent has significant problems with task management and organization, including losing things, forgetting materials at home and school, failing to deliver notes between teacher and parent, and with completing assignments incompletely and inaccurately. Brent reported generally positive attitudes toward school, but complained of too many assignments that "seem like busy work." He also expressed concern about the degree of ongoing conflict with parent and teachers concerning school behavior and performance.

Coordination planning meeting. A joint meeting with the parent, teacher, and child could not be scheduled due to time scheduling constraints for the parent and teacher. Instead, Mr. Klausen and Brent met with the home consultant at school to specify agreements, procedures and start-up. At that meeting, it was agreed that a notebook would be used as a system for communication between home and school. Mr. Klausen agreed to contact Brent's mother by phone to let her know which nights she could expect homework to be assigned and to discuss the use of the notebook. The parent was informed of the agreements made during this meeting at the next home visit by the consultant, which occurred one week later. Brent's mother agreed to provide the communication notebook.

Observed Transactions

Home consultations began in January and continued until mid-March when Brent was hospitalized. He returned to school mid-April, at which time post-intervention data were collected. Eight home consultation and three lengthy phone conversations occurred. The home-based consultation for Brent had three goals: (1) to facilitate Brent's independent study skills, work habits, and positive attitude toward school, (2) to promote more effective parent-teacher relationships, and (3) to assist Brent's mother to acquire specific skills in promoting Brent's academic achievement.

In the early weeks of the home consultation, implementation of interventions was inconsistent on the part of both the parent and the teacher, and Brent failed to follow through with his agreed upon plans. Brent's mother reported that serious behavior problems at home were of much more concern than his performance at school, and that she had initiated weekly psychotherapy for him at a local child-guidance clinic.

During the third week of the intervention, a conference was held at school to review IEP goals for needed revisions and to modify intervention plans. The school principal, regular education teacher, special education (EBD) teacher, school social worker and homework consultant were present; the mother was unable to attend. Plans generated from this conference were communicated to the parent by the home consultant. Interventions planned at this meeting were:

- Brent would be isolated from other students in the regular classroom with use of a study carrel to facilitate task completion and to reduce disruptive classroom behavior.

- Brent would have daily, 30-minute contact with his special education teacher for monitoring of task completion and behavior.

- A daily point sheet would be kept to monitor performance, with negative consequences for poor performance and daily reinforcement for positive behavior. Brent could accumulate points for social privileges, such as helping other students with academic tasks or being a patrol boy.

- Brent would not be allowed to fall behind with assignments; instead, he would be kept after school to complete daily work.

- Brent would be given one assignment per week to address skill deficits in math, and one per week as an enrichment activity that could be from any content area.

- A supply of math worksheets would be provided to Brent's mother for use when Brent failed to bring home assigned work.

- Teachers would communicate with Brent's mother in writing on a weekly basis regarding his progress.

Following this conference, Brent and his mother were more consistent in following through with weekly homework intervention agreements, especially with regard to specific assignment completion tasks. A persistent problem for Brent's mother was her willingness to make contact with Mr. Klausen about Brent's program and behavior.

Throughout the intervention, Mr. Klausen failed to provide consistent homework assignments, to correct and provide feedback for those assignments that were given, and to communicate on a consistent basis with Brent's mother. The weekly enrichment activity that was agreed upon at the IEP review conference was implemented twice, once by Mr. Klausen, and once by the special education teacher. Neither teacher was aware of what assignments were being given by the other. The special education teacher would communicate inconsistently by way of a notebook with the parent. Communication typically concerned Brent's failures in complying with behavioral or task completion goals.

The consultant made numerous contacts with both teachers and with the parent to facilitate project coordination and implementation. The consultant recommended to the special educator, who was the designated case manager, that school psychological services be used for assessment of factors contributing to escalating problems at school, as well as for coordination of developmental goals of the school and the counselor from the child guidance clinic. Home and school efforts appeared at cross purposes, since one of the counselor's goals was for Brent to improve his peer relationships, while the school had him isolated from classmates in a study carrel in the mainstream classroom the entire day (to facilitate task completion). At the recommendation of school staff, Brent also had an ADD assessment in February. Results were inconclusive.

Observed Outcomes

Student data. Brent's responses to instruction are presented in Table 10. Consistent upward trends are evident in Brent's academic responses.

Table 10

Student Responding, Task Completion and Success, and Achievement Data for Brent (Case #7)

	Before Intervention		During Intervention		After Intervention	
Student Responding[a]	Mins.	%	Mins.	%	Mins.	%
ART	68.0	30	69.0	38	91.3	49
AET	173.7	78	143.7	79	162.2	87
M	35.8	16	18.2	10	16.1	9
I	13.8	6	20.2	11	7.7	4
Task Performance[b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling	63	100	100	79	100	100
Math	20	100	88	14	100	79
Social Studies	33	75	--	--	100	55
Achievement						
Curriculum-Based[c]						
Reading	131				159	
Math	40				72	
Spelling	116				115	
BASIS[d]	PR	SS			PR	SS
Reading	78	112			41	97
Math	17	86			62	105
Spelling	88	118			93	122

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

Task completion rates showed consistent increases, but no changes were noted in success rates (see Table 10).

