A Behaviorally Based Teacher Driven Meeting System: Survival

By

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Abstract

The main purpose of this project was to develop a teacher run, behaviorally based meeting system to foster teacher data-based decision-making when targeting either academic and/or behavioral problems in either general or special education. The goal was for this meeting system to survive after the experimenter left the setting. The original study took place over a two-year period in a Midwest public middle school serving 600 students. This meeting system was based on a meeting manual, consisting of scripted meeting agendas developed to guide teachers through the meeting process. In order to analyze the effect of the meeting manual on the percentage of data-based decision making and team meeting behaviors displayed during team meetings (i.e., meeting tasks), a reversal ABA'B design was implemented. The percentage of applicable meeting tasks completed increased from an average of 13% during baseline, to 81% with manual implementation. Manual withdrawal was associated with applicable meeting task completion decreasing to an average of 54%, and increasing back to 79% with manual re-implementation. Follow-up observations up to four years after the experimenter left the setting revealed continued implementation of the meeting manual and applicable meeting tasks completed to average 80%, despite a change in the school's principal, vice principal, and psychologist during this period.

A Behaviorally Based Teacher Driven Meeting System: Survival

Concerns about education and discipline in schools have increased in recent years (24th annual report to Congress – US Department of Education – 2002). In an effort to assist general education teachers in addressing behavioral or academic problems with their students, most schools have what is referred to as "prereferral intervention" systems in place (Nelson, Smith, Taylor, Dodd, & Reavis, 1991). Some of the most common models found in the literature include the Teacher Assistance Team, developed by Chalfant, Pysh, and Moultie (1976); the Prereferral Intervention Model, developed by Graden, Casey, and Christenson (1985); the Peer Problem Solving model, developed by Pugach and Johnson (1988); and the Mainstream Assistance Team, developed by Fuchs and Fuchs (1989) (Nelson, et. al, 1991).

COMMON PREREFERRAL INTERVENTION SYSTEMS

The Teacher Assistance Team (TAT) Model

According to Chalfant and Pysh (1989) the Teacher Assistance Team (TAT) core consists of three elected faculty members, representing various grade levels or disciplines within the school, who have been trained in collaborative problem solving processes as well as on the TAT system. Training for these members is accomplished in either a 6 or a 12-hour session. An additional training session occurs 5 to 7 months later, and researchers are available for consultation throughout. When a teacher requests support, this team meets with the teacher to provide collaborative problem solving consultation. Chalfant and Pysh (1989) conducted a study using questionnaire information from 96 first-year Teacher Assistance Teams. Although these authors report high consumer satisfaction, high consensus for rating of student performance, high accuracy of referrals for special education, as Phillips, McCullough, Nelson, and Walker (1992) point out, these results were not acquired through controlled research design studies. Sindelar, Griffin, Smith, and Wantanabe (1992) further note that "the research of Chalfant, Pysh, and their colleagues was not experimental" (p. 251).

The Prereferral Intervention Model

Through the Prereferral Intervention Model, as described by Zins, Graden, and Ponti (1988), a teacher may obtain assistance for a particular problem by requesting a meeting with the prereferral team. The core of this team is composed of special services personnel, such as the school psychologist, counselor, nurse, speech and language therapist, and special education teachers. General education teachers and administrators may also attend the meeting, but are not part of the core. The emphasis of the team is on responding with intervention assistance: The prereferral team engages in collaborative problem-solving to develop an intervention plan.

The Peer Problem Solving Model

In the Peer Problem Solving model, developed by Pugach and Johnson (1988a), the teacher requesting assistance, referred to as the "initiator," does not meet with a team but is instead is paired with another teacher, the "facilitator." The facilitator is a teacher that has been trained in the Peer Problem Solving Process. Facilitator training is conducted over two four-hour sessions, and includes an overview of the peer collaboration process, a videotape demonstration, practice, and feedback (Johnson & Pugach, 1991). At the meeting, which lasts 45 to 60 minutes, the facilitator guides the initiator, through a four-step dialogue process. The purpose is to assist the initiator in developing a clear understanding of the problems he or she is encountering, through a reflective consideration of the variables that may be contributing to problematic behaviors (Johnson & Pugach, 1991; Pugach & Johnson, 1988a). Johnson and Pugach (1991) conducted a group comparison design study utilizing questionnaires and surveys, and determined that this process helped teachers reconceptualize students' problems, and develop interventions that teachers believed addressed the majority of student problems.

