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AUTHOR Fuchs, Douglas; Fuchs, Lynn S.  
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## ABSTRACT

The Mainstream Assistance Team (MAT) project is a 3-year research program designed to develop, implement, and validate a prereferral intervention model. The model is a least-restrictive, preventative, ecologically-based, problem-solving approach, using a multidisciplinary team composed of a school psychologist, special educator, and general educator. The program's rationale focuses on the increasing numbers of identified mildly handicapped students and the importance of prereferral assessment and intervention in general education classrooms. The social, political, and bureaucratic dimensions of the Tennessee school district setting for which the MAT was developed are considered in the program's design. Major dimensions of the MAT include: behavioral consultation; component analyses of three increasingly inclusive versions of the stages of behavioral consultation (problem identification, problem analysis, plan implementation, and problem evaluation); written scripts to guide consultants' verbal behavior during interviews or meetings; and outcome measures. The implementation process involves selecting schools, consultants, teachers, and pupils; training the consultants; assigning teachers and scripts to consultants; and developing specific procedures. Evaluative data show apparent inconsistency between teacher ratings and classroom observations, and three explanations for this are discussed. Future directions for the MAT project focus on strengthening project-related interventions by requiring use of contingency contracts and data-based monitoring procedures. (JDD)

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Mainstream Assistance Teams to Accommodate Difficult-To-Teach Students in General Education

Douglas Fuchs and Lynn S. Fuchs

George Peabody College of Vanderbilt University

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Requests for reprints should be addressed to Douglas Fuchs, Department of Special Education, Box 328, George Peabody College, Vanderbilt University, Nashville, TN 37203.

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## Abstract

The Mainstream Assistance Team Project (MAT) represents an effort to develop, implement, and validate a prereferral intervention model. In this paper, we describe the MAT as it was implemented during the first year of a three-year project. Specifically, we first present a rationale for prereferral assessment and intervention. Second, we discuss the social, political, and bureaucratic dimensions of the particular setting for which the MAT was developed. Next, we delineate major dimensions of the MAT. Fourth, we outline the implementation process. Finally, we present a summary of our evaluative data on the MATs and discuss implications of these data for implementing and conducting research on prereferral intervention in school settings. Mainstream Assistance Teams to Accommodate Difficult-To-Teach Students in General Education

Since passage of Public Law 94-142, there has been a sharp increase in special education<sup>1</sup> enrollment. It is likely that this increase partly reflects attempts to ensure that handicapped children receive an appropriate education. Nevertheless, there is growing suspicion that (a) too many students are being identified as handicapped and (b) this overidentification or misidentification exemplifies general education's failure to accommodate the heterogeneous nature of its mainstream population. In other words, many view general education as depending more and more on special education to deal with its difficult-to-teach pupils, thereby becoming increasingly exclusive in terms of the students judged appropriate for mainstream education.

In response to this apparent trend toward exclusivity, a number of strategies recently have been developed to strengthen general education's capacity to deal more effectively with student diversity. One such strategy is prereferral intervention. We currently are involved in a 3-year program of research, funded by the Office of Special Education in the U.S. Department of Education, which aims to develop, implement, and validate a prereferral intervention model entitled the Mainstream Assistance Team Project (MAT).

The general purpose of this paper is to describe the MAT, including a detailed description of how it has worked during our first year. Specifically, we first present a rationale for prereferral assessment and intervention. Second, we discuss the social, political, and bureaucratic dimensions of the particular setting for which the MAT was developed. Next, we delineate major dimensions of the MAT such as our use of Behavioral Consultation and written scripts to assure fidelity of the consultation process. Fourth, we outline the implementation process, including a description of how we involved schools, consultants, general educators, and

students and how we evaluated the effectiveness of the project. Finally, we present a summary of our evaluative data on the MATs and discuss implications of these data for implementing and conducting research on prereferral intervention in the schools.

### Rationale

#### Increasing Numbers of Mildly Handicapped Students

Since the U.S. Department of Education's first child count in 1976-1977, the number of students enrolled in special education has grown each year, with an increase of 16% from 1976-1977 to 1982-1983. Dramatic increases in identification of mildly and moderately handicapped pupils account for much of the reported growth (see Annual Report to Congress, U.S. Department of Education, 1984). It is probable that, at least to some degree, this results from legal, legislative, and professional initiatives directed toward assuring handicapped youth a free and appropriate public education. However, there is growing suspicion, both within the Federal government (see Annual Report to Congress, U.S. Department of Education, 1984) and among professionals (see, for example, Gerber & Semmel, 1984), that too many children are identified as handicapped. There are numerous and obvious reasons for the undesirability of incorrect identification. For example, it causes unnecessary separation and stigmatization of children, disruption and fragmentation of school programs, and additional costs to school districts.

These and other negative effects of misidentification argue that we attempt to understand reasons for observed increases in the mildly and moderately handicapped population. There are at least two important explanations. First, classroom teachers are referring increasingly large numbers of children for special education evaluation (Ysseldyke & Thurlow, 1983; Ysseldyke, Thurlow, Graden, Wesson, Algozzine, & Deno, 1983). Second,

comparatively few handicapped students exit special education (e.g., Walker, Reavis, Rhode, & Jenson, in press; Weatherly & Lipsky, 1977; Ysseldyke & Thurlow, 1984). While these interconnected explanations appear essential to understanding why special education enrollments are expanding, we believe the first one, increasing teacher referrals, is more important. Thus, during the first year of our project, we focused on this factor.

Frequency of teacher referrals. It has been estimated that, since 1977, the average number of referrals initiated each year by classroom teachers has nearly doubled, from 2.2 to 4.0 (Ysseldyke & Thurlow, 1983). Furthermore, evidence indicates that teacher referrals are crucial to the ultimate identification of pupils as handicapped. Algozzine and Ysseldyke (1981) reported that, over a 2-year period, 92% of referred students were evaluated and 73% of evaluated students were placed in special education. Similarly, Foster, Ysseldyke, Casey, and Thurlow (1984) found that 72% of students referred were placed in special education and that most were placed in the special education category for which they had been referred. Additionally, Ysseldyke, Algozzine, Regan, and McGue (1981) reported that, when faced with psychometric profiles indicating normal performance, "expert" diagnosticians labeled over 50% of the student profiles as eligible for special education and cited teacher referral reasons as justification for their referral decision.

Arbitrariness and precipitousness of teacher referrals. Despite the apparent confidence that diagnosticians and special educators place in classroom teachers' referrals, empirical evidence indicates that teacher referrals often are arbitrary, if not biased (Lietz & Gregory, 1978; Tobias, Cole, Zibrin, & Bodlakova, 1982; Tucker, 1980; Ysseldyke & Thurlow, 1984). Investigations have found that minority pupils, boys, and siblings of children identified as learning disabled are overrepresented when referrals are

initiated by teachers rather than based on objective measurement (see Marston, Mirkin, & Deno, 1984). Additionally, contrary to reasons typically cited on referral forms, general educators frequently refer students primarily because of disturbing behaviors (Algozzine, 1977), which (a) tend to be defined idiosyncratically (Gerber & Semmel, 1984) and (b) often represent situationally specific problems rather than enduring student characteristics (Balow & Rubin, 1973).