Achievement data were gathered pre- and post-intervention with use of curriculum-based assessment and with the BASIS standardized achievement test. Gains are evident but inconsistent.

Changes in academic engaged time, task completion and success rates, and achievement need to be considered in light of the fact that Brent was removed from the mainstream classroom and placed in a more restrictive setting during the tenth week of the intervention. Final classroom observations and achievement testing took place in a setting where the student-teacher ratio was never greater than 8:1, which contrasts with a ratio of 23:1 in the mainstream classroom where pre-intervention and midpoint data were collected.

Factors Influencing Outcomes

Facilitators. After the IEP review conference, Brent became much more compliant with agreed upon plans. He showed improved task management with regard to being more responsible for getting needed materials to and from school. He completed and turned in assignments as agreed. He was assertive about requesting that he be given a chance to sit with the entire group and was clear in expressing his distress at having to sit in the study carrel, where he felt isolated from his peers and unable to see the blackboard during teacher lectures. Brent's mother also became better able to monitor and structure his homework following the conference.

Inhibitors. From the start-up phase and throughout the intervention, Mr. Klausen failed to follow through in any consistent way with all aspects of the intervention: providing homework assignments regularly, checking them and providing feedback, and providing specific weekly feedback to the parent. His remarks about Brent and his mother were consistently negative and vague. He would defer to the special education teacher regarding specific questions of task completion and behavior.

The role of the special education teacher in the intervention had not been clearly specified, although her influence became more prominent as the intervention proceeded. Although she participated in implementing plans made at the IEP meeting, her feedback concerning Brent's performance was consistently negative. She framed the major problem as one of serious family pathology, and that Brent was "too far gone."

There was very poor integration and coordination of interventions both between the regular and special educators and between the school and the outside counselor. This was despite repeated recommendations for case management involving school staff (including a school psychologist), the family and the outside counselor. This appeared to be confusing for Brent and his mother, and seemed to provoke Brent's behavior problems. Although the mother appeared to acquire skills in monitoring and supporting homework completion, she had persistent difficulty approaching the school staff and counselor with regard to her concerns and the need for coordinated case management.

Case #8: Johnnie

Johnnie, an 11-year-old male in the sixth grade, is an only child living at home with both parents. The parents seem to be very supportive of the school's efforts to meet their son's educational needs. He has received special education services for eight years, beginning with a preschool class. In sixth grade, he received learning disabilities and speech and language services. He was described by his parents and many of his teachers as being very quiet, shy, and withdrawn. He did not appear to have any close friends, although he was involved in team sports with other children his age

Observed Antecedents

Teacher. Mrs. Sandstrom, Johnnie's classroom teacher, described him as a student who had poorly developed academic skills and difficulty with task completion. She reported that he was very distractible, had difficulty following directions, was falling behind in the classwork, and completed work was of poor quality. Despite shorter and less difficult assignments, he was still struggling in her classroom. Unfinished work assigned in class was sent home as homework. Johnnie was in a cycle of doing less work in the classroom, taking more work home, returning less work, and completing work with poorer quality. Mrs. Sandstrom hoped Johnnie would increase completion and success in school and at home, take increased responsibility for his work, and increase his study skills. She believed this intervention could possibly prepare him for entering junior high.

Parent. Johnnie's parents expressed concerns about their son's achievement level and lack of success with homework. His parents were very interested in the project, indicating Johnnie could benefit from extra help and structure. They stated that Johnnie received the right amount of homework, but that it was too difficult for him to complete successfully, and that he was becoming increasingly frustrated with this work. The parents made many very positive comments concerning the school and its efforts to provide a quality education for their son.

Student. Johnnie was very quiet and withdrawn, responding in one word answers and avoiding all eye contact when interviewed. He stated that school was boring, assignments in class were not interesting, and he didn't like reading. He indicated that there was too much reading in class. He later stated that he was good at reading. Johnnie said that he liked his teacher, got along with her, and enjoyed the times when he received individual attention from her. Johnnie believed he received too much busy work as homework. He said that he checked over his paper and received help from his mother when needed, but that he rarely received any feedback from his teacher about the accuracy of his answers.

Several contradictions were noted during the interview with Johnnie. While he stated that he frequently asked for help in class, his teacher said that he never asked for help. He thought he was pretty good at school work and that doing well was important to him. He also said that he wrote down class assignments, but frequently forgot them in school. However, his teacher reported that she checked each night to make sure that he was bringing home his work.