The Mainstream Assistance Team (MAT) Model

In the Mainstream Assistance Team (MAT) model, developed by Fuchs and Fuchs (1989), the teacher requesting assistance meets one-on-one with a consultant. There is one consultant per school. Consultants involve school support staff (i.e., special education personnel or the school psychologist) that have been trained in the model. Training takes place over two days (14 to 16 hours total), and includes formal training on the behavioral consultation model, role-playing and feedback, and use of videotapes to practice interval recording for observations. At the meeting, the consultant follows a behavioral consultation model, exploring antecedents and consequences influencing the problem behavior, employing interventions based on empirically validated laws of behavior, and evaluating effectiveness of such through data (Fuchs & Fuchs, 1989). In the course of a series of four meetings, where scripts guide the consultant's verbal behavior, the consultant leads the teacher through four stages: Problem identification, problem analysis, implementation planning, and problem evaluation. The consultant performs classroom observations and provides teacher feedback. Originally, the intervention to be implemented with the student was left up to the consultant and teacher's discretion, and consultant training also involved a component on interventions (Fuchs & Fuchs, 1989). However, the researchers found that the interventions developed in this manner had weak designs and did not call for teachers to monitor or record student performance. This resulted in the development of a more prescriptive protocol, where student-teacher contracts were used as the prescribed intervention. As such, later consultant training in this model included training on student-teacher contracts rather than on interventions in general, and consultants were given forms for implementing contracts (Fuchs, Fuchs, & Bahr, 1990; Fuchs, Fuchs, Bahr, Fernstrom, & Stecker, 1990; Fuchs, Fuchs, Gilman, Reeder, Bahr, Fernstrom, & Roberts, 1990).

With respect to the Mainstream Assistance Team (MAT) model, large group design research, comparing experimental and control schools, using teacher ratings, pre- and post-intervention student observations, interviews, and questionnaires has been conducted (Fuchs & Fuchs, 1989; Fuchs, Fuchs, & Bahr, 1990; and Fuchs, Fuchs, Bahr, Fernstrom, & Stecker, 1990). Findings suggest that student teacher contracts have high fidelity of implementation, and component analyses of the four stages of consultation reveal greater student improvements in cases that include all stages (Fuchs, Fuchs, Bahr, Fernstrom, & Stecker, 1990).

Remarks on Prereferral Intervention Systems

There are systems in place to address the general education teacher's concerns regarding student behavior or academic problems, and most of these systems claim to be effective. Unfortunately, there is actually very little research demonstrating the effectiveness of these existing models (Sindelar, et al., 1992), and the research that there is, does not use single subject methodology. Additionally, effectiveness does not appear to have the same meaning for all. Effectiveness has been claimed when there is a decrease in rate of students referred for testing for disabilities, when the rate of accurate referrals increases, when teachers report satisfaction with the system, or when students show improvements. The methods to evaluate these systems, as well as the basis on which to evaluate the systems, vary greatly. The fact that these systems differ on numerous components makes comparison of these systems very challenging. Furthermore, due to the "dearth of research on the effectiveness of prereferral intervention and the inconclusive findings in what research has been done" (Sindelar, et al., 1992, p. 247), it is very difficult to determine which system, or which components, promote favorable results. Flugum and Reschly (1994) note that "it appears that the typical prereferral intervention does not involve a behavioral definition, a direct measure, a systematic plan, graphing of results, or comparison of results with baseline" (P. 7), quality indices which, they point out, are related to more successful outcomes for students.

POTENTIAL IMPORTANT ELEMENTS FOR PREREFERRAL INTERVENTION SYSTEMS

Perhaps a model based on behavior analytic principles, where team members define target behaviors, directly measure these behaviors, graph the results, plan systematically, and compare the results of intervention to baseline, might be more effective. Furthermore, a system based on behavioral principles would lead to a common basis for the discussion of problems, it would make no difference if the problem was the deviant behavior of a child, curriculum difficulties, an unruly classroom, or the behavior of children in the cafeteria (Bijou, 1970).