In addition to findings that teacher referrals often are arbitrary, if not biased, evidence suggests teachers frequently make referrals in a precipitous, rather than a deliberate, manner. It seems that classroom teachers typically make few, if any, substantial programmatic changes prior to initiating referral (Ysseldyke, Christenson, Pianta, Thurlow, & Algozzine, 1982; Ysseldyke & Thurlow, 1980). The frequently observed result is that a high percentage of teacher referrals fails to meet local eligibility criteria (Marston et al., 1984; Shepard, Smith, & Vojir, 1983). Findings of arbitrariness and precipitousness in referral-related decisionmaking suggest many classroom teachers do not attempt to accommodate difficult-to-teach students. This is corroborated by a related research literature demonstrating that teachers deliver qualitatively and quantitatively different and inferior instruction to low than high achieving pupils (Allington, 1981; Mosenthal, 1984).

#### Prereferral Assessment and Intervention

Analysis of the often arbitrary and precipitous nature of the referral-to-special education placement process highlights the importance of modifying conventional practices in educational assessment to permit prereferral assessment and intervention in general education classrooms. Such activity aims to enhance general educators' capacity to instruct and manage

difficult-to-teach pupils, thereby reducing the number of students referred for formal assessment and possible placement in special programs.

Traditional educational assessment. According to Salvia and Ysseldyke (1985), traditional purposes of educational assessment are to specify and verify students' problems and formulate decisions about referral, classification, instructional planning, and program modification. The referral and classification phases constitute an identification process in which pupils' performance on nomothetic aptitude and/or achievement measures typically are compared to identify "outliers" who warrant placement in special programs. Contrastingly, the instructional planning and program modification phases together represent a process whereby assessment is relatively idiopathic and related to the content and methods of instruction.

Prereferral assessment. The concept of prereferral assessment requires that we reconceptualize the nature of educational assessment in at least two important ways. First, the concept of prereferral assessment explicitly refers to activity that is preliminary or preparatory to teacher referral, which formalizes the decision whether to refer. Second, and in contrast to activity conventionally associated with referral and classification phases of assessment, prereferral assessment represents an opportunity to collect data helpful to the development of classroom-based interventions. Toward this end, information frequently is necessary about (a) social and instructional dimensions of the classroom and (b) students' social behavior and/or performance in curricula used in the classroom. In addition to its potential contribution to the creation of classroom-based interventions, prereferral assessment signals effort to "fine-tune" or validate these interventions. Thus, prereferral assessment typically is conceptualized as intervention oriented, thereby necessitating the collection of data that are ecologically

sensitive and curriculum based. Moreover, such data may be used formatively to fashion classroom-based modifications that permit general educators to accommodate greater student diversity.

Prereferral intervention. There are at least five characteristics of the prereferral intervention model, a couple of which already have been discussed. First, it is consonant with the least restrictive doctrine set forth in PL 94-142, requiring educators to attempt to accommodate difficult-to-teach students' instructional and social needs in the most "normal" setting possible. Second, and related to the preceding point, prereferral intervention is meant to be preventative. According to Graden, Casey, and Christenson (1985), it focuses on obviating (a) inappropriate referral and placement of students in special programs and (b) future students' problems by enhancing general educators' capacity to intervene effectively with diverse groups of children.

Third, although some general educators may choose to develop and implement prereferral interventions independently, such activity typically is "brokered" by one or more special service personnel, like school psychologists and special educators, acting as consultants. Usually working indirectly with targeted pupils through collaborative consultation with the classroom teacher, these consultants often employ a problem solving approach borrowed from Behavioral Consultation to design, implement, and evaluate interventions (Curtis, Zins, & Graden, 1987). Fourth, prereferral intervention represents immediate assistance to pupil and teacher, since support is provided at the point at which the teacher contemplates referral. Finally, the prereferral intervention model encourages use of an ecological perspective that identifies teacher, physical setting, and instructional variables as well as individual learner characteristics as possible causes of student difficulties. In other

words, rather than assume the source of student problems resides within the child, the prereferral intervention model challenges educators to investigate a larger context for the source(s) and solution(s) to pupil difficulties.

As indicated by Curtis, Zins, and Graden (1987), there are many ways to implement a prereferral intervention program. Two alternate approaches are for special service personnel to assist classroom teachers by working alone or as a part of a team. Cantrell and Cantrell (1976), Graden, Casey, and Bonstrom (1985), and Ritter (1978) have described programs in which support personnel consult independently; in contrast, Chalfant, Pysh, and Moultrie (1979) and Maher (cited in Curtis, Zins, & Graden, 1987) have mobilized teams of various professionals to deliver prereferral intervention.

MATs. We incorporated into the MAT all of the aforementioned characteristics of the prereferral intervention model, including an ecological perspective and collaborative problem solving version of consultation. We also borrowed salient programmatic features developed by several investigators who have implemented and studied the effects of prereferral intervention programs. As an example, following the pioneering work on prereferral intervention of Cantrell and Cantrell (1976), we constructed the MAT to reflect strongly a behavioral approach to consultation. Additionally, like Chalfant et al. (1979), the MAT involves teams of special support personnel providing assistance to general educators.

However, the MATs are not merely reiterative of others' prereferral intervention programs. We believe our version of prereferral intervention is distinctive in four ways. First, it systematically employs a multidisciplinary team composed of a building-based school psychologist and special educator as well as the general educator with a targeted difficult-to-teach student. Second, team members follow written scripts that

presumably contribute to proper use of Behavioral Consultation. Third, the MAT project was designed in part as a component analysis of three increasingly inclusive versions of Behavioral Consultation to identify a most effective and efficient process of consultation. Last, in contrast to many investigations of school-based consultative projects, our outcome measures included indices of student performance and teacher behavior as well as rate of teacher referrals to special programs.

With these few remarks on MATs serving as an introduction, we now turn to a more detailed description of our prereferral intervention approach. However, since it was developed for a particular place and time, rather than represent a model program with universal generalizability, it is important that we first describe the setting to which the MAT conformed.

### Setting

Two policies, one statewide and the other local, influenced the design of our prereferral intervention project. The first was Tennessee's newly initiated Career Ladder Program; the second was the way prereferral intervention was viewed officially in the district in which we planned to implement the project.

#### Tennessee Career Ladder Program

Definition and rationale. The Career Ladder law, SB 1, was enacted in March 1984 during a special session of the Tennessee legislature. It is regarded as the most ambitious, controversial, and expensive component of former Governor Lamar Alexander's Better Schools Program. The law calls for a five-step ladder tied to more money for, and more rigorous evaluations of, general and special educators and administrators in Tennessee's elementary and secondary public schools (Pipho, 1986). Governor Alexander's argument for this merit system started with the assertion that Tennessee's most serious

problems are per-capita income (among the bottom 10 states in the U.S.) and rate of unemployment (among the top 10 states in the U.S.). He believed the key to more and better jobs for Tennesseans is stronger job skills. Stronger job skills, he claimed, require more effective schools, which, in turn, depend on more capable teachers (see Parish, 1983).

Public support. This logic won grass roots support for the Career Ladder Program as well as its passage in the state legislature. In a 1983 statewide survey (cited in Parish, 1983), 73% of all respondents favored the Career Ladder Program. To help finance the merit system as well as other components of the Better Schools Program, the legislature increased the state sales tax by one penny. In 1985 this one-cent increase produced about \$325 million in additional revenue, with elementary and secondary education receiving \$165 million (Odden, 1986).