Coordination planning meeting. A plan was developed in early December at a meeting with the teacher and both parents. It was agreed that Mrs. Sandstrom would assign homework twice per week, on Tuesdays and Thursdays, at Johnnie's skill level,

even if it was below the class level. Along with the homework a note would be sent to explain the assignment and what problems to do. The parents were to communicate and provide feedback to Mrs. Sandstrom by commenting on the homework's length and difficulty so it could be adjusted to Johnnie's skill level and last 20-30 minutes per session. The parents agreed to maintain the set time and place for Johnnie to complete his homework. He would also receive a reward of a candy bar or cookies upon completion of his work. Johnnie's parents also agreed to send the notes back to the school on a regular basis to provide feedback to the teacher regarding the assignments.

Observed Transactions

Home consultations began in early January and ended in late April. Nine contacts with parents occurred. The first three weeks of program implementation were reported by both teachers and parents as going smoothly. Johnnie was provided with homework twice per week and the work was completed, returned, and of good quality.

During the fourth week of implementation, Mrs. Sandstrom noted Johnnie was doing less and less work in class and that more and more of his class work was being sent home as homework. Johnnie was becoming more disruptive in the classroom, which Mrs. Sandstrom interpreted as interference for task completion. With the increase in the amount of classwork being taken home, homework was sent only one time per week.

A meeting with the parents confirmed that the program was not being followed. They were not seeing a difference in the quality or quantity of homework sent home by the teacher; and notes were not being sent home. A meeting was set up with Mrs. Sandstrom to discuss the parents' concerns about the lack of difference between Johnnie's "old" homework and the project's homework. Mrs. Sandstrom stated that Johnnie was doing less and less in-class work and that homework assignments were being sent home as homework more and more frequently, leaving less time for project homework. Mrs. Sandstrom stated that there were minimum standards for completing work in her classroom, and that Johnnie was not even meeting these minimum requirements. She agreed to work on keeping Johnnie more on task while in school which would provide more opportunity for project homework to be sent home. After these meetings, the program was implemented again to both parents' and teacher's satisfaction.

The following week, however, the program did not appear to be working. Many in-class assignments were sent home each night, leaving little time for designated homework intervention assignments. The parents expressed their frustration over the lack of success of the program. At this time, questions concerning the process of special education and whether it was of any benefit to their son were raised. Specifically, they described a lack of information and involvement in the placement process and confusion about Johnnie's apparent lack of progress. The consultant encouraged the parents to list their questions and request a meeting with the school to discuss their concerns Mrs. Sandstrom also noted her concerns about Johnnie's low academic performance, acting out behaviors, lack of social skills, and almost total lack of friends. She was very willing to attend a meeting with Johnnie's parents to discuss these concerns as well as to answer their questions and concerns.

The content of home consultations had shifted from homework issues to identification of parental concerns, with the consultant serving as liaison between the home and school. Approximately three months after parental concerns were raised, a meeting was held to discuss Johnnie's current situation, as well as to answer the parents' questions. The consultant did not know about the meeting until after it occurred. The parents appeared satisfied that their concerns and questions were addressed by the school. They believed that they were better informed about the special education process and about their son's education. The parents were encouraged to contact the school in the future to discuss any concerns they had about their son and were provided with the name and phone number of a parent advocacy group if they believed that they needed further support or assistance.

Observed Outcomes

Interview data. Parents reported that the homework intervention appeared to work for awhile, but that homework was often not assigned or adjusted to Johnnie's skill level, and there was limited feedback from Mrs. Sandstrom. Johnnie still needed help organizing his work, but the set time and place for completing homework worked well. Motivational strategies were implemented more consistently for homework completion by the parents. They believed that the project facilitated communication between the home and school. However, they were frustrated by the inconsistent follow through by Mrs. Sandstrom. Despite this frustration, they were positive about Johnnie's school experience, and especially noted his positive attitude toward school.

Johnnie's attitude about school and homework changed during the intervention. School was rated as less boring, more fun, but less enjoyable. Reading and class assignments were rated as more enjoyable and interesting. Johnnie indicated he was bothered more when he didn't get his work done; however, he had less desire to be very good at school work and he was less likely to ask for help when he did not understanding something. He was getting more feedback from the teacher on his assignments, but believed there was still too much homework assigned. Instead of being viewed as just busy work, homework was rated as a means to improve skills and understanding.

Mrs. Sandstrom indicated that Johnnie was still very selective in the work that he completed. He was described as easily frustrated, and when frustrated, he closed his books and refused to work. Mrs. Sandstrom noted little success from the many interventions (quiet study areas, individualized help, LD teacher help, peer tutors) attempted to improve Johnnie's school performance.