Teacher reaction. In contrast to overwhelming public support for the Better Schools and Career Ladder Programs, Tennessee's teachers and their state education association were, and continue to be, strongly opposed to them. At least three factors have contributed to their opposition. First, they were not involved through their professional organizations in the formulation of the Programs (Pate-Bain, 1983). Second, the Better Schools package requires yearly criterion-referenced testing in several grades and pupil promotion based on these test scores. Since such testing tends to influence the nature of many educational goals and objectives as well as the selection of instructional materials, content, and activities, many teachers believe their professional autonomy has been seriously curtailed.

Finally, and probably most important, many Tennessee teachers, like the majority of America's educators (see Gallup, 1984), dislike a merit pay system. Their antipathy for incentives appears based on the beliefs that (a)

they will be evaluated unfairly and (b) merit pay will cause morale problems. Additionally, they were resentful that the Career Ladder Program initially permitted identification of only 15% of the workforce as master teachers, that is, professionals' judgment of placement at the highest rung on the ladder (Pate-Bain, 1983). In fact, during the 1984-85 school year, 65% of 3,100 Tennessee teachers who applied and were evaluated for the top two rungs of the career ladder failed to qualify.

Teacher unrest seemed uppermost in the minds of local school officials with whom we spoke in Fall, 1985 as we explored ways to implement the MAT project. Describing their teachers as feeling undervalued, overworked, misunderstood, and alienated, a middle school director counseled that, if we wished to secure teacher cooperation, we could not ask much of them in terms of time and energy. This advice was repeated by several officials in the school district's central office.

The message was articulated more pointedly by building principals. Many communicated a fear of aiding and abetting a project that would be perceived by teachers as one more intrusive, disruptive, time-consuming evaluative exercise with which to contend. However, the principals also recognized that the MAT project addressed a major problem that they and their teachers inevitably would be required to confront; namely, an unprecedented number of retained, difficult-to-teach pupils, resulting from the new statewide policy requiring that promotion be tied to performance on criterion-referenced tests. If the MATs indeed could help teachers deal with such students, then the project would be highly valued. Nevertheless, several principals rejected the project outright. The others gave conditional consent: "If it's allright with my teachers, it's OK with me."

Special Education's View of Prereferral Intervention

Administrators in special education liked the MAT project for several reasons. First, they claimed to support in principle the preventative thrust of the project. Second, they applauded the fact that the MATs were designed to draw special and general educators together for purposes of collaborative problem solving. Such a feature, they said, was sorely needed in a school system in which special and general education operate so much apart. Relatedly, they asserted many general educators have much to learn from special education and that, within the framework of the MATs, general education might develop a more positive regard for special education. Finally, they predicted that their teachers would enjoy consultation; it would provide many an opportunity to learn new, important skills and try something different.

However, two important facts served as brakes on their enthusiasm. First, they related that special education teachers in their district have been misused by principals who have required them to serve as aides in general education and in other positions having little to do with special education. To discourage such practice, the special education administrators said they repeatedly have argued that their teachers may be used only to further the educational development of handicapped pupils. Thus, although supportive of prevention as an idea, the administrators feared their support of special educators' participation on the MATs, which address the needs of nonhandicapped students, might blunt a major distinction they had worked so hard to sharpen.

The second reason, expressed implicitly by the administrators, related to the formula used by the state department of education to reimburse local school districts' special education costs. The reimbursement formula incorporates 10 service options that range in cost from \$252.44 (for

consultation to a classroom teacher) to \$12,987.96 (for residential placement). Despite the panoply of services represented by this reimbursement formula, all must target a handicapped child. There is not 1 cent of reimbursement for the special education teacher who consults with a general educator who requested help to address the needs of a difficult-to-teach nonhandicapped student.

In other words, the administrators literally could not afford to reduce the number of handicapped children with whom their teachers worked so they could participate in a large-scale prevention program of prereferral intervention. However, following several discussions, the administration gave permission for a limited number of special educators to participate in the project, providing participation would be voluntary and that teachers understood there would be no concomitant reduction in direct caseloads.

#### Relation between Setting and MAT Project

We took to heart what we learned from school officials about prevailing teacher attitudes, inter-departmental relations, and administrative policies. On balance, such descriptions did not augur well for our school-based consultation project: General educators did not appear in an overly generous mood and, even if they had been, special educators and, we later learned, school psychologists had scant time to consult with these teachers. We came to a simple and, we believe, important conclusion. If the MAT project were to be effective, it had to be efficient. This conclusion is consonant with the work of Witt (1986), documenting that teachers "are very concerned with the amount of time, personnel, and material resources that an intervention is likely to require" (p.39).

In search of economy, we pursued several independent avenues. First, we selected a structured and explicit model on which to base our consultation

approach. Second, we developed relatively prescriptive MAT materials and activities. Third, we attempted to present these materials and activities in an organized fashion. Fourth, as part of our project evaluation, we designed an analysis of major components of the consultation process, hoping to distinguish indispensable from dispensable aspects of school-based consultation. Finally, we attempted to recruit special education teachers and school psychologists who were "quick studies" and hard workers. These and other procedural and substantive facets of our MATs are described below.

### MATs: Important Dimensions

#### Behavioral Consultation

We based much of our MAT activity on Behavioral Consultation because the process appears straightforward and at least limited support for its effectiveness exists.

Definition and characteristics. Behavioral Consultation (BC), like alternate well-known consultation models of Mental Health and Organizational Development, involves a triadic network (consultant, teacher, and pupil) and indirect service. Unlike these models, BC has roots in the learning theory tradition of Watson, Skinner, and Bandura. Not surprisingly, it emphasizes the role of environmental factors in controlling behavior. That is, it encourages exploration of antecedents and consequences of behavior in naturalistic settings to permit identification of variables influencing the frequency, rate, intensity, and/or duration of problem behavior. Behavioral consultants employ respondent, operant, and modeling procedures to change disturbing behavior.

A second feature of BC is that it depicts the consultee, and often the student, as a problem solver who participates as a coequal in designing intervention strategies. Third, BC links decisionmaking to empirical

evidence. The model calls for the design and implementation of interventions to be based on behavioral data and empirically validated laws of behavioral change. Fourth, BC evaluations require focus on goal attainment and plan effectiveness. Finally, BC is conducted within a series of four well-defined, interrelated stages: problem identification, problem analysis, plan implementation, and problem evaluation. These stages are described below.

Evidence of effectiveness. The effectiveness of BC has been evaluated experimentally more often than the success of alternate consultation models (Alpert & Yammer, 1983). Although some of this efficacy research suffers from conceptual and methodological limitations (see Alpert & Yammer, 1983; Meyers, Pitt, Gaughan, & Freidman, 1978), we are impressed with the steadily growing corpus of school-based investigations indicating its success in increasing pupils' attention, study behavior, completion of homework assignments, and mathematics and compositional response rates and reducing lateness, out-of-seat behavior, general disruptiveness, stealing, chronic absences, and digit reversals (e.g., Tombari & Davis, 1979).

#### Component Analyses of BC

Stages of BC. As mentioned, BC is conducted during a series of four interrelated stages: problem identification, problem analysis, plan implementation, and problem evaluation. The consultant guides the teacher through a majority of these stages in a succession of structured interviews in which specific objectives must be accomplished before consultation can proceed to subsequent stages. The major objectives of the first stage, problem identification, are to define the problem behavior in concrete, observable terms, obtain an estimate of the frequency or intensity of the behavior, and tentatively identify the environmental events surrounding the problem behavior.

In the second stage, problem analysis, the goal is to validate the existence of a problem, discover factors that may influence problem solution, and develop with the teacher an intervention plan that directly addresses the problem. During the third stage, plan implementation, the consultant makes sure the intervention plan is implemented as agreed and is functioning properly. Although plan implementation is primarily the responsibility of the teacher, the consultant monitors details of implementation. The goal of the final stage, problem evaluation, is for the consultant and teacher collaboratively to evaluate the effectiveness of the implemented intervention and, if it has proved ineffective, to determine how it should be modified.

Rationale for component analysis. An apparent basic and widespread presumption in the literature on BC is that all four stages constituting the model are important; none is indispensable (e.g., Gresham, 1982). Although Bergan and associates (e.g., Bergan & Tombari, 1976; Tombari & Davis, 1979) have indicated that the initial stage may be most important to consultation outcomes, we are unaware of any systematic attempt to determine the relative value of the various stages or components of the BC model.

The absence of component analyses seems to reflect a more general dearth of process-outcome research in the consultation literature (e.g., Alpert & Yammer, 1983; Medway, 1982; Meyers, et al., 1978; Witt & Elliott, 1983). This is unfortunate, since process-outcome research, including component analyses, can help identify dispensable facets of the consultation process, leading to approaches that simultaneously are effective and efficient. Operating in an environment relatively inhospitable to consultation, we were eager to develop efficient consultative procedures. Toward this end, as well as in hopes of contributing to the pertinent literature, we undertook a component analysis of the BC model.

Description of component analysis. We decided to explore the importance of the various components of the BC model by creating three increasingly inclusive versions. In the least inclusive variation, the consultant and teacher worked collaboratively on problem identification and analysis. However, the consultant did not help the teacher implement the intervention developed during the problem analysis stage. Moreover, the consultant and teacher did not evaluate intervention effects in any formative fashion, precluding an opportunity to modify or fine-tune the intervention. In other words, our first version of the model incorporated only the first two of the model's four stages.

The second variant of BC also included the first two stages. Additionally, it required the consultant to make a minimum of two classroom visits to assist the teacher with the intervention. However, like the first version, this second variation of the model did not include a formative evaluation stage. Thus, the second version comprised the first three stages of BC. Finally, our third and most inclusive version required consultant and teacher to formatively evaluate intervention effects, and, therefore, incorporated all four stages of the BC model.

### Written Scripts

Three of four BC stages are implemented during the course of formal interviews or meetings. (Stage 3, plan implementation, typically is conducted in the classroom.) Gresham (1982) has provided one of the more comprehensive descriptions of the substance to be covered during these meetings. Inspired by the Cantrell's Heuristic Report Form (see Cantrell & Cantrell, 1980; 1977), we recast Gresham's materials into written scripts that guided much of our consultants' verbal behavior. The scripts provided them with an efficient means to create rationales and overviews for the meetings; to establish

structure and maintain a logical and quick-paced "flow;" to obtain succinct descriptions of the classroom environment, qualitative and quantitative evaluations of most difficult-to-teach students, and logistical information such as days and times when the target child could be observed and tested; to check, and systematically double-check, that key information such as descriptions of the target pupil's behavior was sufficiently elaborate and precise to permit easy identification during the consultant's classroom observations.

In addition to promoting efficiency, we believe the scripts enhanced fidelity of treatment. That is, assuming (a) the scripts accurately reflected the BC model and (b) consultants faithfully followed the scripts, we could be confident that the model was implemented as intended. This fidelity of treatment issue was especially important to us since the majority of our consultants lacked formal consultation training and experience. Finally, each of our three versions of BC had its own script. In an Appendix, we have included an unabridged copy of Meeting #1, Problem Identification, which is the only meeting that is the same across the three treatments.

#### Outcome Measures

We employed a wide range of outcome measures to evaluate effects of our MAT consultation activities. These measures included The Revised Behavior Problem Checklist (Quay & Peterson, 1983), The Teacher Efficacy Scale (Gibson & Dembo, 1984), and the Stallings Observation Instrument (Stallings, 1983). Rather than discuss these diverse data, we limit our description here of MAT effects to three additional and, we believe, most pertinent measures: consultants' global evaluations, teacher ratings, and direct observations of pupil classroom behavior.

Consultant evaluations. During a debriefing interview following

completion of MAT activities, consultants rated the effectiveness of the MAT from (a) their own perspective and (b) the point of view of each of their teachers. Consultants were given a 4-point scale, where: 1 = unqualified failure ("The MATs made no impact on student or teacher behavior. It was really a waste of everyone's time."); 2 = qualified failure ("The MATs were responsible for minor positive changes in student or teacher behavior, but these changes were not really sufficient to make an important difference in the classroom."); 3 = qualified success ("The MATs resulted in real, if not dramatic, positive change in student or teacher behavior. It made a noticeable and welcomed difference to participants."); 4 = unqualified success ("The MATs lead to dramatic positive change in student or teacher behavior. It made a very important difference in the classroom.").

Teacher ratings. Teachers identified problematic social and/or academic behaviors of their most difficult-to-teach students. Then, using a Likert-type continuum, they rated each behavior in terms of severity, manageability, and tolerableness. The rating scales were incorporated into the written scripts and administered by the consultants prior to and following completion of consultation.

Classroom observations. We developed an observation procedure that combines features of (a) systematic time-interval recording and (b) anecdotal note taking on antecedents and consequences to the targeted classroom behavior. Consultants were instructed (via audiotape and earphones) to observe on a rotating basis the target student and two randomly selected same-sex peers. Each target child and classmates were observed during two 30 minute sessions prior to MAT activity and two 30 minute intervals following MAT activity. Consultants were trained to a minimum level of .80 inter-rater agreement, which was maintained during pre- and post-observations.

This hybrid time-interval/anecdotal observation procedure (hereafter referred to as Antecedent-Behavior-Consequence Recording [ABC]) was developed with three objectives in mind. First, the time-interval aspect would quantify the seriousness of the target child's problem behavior as well as determine and quantify appropriate goals. Second, generation of time-interval data on a pre- and post-consultation basis represented an index of MAT effectiveness. Third, the anecdotal dimension of the ABC observation procedure would help consultants identify antecedent and/or consequent events surrounding problem behavior that might become the focus of intervention activity.

#### MATs: Implementation

##### Participants

Schools. For about one month, we spent much of our time in discussions with central administrators in the public school system in which we planned to implement the MAT project. These administrators, representing general and special education as well as school psychology, helped identify a pool of competent, hard-working, personable principals and building-based support staff. From central administration we also obtained for every school in the district data on (a) size of enrollment, (b) number of referrals to special education, (c) up-to-date Stanford Achievement Test (SAT) scores in reading and math, and (d) percentage of black students enrolled.

Following conversations with principals, general education teachers, and building-based support staff, we recruited four inner-city middle schools to serve as project schools. Next, five control schools were selected that matched project schools in terms of (a) location (inner-city), (b) level (middle schools), (c) average SAT reading and math scores, (d) student enrollment, (e) proportion of black students enrolled, and (f) annual rate of referrals to special education. In comparison to all schools in the district,

the nine project and control schools demonstrated lower SAT reading and math scores, a higher percentage of black enrollment, and a greater annual rate of referrals to special education.