Student data. Johnnie's responses to instruction are listed in Table 11. Johnnie showed a considerable drop in the amount of academic responding and a considerable increase in the amount of inappropriate behaviors from pre- to post-intervention. The amount of time spent in management behaviors remained relatively unchanged. These data confirmed teacher reports of frequent off-task and disruptive behavior.

Measures of task completion and success rates for different subject areas are also provided in Table 11. No clear pattern emerged from these measures of task completion and success.

Results from academic testing also appear in Table 11. Johnnie's greatest gain was made in reading.

Table 11

Student Responding, Task Completion and Success, and Achievement Data for Johnnie (Case #8)

	Before Intervention		During Intervention		After Intervention	
Student Responding [a]	Mins.	%	Mins.	%	Mins.	%
ART	80.8	36	38.8	18	42.8	21
AET	178.0	78	144.2	68	141.2	69
M	32.3	14	52.2	25	44.3	22
I	17.3	8	15.5	7	19.2	9
Task Performance [b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling	100	88	--	--	--	--
Reading	100	87	100	59	100	100
Math	--	--	100	0	0	0
Social Studies	33	75	--	--	100	55
Language	--	--	0	0	0	0
Achievement						
Curriculum-Based [c]						
Reading	172				187	
Math	86				81	
Spelling	119				119	
BASIS [d]	PR	SS			PR	SS
Reading	12	82			27	91
Math	41	97			33	93
Spelling	52	102			66	106

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

Factors Influencing Outcomes

Facilitators. Several factors facilitated implementation. Both the teacher and parents were interested in the intervention; the regular classroom teacher volunteered to participate. Johnnie's parents kept to his schedule of homework at the same time and place each night, which was followed by rewards from parents upon completion of the assigned work. Increased communication between parents and school occurred.

Inhibitors. Several factors inhibited successful implementation. At the beginning, Johnnie increased his acting out and off task behaviors in the classroom, which led to more regular in-class work being sent home as homework, leaving little or no time for additional project homework. Thus, the goal of giving Johnnie extra practice in skill deficit areas was not achieved. Teacher follow through in assigning homework and communicating with parents was infrequent and inconsistent. Parents were less well informed about Johnnie's daily performance because of inconsistent feedback from school.

Case #9: Jake

Jake, a sixth grader, is the youngest of three children. He has two older sisters in high school. Jake was described by his teacher, Mrs. Jenkins, and parents as being a well liked, kind child. Although he was older than the other sixth grade children, having been retained the previous year, Jake was considered to be less mature than his classmates. Mrs. Jenkins claimed that despite being retained and despite receiving resource room services, Jake continued to hold a positive attitude toward school.

Observed Antecedents

Teacher. Mrs. Jenkins described Jake as having difficulty organizing and taking responsibility for himself and as manipulative, especially with his parents. She stated that she did not have a problem with him at school, but that he would not get his work done at home.

Parent. The family gave an impression that was consistent with the teacher's description of their hectic lifestyle. They almost did not consent to be in the study because of their many other obligations. Jake was busy almost every night of the week with boy scouts, religion class, hockey practice and games, or watching his sisters' sporting events. Although this family was so busy that they had a difficult time eating dinner together at a consistent time on a daily basis, they seemed very much involved in each others' lives. The parents expressed concern about Jake's academic problems and worried about him attending junior high school the following year because he would not have one teacher to take responsibility for him as he did in elementary school. Both parents felt that Jake's extracurricular activities were important for his social/emotional development, but acknowledged that there tended to be very little time for him to complete his school work.

The mother was the primary person involved in Jake's education. Prior to the intervention, she had already set up a system for helping Jake complete book reports. She would divide the book into five equal parts and then for the next five nights he would read all of the pages assigned for that night. She reported that this worked fairly well. The father was relatively uninvolved in Jake's education. For instance, he attended only one parent/teacher conference and then, only after the mother complained about always having to shoulder that responsibility. The father was more involved with Jake's extracurricular activities.

Both parents, however, expressed concern about Jake and wanted to help him, but expressed frustration at not knowing what to do. They mentioned that getting Jake to do his school work created much conflict and generally ended up as one big power struggle. They felt that he expended more energy to get out of the work than it took to actually complete the work. The parents seemed to be giving Jake a double message about academics. On one hand they tried, albeit inconsistently, to get Jake to do his school work and, on the other hand, they let him over schedule his extracurricular activities to the point where he would have no time set aside for homework. He would frequently try to finish his work late at night, rushing through it, before going to bed. They also mentioned that he was disorganized and that by the time he would get prepared to do his work, 20 to 30 minutes had elapsed.

Student. At the beginning of the intervention, Jake stated that he liked school primarily because his friends were there. He also liked his teacher and, after being

retained by her last year, chose her again the second year. He mentioned that he did not like homework but also felt that getting it done was not a problem. His comments about school and himself tended to be generally positive.

Coordination planning meeting. A meeting was held after school with Mrs. Jenkins, Jake, and his mother to discuss the initial intervention and establish lines of communication, which primarily involved the consultant working with the parents. The procedure was described as a process of fine tuning, keeping what works and discarding what does not. The initial plan involved setting up scheduled study times and allowing Jake to indicate when he had work to do. The schedule included five nightly reading periods for approximately 20 minutes each. It was decided that an additional 20 minutes would be allocated for work he did not get done during the day. These two time periods were combined as one. It was decided that Jake and his mother would make the schedule together and that eventually Jake would take responsibility for it himself. Parents and teacher were going to communicate by phone two times a week. Mrs. Jenkins would report on Jake's progress toward completing work as well as on the quality of his work. Jake was given concrete suggestions for organizing himself and his parents were going to enforce a consistent study place (his room) instead of in front of the television, on the kitchen table, or wherever else he felt like being at the time.

Observed Transactions

Home consultations began in late November and ended at the end of March. Ten consultations occurred. When Jake did not consistently let his parents know about his homework, it was decided that a notebook would be used for communications between the parents and Mrs. Jenkins. This plan worked well and was maintained throughout the intervention. Mrs. Jenkins would jot down all assignments that Jake needed to complete and the parents would sign off after Jake completed them. If Jake forgot his books, he would return to school that same day to pick them up.

Jake's homework time was scheduled early in the evening, which seemed to improve the quality of his work. Jake and his parents reported a decrease in arguments over starting homework. This seemed very reinforcing for all of them.

Several modifications were made during the course of the intervention. One change involved keeping the 20 minute time periods separate, with one time period for his nightly reading and the other time period for completing the work he did not get done in school. If he finished his work at school and it was of acceptable quality, then he could use that period as free time. This also seemed to be reinforcing; he earned free time about once a week.

Jake's parents instituted other reinforcers, such as allowing him to get out of doing some type of chore. Jake did not always mark his chart, but still got his work done; at the end of the project, it was decided that the charting would be phased out when it appeared Jake did not need it, after the beginning of the next school year.

Interview data. Overall, the parents were satisfied with the intervention. They noted that the number of arguments with Jake over completing homework decreased and that his organizational skills improved. They have structured their activities to allow close monitoring of Jake's homework completion. Probably the

best evidence to show the parents' pleasure with the intervention was their stated intention to continue it after the consultant was finished.

Student data. Jake's responses to instruction before, during, and after the intervention are listed in Table 12. In general, there was little change in his academic responding or inappropriate behavio. from pre- to post-intervention. He showed some increase in academic engaged time at the end of this time period. The proportion of time spent in inappropriate behavior was greater during the middle of the intervention, when both his engaged and responding rates were lower.

Task completion and success rates were calculated by subject area pre-, during, and post-intervention (see Table 12). Few task completion and success rates were available; no trends are evident.

Jake's achievement in spelling and reading, as assessed by the BASIS, was similar before and after intervention (see Table 12). Jake's performance in math showed an increase from the 45th to 97th percentile rank on the BASIS, and his automaticity for math calculation problems, as assessed by curriculum-based measures, increased from 39 to 89.

Factors Influencing Outcomes

Facilitators. Jake's parents mentioned that the project helped them realize that study time was important and not something that is done when and if there was time. Family members liked the charting in that it alleviated arguments about starting time. One of the biggest factors that helped facilitate the intervention was the involvement of both parents at the meetings and the unified support they presented for their child's academic progress. It also helped that Jake was at the meetings. Giving him a say during the meetings enabled him to take some ownership in the plan. In addition, Jake's teacher stayed closely involved by keeping track of things that pertained to Jake, such as homework, communicating with parents, etc.

Another facilitating factor that led to the initial acceptance of the intervention was that the consultant went to the family's home and worked around the parents' schedules. In addition, Mrs. Jenkins greatly facilitated the parents' acceptance of the intervention by recommending it during a parent-teacher conference. The intervention time period was adequate for initiating and maintaining change for Jake. A shorter time period may have not allowed participants to work through problems. The time also allowed the consultant time to step back for a couple weeks and let the parents work problems out on their own.

The parents had nothing but positive comments for Jake's school and teachers. They described Mrs. Jenkins as a caring, yet firm individual who would not let Jake get away with anything. Both parents saw this as positive. They were pleased with how Jake was being taught and were glad that he liked his teacher.

Inhibitors. Mrs. Jenkins seemed to care a great deal about Jake and felt discouraged about what could be done for him. She believed that the major problem with Jake was that his parents, although good intentioned, had difficulty following through in supporting assigned work. For example, she had once before tried sending a work folder home with Jake, but the parents did not follow through with it.