Consultants. Associated with the four project schools were 10 school-based consultants. Five consultants were special education resource room teachers, two were school psychologists, and three were pupil personnel specialists (PPSs). The PPS was a newly created multidimensional position requiring the assessment skills of a psychologist, advising capacity of a school counselor, and family-work experience of a social worker. Among the PPSs, two were formally trained and experienced school psychologists. Additionally, two graduate students with special and general education experience served as consultants. Thus, there was a total of 12 consultants serving four project schools.

Teachers and pupils. Consultants in project schools helped recruit 24 fifth and sixth grade classroom teachers. In control schools principals and project staff also recruited 24 general educators in fifth and sixth grades. In each of the nine schools, classroom teachers were asked to identify their most difficult-to-teach, nonhandicapped pupil. These 48 most difficult-to-teach children were largely boys (71%), mostly black (65%), and approximately 1 grade below expectations in reading and math. Additionally, 44% of the students were described as most difficult-to-teach primarily because of "off task" or "inattentive" behavior; 20% because of "poor academic work," despite capability to perform better; 15% because they "lacked academic skills;" 12% as a result of "poor interpersonal skills with adults;" 4% due to "poor interpersonal skills with peers;" and 4% because of "poor motivation." (See Fuchs, Fuchs, Stecker, Goodman, and Bahr [1987] for a detailed description of these difficult-to-teach nonhandicapped children.)

## Training

We conducted inservice and on-the-job training to prepare our consultants for their MAT responsibilities.

Inservice training. Two all-day training sessions were conducted at our university for the school-based and graduate student consultants. During 14 hours consultants were trained in three areas. First, we discussed the problem-solving, collaborative, and data-based nature of BC. To improve understanding of these features, we asked consultants to role play consultation within the context of several prepared vignettes. Corrective feedback accompanied this role playing. Second, we trained consultants to employ the ABC observation procedure reliably. Videotapes of various non-staged incidents of classroom conflict, scored with the ABC procedure prior to training, were used to train consultants to criterion. Third, we reviewed with consultants how to implement a broad range of behaviorally-inspired interventions, including token economies, contingency contracts, and self-management strategies. At the same time, we informed consultants that they were not bound to implement such interventions.

Each consultant received a packet of materials. The materials included (a) an agenda, (b) a 2-page general description of BC, (c) brief guides to specifying and analyzing problem behavior, (d) a thick set of behavior management strategies, (e) a written script for each assigned teacher, (f) copies of all tests, questionnaires, and rating scales to be administered to teachers or pupils, (g) directions on using the ABC observation system, (h) ABC recording sheets, and (i) an audiotape to cue consultants' observations.

At the conclusion of our inservice training, we asked the 10 school-based consultants to evaluate anonymously the 2-day inservice in terms of five dimensions: organization, clarity, amount of information, usefulness for

consultation, and overall quality. Using a 4-point scale (4 = excellent, 3 = good, 2 = fair, and 1 = poor), their rating for organization was 3.4; clarity, 3.2; amount of information, 3.6; usefulness for consultation, 3.8; and overall quality, 3.5.

On-the-job training. There was an approximate 10-day hiatus between completion of inservice training and initiation of MAT activity in the project schools. During this interval graduate students, including the two serving as consultants, visited the school-based consultants, verifying that the consultants possessed (a) necessary materials and (b) an accurate understanding of the MAT sequence of activity, consultation scripts, and data-gathering procedures such as the ABC observation system. As necessary, missing materials were supplied and clarification on procedures was provided.

#### Assignment of Teachers and Scripts to Consultants

Assigning teachers. On the second day of inservice training, the 10 school-based consultants were grouped by school affiliation and handed a list of teachers in their respective buildings who had volunteered for the MAT project. Within these groups each consultant chose an average of two general educators with whom to consult. They also assigned participating teachers to the two graduate student consultants. We purposely did not randomly assign teachers to consultants since many of the consultants worked as members of discrete teacher teams; to have paired them with teachers not part of their team would have violated basic facts of consultants' and teachers' work experience.

Assigning scripts. Nevertheless, we did randomly assign the 24 project teachers to the three script types, with 8 teachers per script. This random assignment of teachers to scripts also meant that a majority of consultants used one form of BC with one teacher and a contrasting (more or less

inclusive) variant with another teacher. We were above-board with the consultants about these scripts: We said we had no compelling a priori reason to believe that one script would be more effective than another and, as a consequence, we suggested it would be a mistake for them to guess which script was superior.

Additionally, we asked the school-based consultants to rate each participating teacher in their buildings in terms of the teacher's capacity to work effectively with difficult-to-teach nonhandicapped students. A subsequent analysis of these ratings indicated no reliable differences between teachers assigned to the three variations of BC.

#### Procedures

Sequences of consultants' activity. Figure 1 displays sequences of salient consultation activity associated with our three versions of BC. In part, Figure 1 graphically presents what already has been discussed. That is, Script 1 (least inclusive version) differs from Scripts 2 and 3 (most inclusive version) in its omission of classroom visitation, whereas the uniqueness of Script 3 in relation to 2 is the more inclusive script's potential for a third classroom visit, fourth meeting, and fifth observation. Figure 1 also indicates that Scripts 1 and 2 call for a 6-week consultation period, while Script 3 requires 6 to 8 weeks of consultation activity.

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 Insert Figure 1 about here  
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Multidisciplinary teams. An important distinctive feature of MAT activities, which is neither displayed in Figure 1 nor described heretofore in the text, is that, irrespective of script, a multidisciplinary team coalesced for every Meeting 2. The team comprised (a) the classroom teacher, (b) a

school based special educator, and (c) either the building-based school psychologist or PPS. The presence of such a group at Meeting 2 reflects our beliefs that (a) the objectives for this meeting, including problem validation and analysis as well as the formulation of a classroom-based intervention, are relatively difficult and important to achieve, and (b) many heads are better than one or two, especially when they collectively represent diversity and richness in formal training and professional experience.

Target behaviors and types of interventions. Approximately 60% of project teachers directed consultants to help them with off-task or inattentive behavior; about 20% of teachers targeted poor quality of work for planned interventions; and the remaining teachers wished treatment plans to address poor relations with adults, poor relations with peers, and lack of academic skills.

A total of 22 of 24 planned interventions included delivery of some type of reinforcement contingent on display of desired behavior. In two cases, the nature of the classroom-based treatment was unclear. Among the 22 described interventions, 7 involved use of activity reinforcers, 4 included tangible reinforcement, and 3 made use of teachers' verbal praise. Eight interventions did not specify type of reinforcement. Additionally, 17 of these 22 interventions included monitoring of pupil behavior; 5 did not. Among the monitored interventions, 5 teachers developed wall charts, 6 kept track of behavior on informally fashioned tally sheets, and 6 did not use a written record. Finally, teachers dispensed reinforcers in 17 of the 22 described interventions; an aide delivered reinforcement in one case; and 4 descriptions of interventions were unclear on this point.

Finding the time for consultation. As described previously, our MAT project was implemented in an environment comparatively "inhospitable" to

consultation. Special educators' heavy case loads of direct service, school psychologists' long backlogs of psychological assessments, and administrators' discomfort with preventative interventionism all militated against "doing consultation." Given such conditions, an obvious question is, "How did consultation get done?"

All consultants stated they carefully scheduled times for meetings, observations, and classroom visits, which did not conflict with myriad school activities and obligations. Consultative meetings typically were reserved for before or after school, at lunch, or during teachers' planning time. Nevertheless, consultants reported rescheduling 25 of 76 meetings (33%) and 29 of 96 classroom observations (30%) because of absences of teachers, teachers' aides, consultants' aides, or students; because of scheduling conflicts brought on by breakdowns in communication, unplanned school activities, and teachers' forgetfulness; and because of modifications of established timelines such as the need to delay a second observation and second meeting because of failure to complete a first observation in timely fashion.

Each of the special education consultants said they asked their aides (if they had one) or another special education teacher or a general educator to cover their classes, freeing them for brief periods to attend to MAT activity. Two special educators employed a different strategy, asking a librarian and physical education teacher to extend class time. One special education teacher did some horse trading. She convinced the general educator with whom she was consulting that, in order for her to help plan and implement an intervention for a most difficult-to-teach nonhandicapped child, the general educator would have to agree to increase mainstreaming time for two handicapped pupils shared by both teachers. Securing the general educator's agreement not only reduced the special education teacher's direct case load,

thereby increasing opportunity for consultation, but helped to win for the two handicapped pupils additional mainstream experience, a year-long objective of the special educator.

### Evaluation

Prior to reporting our evaluative findings, we have two brief comments. First, as discussed earlier, we confine our discussion of MAT outcomes to a subset of dependent measures. These are consultants' global evaluations of MAT success, teachers' pre- and post-MAT ratings of most difficult-to-teach pupils' targeted behavior, and pre- and post-MAT classroom observations of the same children and same behavior. Second, our discussion of these data will be general in nature; a more detailed, researcher-oriented exposition may be found elsewhere (Fuchs & Fuchs, 1987).

Consultants' evaluations. Remember consultants responded to a 4-point scale with the following descriptive anchor points: 1 = MATs were an unqualified failure; 2 = MATs were a qualified failure; 3 = MATs were a qualified success; and 4 = MATs were an unqualified success. Consultants awarded mean evaluations of 2.0, 2.8, and 2.9, respectively, to Script #1 (least inclusive version), Script #2 (more inclusive version), and Script #3 (most inclusive version). When taking the perspective of their consultees (that is, evaluating MAT success as they believed their teachers would), consultants assigned virtually identical mean scores to the scripts. Descriptively, such evaluations suggest that consultants and teachers were rather satisfied with the comparatively inclusive versions of BC, but were dissatisfied with the least inclusive variant. However, this difference in evaluations was not statistically significant.

Teachers ratings. The reader also will remember that teachers rated the severity, manageability, and tolerableness of their most difficult-to-teach

pupils' target behavior on a pre- and post-MAT basis. We aggregated the three ratings to generate a single pre-MAT score and single post-MAT score for each student. Subtracting pre-MAT ratings from post-MAT ratings yielded the following average change scores for control students and project pupils involved with Script #1 through Script #3, respectively: -.2, -.5, -.9, and -1.0.

In other words, descriptively, teachers claimed that control students' problematic behavior decreased least; targeted behaviors of students in the most inclusive version of BC decreased most. Moreover, inferential statistical analyses indicated that the reported decreases in problem behavior associated with Scripts #2 and #3 were reliably greater than the decreases evidenced by pupils in control and Script #1 groups. Thus, teachers' ratings and the descriptive, rather than inferential, interpretation of consultants' evaluations, evidence a similar pattern: Relatively inclusive versions of BC seem to be viewed as effective and with satisfaction; the least inclusive variant of BC appears to be perceived as ineffective and with dissatisfaction.

Classroom observations. Observational data on difficult-to-teach pupils' problem behavior are both consistent and inconsistent with the emerging pattern in our findings. As expected, control students did not display a pre- to post-MAT decrease in targeted troublesome behavior; rather this group's behavior increased by 9%. Predictably, too, Script #2 pupils demonstrated a modest 6% decrease in problem behavior. However, the greatest percentage decrease in troublesome behavior (8%) was associated with the least inclusive variant of BC, or Script #1, which was the script consultants and teachers viewed least effective and least satisfying. Students involved with Script #3 activity surprisingly displayed no change in problem behavior from pre- to post-MAT observations. Differences among the groups' pre-to-post behavior

changes "approached" (2-tailed  $p = .11$ ), but did not "reach," the conventional threshold ( $p .05$ ) of statistical significance. Therefore, there was no reliable difference between the respective groups' observed behavior change.

### Discussion

We believe there are at least three possible reasons for the apparent inconsistency between teacher ratings and classroom observations. First, teacher ratings may represent a forthright and precise estimate of students' classroom behavior; pupils associated with the two relatively inclusive scripts may have demonstrated, in fact, greater positive behavior change than those in the least inclusive script, but our classroom observations failed to detect this improvement. After all, we were capable of observing each of 24 project children on only four 30-minute occasions, two prior to MAT implementation and two following MAT activities, and this relatively small sampling of behavior may have been unrepresentative of students' classroom conduct.

A second explanation starts with the somewhat different premise that the teacher ratings do not accurately reflect students' classroom behavior; that is, contrary to the ratings, children in Script #2 and #3 displayed the same pre- to post-MAT behavior change as students associated with Script #1. However, like the first explanation, this one assumes teacher ratings are truthful: Teachers participating in the more inclusive scripts honestly perceived a more positive transformation in their students than did teachers of children involved in the least inclusive script.

Yet a third reason begins with a presumption antithetical to that of the first; namely, that the teacher ratings are less than completely honest and inaccurate. In other words, it is possible pupils' behavior did not improve and teachers knew this. However, they were reluctant to say so because they

were afraid of offending their school-based colleagues who, in many instances, had worked very hard with and for them on the MAT. Presumably, teachers involved in relatively inclusive (i.e., more labor intensive) scripts would have been more strongly oriented toward evasiveness than teachers associated with the least inclusive script. This "white lie" explanation is another way of stating that the obtained ratings were artifactual (see Sechrest & Phillips, 1979); that is, they represented an outcome of our methodology, rather than of our experimental treatment.

Having presented three different, but partially overlapping, explanations of our data, the inevitable question arises: Assuming these explanations represent the universe of plausible interpretations, which is correct? Unfortunately, at this point, we do not know. As a result, we cannot present confidently a single set of implications or recommendations for practitioners and researchers. Instead, we feel obliged to discuss multiple sets of implications and recommendations, each one hinging on a different interpretation of the database.

#### Explanation #1

As mentioned, Explanation #1 promotes the verisimilitude of the teacher ratings, while it dismisses the observational data as unrepresentative and misleading. Accordingly, this view of our data indicates that, with respect to "doing" BC, "more is better." What does this mean? A salient characteristic distinguishing our least inclusive version from our two more inclusive variants of BC is that the more inclusive versions required consultants to visit teachers at least two times to assist with implementation of the classroom-based intervention (see Figure 1). Explanation #1 indicates that these visits contributed to greater positive change in student behavior, as presumably reflected in the teacher ratings.