Table 12

Student Responding, Task Completion and Success, and Achievement Data for Jake (Case #9)

	Before Intervention		During Intervention		After Intervention	
Student Responding[a]	Mins.	%	Mins.	%	Mins.	%
ART	43.0	27	37.2	17	42.7	24
AET	108.7	67	120.7	57	139.3	78
M	27.3	17	31.7	15	14.5	8
I	25.3	16	60.3	28	23.2	13
Task Performance[b]	Compl	Succ	Compl	Succ	Compl	Succ
Spelling	100	90.7	--	--	--	--
Reading	--	--	--	--	100	46.2
Math	100	68.0	--	--	--	--
Achievement						
Curriculum-Based[c]						
Reading	161				153	
Math	38				89	
Spelling	110				113	
BASIS[d]	PR	SS			PR	SS
Reading	14	84			17	86
Math	45	98			97	128
Spelling	42	97			38	95

[a]Student responding composites are: ART = active academic responding time; AET = academic engaged time; M = management responses; I = inappropriate responses. Entries are minutes (min) and percentages of time (%).

[b]Task performance entries are task completion (Compl) and task success (Succ); these are expressed as percentages.

[c]Curriculum based achievement data entries are expressed as number correct.

[d]BASIS achievement data entries are percentile ranks (PR) and standard scores (SS).

Discussion

The purposes of the home-based consultation were to increase classroom academic responding and to document home and school factors that influence completion of assigned work for students with mild handicaps. The 12-week intervention was not successful in increasing classroom academic responding of the nine elementary students. Several factors may have contributed to no change in academic responding for these students. First, a 12-week intervention may not be long enough to change behavior, especially for students who have chronic problems with task completion, have not developed consistency and independency in study habits, and whose school problems have been a focal point of family conflict. Old habits and attitudes are not easily changed, and students with learning and behavior problems may need a "long term commitment" to really assess the effect of an intervention. Change is not an event; it is a process, and the process may take much longer than 12 weeks.

Second, consultants who worked with parents had difficulty maintaining treatment fidelity across participants. Roles and responsibilities were identified for parents and teachers of each student. Teachers and parents had made very specific agreements with each other and with students in terms of what responsibilities each would have in this intervention. Despite pre-intervention interviews and coordination meetings, some teachers and parents neglected to follow through with plans all had agreed were important; other teachers and parents changed their agreed upon task, and many times these changes were not communicated to other key participants. It could be argued that participating students observed their teachers and parents neglecting to follow through with agreed plans, and that this kind of modeling by adults was counterproductive for promoting the very attitudes, [illegible], and academic skills the students needed to develop.

Also, the primary focus of this intervention was on a subsystem of a student's life. Parents were the primary focus of intervention efforts. Consultants tried to empower parents, working with their identified needs and skills in relation to the intervention goal of increasing positive study habits in their children. For many parents, parent-child conflict centered on school performance-related issues. Consultants attempted to coordinate intervention activities across participants -- teachers, parents, and students -- while directing specific intervention activities toward only the parent or home subsystem. Coordination may not be enough; active participation by the key players in a student's life -- parents and teachers -- may be necessary to see changes in classroom functioning. A more effective strategy might have been to include teachers also as targets of the consultation. Development of systematic and consistent practices for homework, including kind and level of difficulty of assigned work, were critical issues for teacher consultation. Adopting an ecosystemic approach that included active participation by teachers and parents to solve shared concerns about students could have increased parent-teacher follow through and eliminated some misperceptions and miscommunications between the two subsystems.

Finally, by focusing to a greater extent on the parent system, it was difficult for consultants to stay focused on goals of the intervention. Families had numerous issues, concerns, and questions related to their children's educational programming. The several requests for the consultants to become involved in IEP evaluations and revisions, and in independent assessments of students in their programs suggested a parental need for problem solving and resolution, a need that was broader than what could be provided by the home-based consultation intervention. In the absence of this problem solving forum, it often was difficult to maintain the focus on the more narrowly specified activities of the intervention. And, the degree of family conflict,

concerns about school performance, and lack of teacher follow through added other issues that parents wanted to discuss during the hour consultation.

The examination of home and school factors that facilitate or inhibit completion of academic work and development of study habits yielded important information worthy of further investigation. Assigning homework results is an automatic link between home and school. Too often homework is avoided in schools because it is the stimulus for conflict. In this study, despite some coordination, homework was an area of conflict for some students and parents. Personal belief systems of parents and teachers may have influenced the systematic implementation of the homework. Recall Bill, whose parents would not engage in a 20 minute reading session for pleasure because "He's 10 years old and doesn't need us there. We'll help him with a word when he needs help." Recall Lisa, whose teachers did not think that Lisa needed to be given homework. Recall Kyle, whose teacher believed showed behaviors that said "If I don't comply, I won't have to do this anymore." Perhaps parents' and teachers' perceptions of homework -- what it is, how it should be handled, and its benefits -- are key variables.