Simultaneously, this interpretation prompts the question whether school-based consultants typically make such visits. The importance of this question is underscored by the fact that many school psychologists and special educators have scant time for consultation and may view classroom visitation as desirable but unnecessary. Explanation #1 of our data contradicts this view, holding that such visits contribute to desired changes in pupil behavior.

#### Explanation #2

Unlike the preceding interpretation, Explanation #2 assumes both teacher ratings and classroom observations are accurate. Although this second interpretation, like the first, supports use of more inclusive versions of BC, such endorsement is not based on an expectation that student behavior will be positively affected. Rather, Explanation #2 argues that more inclusive variants of BC are more likely to positively change teachers' perceptions of students, which may or may not be linked to verifiable change in students' classroom behavior or academic performance. Before proceeding, least some readers view teacher attitude change as trivial in comparison to student behavior change, many practitioners and researchers (see, for example, Donaldson, 1980) can attest that attitude toward difficult-to-teach pupils often means the difference between willingness to modify classroom instruction and management to accommodate special learners and refusal to tolerate such students in the classroom.

Supporting the proposed causal connection between more inclusive versions of BC and positive change in teacher attitudes is the probable fact that our more complete versions encouraged teachers to think seriously about their difficult-to-teach pupils and, as a consequence, to become more knowledgeable about these children. According to person-perception theory (e.g., Adinolfi,

1971; Asch, 1946; Bieri, Atkins, Briar, Leaman, Miller, & Tripodi, 1966; Bruner, Shapiro, & Tagiuri, 1958; Crockett, 1965), as one accumulates experience with, or knowledge about, another person, one's cognitive system with respect to that person becomes increasingly differentiated and articulated. This, in turn, reflects both growing awareness of the subtle differences in aspects of the other person and increasing capacity to respond differentially to such subtle differences. Fuchs, Fuchs, Dailey, and Power (1985) have demonstrated a close relation between cognitive complexity and positive attitude.

### Explanation #3

Explanation #3, like Explanation #2, assumes our observational data accurately reflect the failure of our classroom-based interventions to promote positive behavior change among most difficult-to-teach students. Earlier, we presented descriptions of these interventions consonant with this view. For example, among 22 interventions that used some type of reward system, 11 (50%) either did not include any form of teacher monitoring of student performance or did not require teachers to collect data during monitoring. How, one legitimately might ask, did the 11 teachers associated with these classroom treatments know whether, and if so when, to deliver reinforcement?

Whether or not more inclusive versions of BC were associated with greater positive changes in student behavior, we were not impressed with the conceptualization or execution of many classroom-based interventions. Our impressions were based on others' aforementioned descriptions as well as our own observations of these interventions. Their apparent low quality was surprising, since we (a) believed we had enlisted competent hard-working school psychologists and special educators as consultants, (b) trained the consultants for many hours and equipped them with pertinent materials, and (c)

organized them into multidisciplinary teams, believing that more heads, perspectives, and sets of skills were better than one.

Assuming our impressions to be correct, why were many interventions ineffective? Following numerous debriefings with consultants and teachers, we believe there are at least two important reasons. First, despite our training and materials, many consultants (and teachers) appeared insufficiently skilled to formulate and operationalize meaningful interventions. Second, consultants seemed to waste valuable time trying to engage teachers in collaborative consultation, when many teachers simply wanted to be handed solutions to vexing problems. Not only was time lost, but consultants' efforts to convince teachers to become co-equal partners ironically seemed to irritate the teachers, which, in turn, confused and frustrated many consultants. Such anecdotal findings have strongly influenced the nature of our project in Year 2, which we describe below.

Explanation #3, in contrast to Explanation #2, discredits also the veracity of the teacher ratings. According to this view, teachers associated with Scripts #2 and #3 indicated greater positive behavior change than those connected with Script #1 because teachers in the more inclusive BC versions felt more indebted to the consultants, more compelled to tell them what they thought the consultants wished to hear. If there is truth to this explanation, teacher ratings should be viewed with a healthy dose of skepticism and, when used, supported by qualitatively different methods of data collection such as direct observation of behavior and/or collection of students' permanent products. How many school psychologists and special educators evaluate their consultative efforts solely on the basis of teacher reports? How many investigators employ teacher ratings as the single outcome measure of their consultation research?

### Future Directions for the MAT Project: Year 2

Inconsistency in our data and uncertainty of our conclusions from Year 1 encouraged a reconceptualization of several facets of the MATs. Such "taking stock" resulted in several important changes, which, we believe, may be of interest to practitioners and researchers involved in prereferral interventions.

Most importantly, in Year 2 we have attempted to strengthen project-related interventions by requiring use of contingency contracts and data-based monitoring procedures. These contracts between teachers and their targeted students stipulate six dimensions of the intervention: (a) the type and degree of the desired change in behavior or academic performance; (b) the activity (or activities) to which the contract applies; (c) how student behavior and academic performance will be monitored; (d) the nature of the reward; (e) when and by whom the reward will be delivered; and (f) whether the contract may be renegotiated. Contracts were selected as an intervention activity for two reasons. First, during Year 1, many of our consultants and teachers independently chose to implement contracts; second, recent surveys (e.g., Martens, Peterson, Witt, & Cirone, 1986) indicate they are viewed positively by large numbers of general educators.

Our data-based monitoring procedures involve either product inspection (for academic performance) or time interval recording (for classroom behavior). Building on the work of Meichenbaum (1977) and Meichenbaum and Asarnow (1979) as well as Hallahan and associates (e.g., Hallahan, Lloyd, Kosiewicz, Kauffman, & Graves, 1979; Hallahan, Marshall, & Lloyd, 1981), we are exploring experimentally the effectiveness and efficiency of teacher monitoring versus student self-monitoring.

Required use of contracts and data-based monitoring procedures, combined

with continued use of written scripts, makes our consultation approach relatively directive in Year 2. We recognize that this prescriptiveness runs against the current conventional wisdom, encouraging, if not admonishing, school consultants to avoid use of heavy-handed prescriptions. Such procedures may "turn-off" consultants who view our directives as constraining, if not demeaning, and estrange teachers resentful of interventions imposed on them, rather than formulated through a collaborative process to which they can lay claim.

On the other hand, many of our consultants seemed to have difficulty conceptualizing and operationalizing interventions for the classroom. A majority appeared in need of greater direction. Additionally, it is unclear just how non-directive or collaborative BC should be in school settings. Must the entire process, beginning with Problem Identification through Problem Evaluation, reflect a distinctly non-prescriptive approach? Or is it possible that degree of prescriptiveness should vary as a function of the phase in question? Perhaps consultants should be relatively directive during Problem Analysis or Implementation and comparatively non-directive during Problem Identification. Contributing to our uncertainty is a consultation literature that appears to take on faith the assumption that non-directiveness is desirable. Nevertheless, there is scant empirical evidence to support this view.

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Figure Caption

Figure 1. Sequence of consultant activity in Scripts 1, 2, and 3.

Week	Consultant's activity	Scripts <sup>a</sup>		
		1	2	3 <sup>b</sup>
1	Meeting 1	X	X	X
	Observation 1	X	X	X
2	Observation 2	X	X	X
	Meeting 2	X	X	X
	Intervention begins	X	X	X
3	Classroom visit 1		X	X
4	Classroom visit 2		X	X
5	Observation 3	X	X	X
	Observation 4	X	X	X
	Intervention ends	X	X	X
6	Meeting 3	X	X	X
7	Modified intervention begins			?
	Classroom visit 3			?
8	Observation 5			?
	Modified intervention ends			?
	Meeting 4			?

<sup>a</sup>Scripts 1 and 3 represent our least and most inclusive versions of BC, respectively.

<sup>b</sup>Question marks in this column denote that consultants using Script 3 had an option to pursue the associated activities, depending on the evaluation of MAT effectiveness up to that point.

## Appendix

## MEETING #1: PROBLEM IDENTIFICATION

Start time \_\_\_\_\_

Date \_\_\_\_\_

As you know, the goal of this project is for us to work together to make your most difficult-to-teach student easier to teach. Toward this end, we will meet like this 3 or 4 times over the next 2 months.

The purpose of this meeting is to get some general information on your most difficult-to-teach child and to try to specify his (her) most troublesome behaviors.

Before beginning, I'm wondering if you wouldn't mind me recording just the first discussion. We value what you have to say, and we wish to get it all and get it right. The tape will be erased after it's transcribed and neither your name nor the child's name will be associated in any way with the information.

## A. Describing the Target Child

1. Describe your most difficult-to-teach student, or what we'll call the target child. What is he (she) like in the classroom?

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2. What does he (she) do that makes him (her) difficult to teach? Identify behaviors and academic performance that make teaching the target child difficult.

a. _____	d. _____
b. _____	e. _____
c. _____	f. _____

3. (Encourage the teacher to describe at least 1 behavior problem and, if appropriate, at least 1 academic problem.)

4. How severe are each of these problems, using a scale of 1 to 5  
(where 1 = mild and 5 = most severe)?

Behavior/Academic ProblemsRating

a.	_____	_____	_____	_____	_____
		1	2	3	4
		(mild)			(most severe)
b.	_____	_____	_____	_____	_____
		1	2	3	4
		(mild)			(most severe)
c.	_____	_____	_____	_____	_____
		1	2	3	4
		(mild)			(most severe)
d.	_____	_____	_____	_____	_____
		1	2	3	4
		(mild)			(most severe)
e.	_____	_____	_____	_____	_____
		1	2	3	4
		(mild)			(most severe)
f.	_____	_____	_____	_____	_____
		1	2	3	4
		(mild)			(most severe)

5. Mild problems are not always the most controllable or manageable; severe problems are not always the least manageable. Thus, I'd like you to rate each of these problems, using a scale of 1 to 5 (where 1 = easily manageable and 5 = unmanageable).

Behavior/Academic ProblemsRating

a.	_____	_____	_____	_____	_____
		1	2	3	4
		(easily managed)			(unmanageable)
b.	_____	_____	_____	_____	_____
		1	2	3	4
		(easily managed)			(unmanageable)
c.	_____	_____	_____	_____	_____
		1	2	3	4
		(easily managed)			(unmanageable)
d.	_____	_____	_____	_____	_____
		1	2	3	4
		(easily managed)			(unmanageable)
e.	_____	_____	_____	_____	_____
		1	2	3	4
		(easily managed)			(unmanageable)
f.	_____	_____	_____	_____	_____
		1	2	3	4
		(easily managed)			(unmanageable)

6. I'm also interested to know how easy or hard it is right now for you to live with these behaviors. In other words how tolerable are each of these problems, using a scale of 1 to 5 (where 1 = easily tolerated and 5 = intolerable)?

Behavior/Academic Problems

Rating

a.	_____	_____	_____	_____	_____	
		1	2	3	4	
		(easily tolerated)			(intolerable)	
b.	_____	_____	_____	_____	_____	
		1	2	3	4	
		(easily tolerated)			(intolerable)	
c.	_____	_____	_____	_____	_____	
		1	2	3	4	
		(easily tolerated)			(intolerable)	
d.	_____	_____	_____	_____	_____	
		1	2	3	4	
		(easily tolerated)			(intolerable)	
e.	_____	_____	_____	_____	_____	
		1	2	3	4	
		(easily tolerated)			(intolerable)	
f.	_____	_____	_____	_____	_____	
		1	2	3	4	
		(easily tolerated)			(intolerable)	

7. Pick a second student who is also difficult to teach. Think about this student for a minute. Then tell me what makes the target child more difficult than the second child?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. Why do you think the target child behaves or performs this way? What makes the child "tick"?

\_\_\_\_\_

\_\_\_\_\_

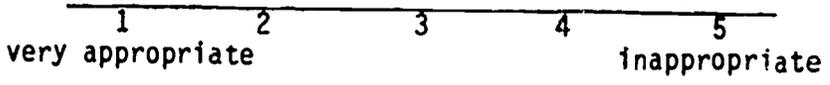
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. Have you referred the child for a psychological assessment? \_\_\_\_\_

10. In your opinion, how appropriate would it be to refer the target child for some type of specialized professional help, such as placement in special education, counseling provided by a school psychologist or pupil personnel specialist, or a comprehensive assessment at a nearby hospital or clinic?



B. Specifying the Problem

1. Earlier you mentioned the target child is difficult to teach because of these problems: (Restate the teacher's response to A-2.)

2. Rank order these problems from most to least pressing or troublesome.

- a. \_\_\_\_\_ d. \_\_\_\_\_
b. \_\_\_\_\_ e. \_\_\_\_\_
c. \_\_\_\_\_ f. \_\_\_\_\_

3. Among this group, please select the one behavior problem that, if solved, will lead to the greatest improvement.

\_\_\_\_\_

4. Describe this behavior problem as concretely as possible, since this should become the target behavior that we work on together.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. In the past, have you taken any steps to address this problem behavior? \_\_\_\_\_ (Y/N) (if "yes":) Specifically, what have you tried to do?

\_\_\_\_\_

6. When during the day (two academic activities and times) does the student typically demonstrate this behavior?

Academic Activity #1 \_\_\_\_\_ Time \_\_\_\_\_

Academic Activity #2 \_\_\_\_\_ Time \_\_\_\_\_

7. On which level in Ginn 720 is the target child reading? \_\_\_\_\_



8. (If the target child is not in Ginn 720, which reading materials are being used and on what level is he/she reading?) \_\_\_\_\_  
 \_\_\_\_\_

C. Summarizing the Target Child's Problem Behavior

1. Let's see if I have a clear understanding of the target child's most important behavior problem. (Restate the child's problem behavior. Be sure that your retesting is clear and concrete enough so you would have no trouble seeing it in the classroom.)

2. Have I got it right? If not, please help me. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. Do we agree that this will be the problem that we will work on? \_\_\_\_\_

D. Identifying Class Times and Days to Observe and Test the Target Student

1. I would like to observe the target child two times. Keeping in mind I need to observe during the academic activities already identified, when would be good days and times to observe?

<u>Observation #1</u>	<u>Observation #2</u>	<u>Observation #3 (Back-up)</u>
Date _____	Date _____	Date _____
Time _____	Time _____	Time _____

2. When I come to observe the target child it is very important that you try to relate to him (her) as you normally do, since I'd like to watch the child under typical circumstances.

3. Testing can be completed in one session, lasting between 30 and 40 minutes. Which are good days and times of the week when the target child can be tested?

Good days \_\_\_\_\_ Good times \_\_\_\_\_

E. Administering the Quay Scale

Stop time \_\_\_\_\_

Meeting #1 lasted \_\_\_\_\_ minutes.