Follow through was a problem for both parents and teachers in this study. In reflecting on the nine case study descriptions, it seems that home and school factors that facilitate or inhibit the completion of academic work can be discussed in terms of consistency of approach, specificity of information, and level of intervention.

Consistency of approach is important. Parent monitoring of homework completion for the dual benefits of providing extra academic student practice and fostering an attitude of educational importance is necessary. However, both parents and teachers must do their part; teachers must "deliver" too. The willing parent soon becomes discouraged if the child does not have homework when it is expected. Similarly teachers become discouraged and defeated when students are not prepared for class. Students with learning and behavioral handicaps need the consistent

instructional support of parents and teachers. Parents and teachers need to work toward common goals. Recall Bill, where the primary goal of the school was social development and the primary goal of the parents was academic progress. Recall Lisa, where the goal of the parents was academic and the parents' perception of the school's goal was development of self-esteem. And, recall the benefits for Roy, where parent and teacher goals were congruent and coordinated. Without this consistent coordinated support, students flounder, learn to manipulate to avoid task completion, and learn to minimize the importance and value of school work.

Specific information needs to be exchanged between parents and teachers. For parents to monitor task completion effectively, they need specific information from teachers on an ongoing basis, not just in the beginning of the year. Parents need to know and understand specific teacher expectations, which, unfortunately vary by teacher. General expectations such as "complete assigned work at home" may be too general to establish consistent follow through by parents. Teachers also need specific information; information about the amount of time devoted to homework completion and the degree of parental assistance required are helpful for teachers to maintain an appropriate instructional match. Epstein (1986) has developed, as part of the TIPS process (Teachers Involve Parents in Schoolwork), a communication form for parent-teacher use. Specificity is critical to avoid homework as a conflict area.

Finally, as homework issues are addressed by educators, the level of intervention should be considered. Providing specific information to parents and systematic exchange of information between parents and teachers may be easier if schools adopt a uniform approach to homework. Benefits of creating a homework policy in a school include opportunity for improved parent-teacher communications, establishing an attitude that learning is important, and informing parents about children's school work and classroom content. Recall Jake, whose home life was so

active, homework was "lost" among the many activities until its importance was elevated to a priority position. Also (with respect to the current study), a homework policy implemented for all students within a classroom may have decreased the problems of treatment integrity encountered as teachers were asked to individualize their ordinary classroom practice. Teachers can individualize only "so much"; given that homework is a strong, consistent correlate of academic achievement (Walberg, Paschal, & Weinstein, 1985), establishing a systems level intervention makes sense and has intuitive appeal. The added benefit of using homework to inform parents about school work and to increase communication among parents, teachers, and students about learning, lends to support the argument for creating a systems level homework policy.

This study is classic: when children have difficulty performing in school, peripheral issues surface. It seems that school failure breeds a "search for the cause" mentality, which often results in finger pointing between the two subsystems (Tucker & Dyson, 1976) or placing the attributions for homework completion difficulties on the student, as in the case of Kyle. One way to prevent or reduce this phenomenon may be for parents and teachers to engage in a mutual problem solving process for the specific concern at hand. Intervention plans are often complicated or sidetracked by additional peripheral information; the result is that teachers and parents continue to admire the problem.

Problem solving takes time, but time spent problem solving despite parents' and teachers' busy lives and schedules, may far exceed the insidious effect of blame, discouragement, and miscommunication. One merit of the conceptual aspect of this study was the acknowledgment that parents make a difference in the amount students learn. One flaw of the conceptual aspect of this study was focusing more on the parent subsystem, and thereby creating an imbalance in the total system (parent and teacher). The parent-teacher link occurs when a child becomes a student, and

the challenge for parents and teachers, who are the most significant people in a student's life, is to create a vehicle for sharing specific information and consistently working together to improve educational outcomes for students. School level intervention approaches, such as homework policies and problem solving teams, may help parents and educators meet the challenge.

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Appendix A

Child Interview

Student Attitude		Strongly Disagree 1	2	3	4	Strongly Agree 5
1.	I get along with my teachers.	1	2	3	4	5
2.	School is boring.	1	2	3	4	5
3.	I enjoy reading.	1	2	3	4	5
4.	I think that I am pretty good at my schoolwork.	1	2	3	4	5
5.	I'm sorry when school is over for the day.	1	2	3	4	5
6.	In this class we spend too much time doing reading.	1	2	3	4	5
7.	If I don't understand something in class, I am too scared to ask my teacher for help.	1	2	3	4	5
8.	My school work worries me.	1	2	3	4	5
9.	When the teacher asks me a question about my work I get very upset.	1	2	3	4	5
10.	My assignments are very interesting.	1	2	3	4	5
11.	Children in my classes who can't do their schoolwork feel badly.	1	2	3	4	5
12.	My teacher is interested in me.	1	2	3	4	5
13.	School is fun.	1	2	3	4	5
14.	I find a lot of schoolwork hard to understand.	1	2	3	4	5
15.	I work and try very hard in school.	1	2	3	4	5
16.	I am very good at reading.	1	2	3	4	5
17.	Going to school is a waste of time.	1	2	3	4	5
18.	I'm useless at schoolwork.	1	2	3	4	5
19.	I like school.	1	2	3	4	5
20.	I would leave school tomorrow if I could.	1	2	3	4	5
21.	Doing well at school is most important to me.	1	2	3	4	5

22.	At school they make you do things you don't want to do.	1	2	3	4	5
23.	I enjoy it when the teacher asks me questions.	1	2	3	4	5
24.	It doesn't bother me if I get my work wrong.	1	2	3	4	5
25.	I would like to be very good at schoolwork.	1	2	3	4	5
26.	If I don't understand something, I ask the teacher.	1	2	3	4	5
27.	My teacher likes me.	1	2	3	4	5

Student Cognitions		Usually	Often	Sometimes	Never
28.	When the teacher gives a homework assignment, do you write down what you are supposed to do?	4	3	2	1
29.	How often do you remember to bring your books and paper and instructions home with you?	4	3	2	1
30.	Do you have a set time and place to do your homework? When? Where?	4	3	2	1
31.	How often do you remember to start your homework?	4	3	2	1
32.	When you start your work, can you find all of your material?	4	3	2	1
33.	What do you do when you don't understand how to do the homework assignment? (Probe for: Ask parents for help, ask siblings, call a friend, look back at notes...)	4	3	2	1
34.	Do you think about how the teacher worked similar problems or examples?	4	3	2	1
35.	Do you go back and read the instructions again?	4	3	2	1
36.	How much time do you usually spend on your homework?	4	3	2	1
37.	Do you find our that you didn't understand the lesson as well as you though you did while the teacher was teaching?	4	3	2	1
38.	Do you check back over your answers when you have finished your worksheet problems?	4	3	2	1

39.	Do you know if you have done your work right or wrong?	4	3	2	1
40.	Do you finish your assignments?	4	3	2	1
41.	How often do you remember to take your homework back to school?	4	3	2	1
42.	Does your teacher usually check the homework? Do you find out how well you did on it?	4	3	2	1

43. Homework assignments in the school usually

a) help us understand
b) have little to do with what we do in class
c) are just busywork

44. The amount of homework I am given is

a) too much
b) just right
c) too little

Appendix B

Parent Interview

Homework Intervention

1. What is your sense about the amount of homework _____ is given? (too much, too little, right amount)

2. Describe what happens when it is time for _____ to do his/her homework? (Probe for • do parents tell when to start • amount of prompting needed for child to stay on task • specific time and place for homework • who helps with homework and how much • does anyone check homework when it is done • parent-child interaction is a source of conflict, enjoyment, etc.)

3. What is _____'s ability to organize homework materials both coming home from school and returning homework to school? (Probe for: forgetting materials, losing materials, sloppy work, on-time/late assignments)

4. What kinds of feedback do you and your child get from the teacher regarding homework? (Probe for: feedback regarding quality, neatness, completion, accuracy)

5. Is the child held accountable by the teacher for incomplete, inaccurate or sloppy work?

6. Is there recognition for homework well done or consequences when homework is not completed satisfactorily here at home?

7. Does _____ read at home? If yes, what does he/she usually read? How many hours per week are spent in reading?

8. Do you have the time to read at home? If yes, how many hours/week would you generally spend reading?

9. Did_____ enjoy being read to or enjoy books when he/she was younger?

On Attitude:

10. In general, what is your perception of _____ 's school experience these past few years?

11. Have you been fairly satisfied with _____ 's school experience? (i.e., teachers, programs)

12. How would you describe _____ 's attitude toward school? Toward homework?

Appendix C

Teacher Interview

Homework Intervention

1. What kinds of problems of behaviors does _____ exhibit that led to his/her referral for this intervention?

2. What are his/her strengths or special interests?

3. What are your usual practices regarding homework and/or having students complete work at home that was not finished during the school day? (Probe for: frequency, length of assignment, whether all students receive the same assignment, procedures for checking homework and providing feedback).

4. How do expectations for homework and work completion differ for _____ than for the average student in your class?

5. How well does _____ comply with assignment homework tasks?

6. In general, how much of the homework assignment does he/she complete and with what accuracy?

7. What are the child's study habits like? (Probe for: does the child write down assignments, bring work home, lose papers, forget to do assignments, ask for help when needed . . .).

8. What are you hoping this intervention can do for _____?

9. Do you have any ideas about what strategies/interventions might be helpful in reaching these goals?

10. What strategies have you tried in helping _____ improve his/her school performance? Have these been helpful?