Teacher Core

If the goal of prereferral systems is to assist teachers whenever they have a concern regarding a student, it is imperative that at least the teacher having the concern be present at the meeting. However, greater success might be achieved if all of the student’s teachers are also at that meeting. Having all the student’s teachers at the meeting is important because several teachers may share the same concern (Bartels & Mortenson, 2002). Also, because teachers have an excellent opportunity to witness students’ relative strengths and weaknesses across a variety of tasks and environments (Fantuzzo & Atkins, 1992), they may be able to contribute very valuable information at the meetings.

A collaborative process is important because it contributes to teacher ownership and commitment to interventions (Phillips et al., 1992). Intervention plans developed in such a way tend to be meaningful, fit natural routines, and be judged as acceptable by implementers (Allen & Blackston, 2003). A system that fosters teacher attendance and team collaboration at the meetings might also decrease the countercontrol sometimes encountered with a consultation model. However, as Pugach and Johnson (1988b) remark, in a system in which general educators are characterized as needing assistance and specialists as being the sources of assistance, collaboration is diminished. Intimidation and lack of assertiveness have been noted when classroom teachers are in front of a group of specialists (Pugach & Johnson, 1989). Thus, collaboration among teachers might be increased if meeting attendance is primarily composed of teachers rather than administrative (e.g., principal, vice-principal) or “expert” staff (e.g., counselor, consultant, social worker).

A teacher-run meeting system, devoid of a hierarchical structure, might foster collaboration among teachers in developing interventions to better assist students. This, in turn, could decrease intervention implementation countercontrol and increase consistency of implementation.

Participant Run Meeting Systems

Effective participant-run meeting systems, in which participants make decisions on a wide range of behavioral problems, have been designed. For instance, Fixen, Phillips, and Wolf (1973) designed a self-government meeting system for pre-delinquent boys living in a group home. In this meeting system, the boys made rules and decided on consequences for themselves. Briscoe, Hoffman, and Bailey (1975) developed a behaviorally based program to teach community members problem-solving skills to implement at their meetings. Welsh, Miller, and Altus (1994) established a meeting system in a student-housing cooperative for residents to discuss problems and make decisions as to how to solve them on their own. Perhaps a teacher-run meeting system, where teachers decide how to intervene with their students, might also be effective. Nevertheless, a teacher-run meeting system does not ensure that student interventions will be based on behavioral principles.

Teacher Developed Interventions

Although the potential for general education teachers to be able to implement behavioral principles on their own, without the guidance of some type of consultant or researcher, may be questioned, the need to empower teachers in the use of these methods has been acknowledged (Fantuzzo & Atkins, 1992). Furthermore, as Bijou (1970) explains, application of behavioral principles to education would revise the role of the teacher, as she or he would become a manager of contingencies of reinforcement, and an effective programmer of instruction. As Carnine (1992) points out, “just like any other professional, teachers’ efficacy is dependent on the tools at their disposal” (p. 41).

Bartels and Mortenson (2002) comment that the design of effective interventions involves, among other things, that decisions be based on data. The need for teachers to collect data, analyze data, and make decisions that are based on data, has been stressed by many (e.g., Bushell & Baer, 1994; Flugum & Reschly, 1994; Jones & Slate, 1996; Sandall, Schwartz, & LaCroix, 2004). Perhaps if teachers are guided to use behavioral principles and to collect data, they might develop effective interventions.

Behavior Analysis in Education

"Behavior analysis has an arsenal of proven practices for promoting successful education in a variety of situations and a technology that offers potential for addressing numerous educational concerns" (Neef, 2004, p. iii). Yet, as Witt (1986) asserts, "most of the technology developed for use in educational settings has been underutilized" (p. 37). Although teacher-implemented behavior analytic programs can be very successful, classroom teachers rarely employ behavior analytic methods in non-research settings (e.g., Axelrod, 1992; Fantuzzo & Atkins, 1992; Jones & Slate, 1996; Lindsley, 1992). Generally, these technologies are put directly into practice by the researchers themselves. For example, Miller and Kelley (1994) implemented contingency contracting procedures to increase student homework accuracy. Occasionally, the researchers instruct teachers on the procedures to implement. For instance, Sharpe, Brown, and Crider (1995) instructed physical education teachers on the use of a social curriculum to increase student conflict resolution.

When researchers do get teachers to implement programs, these are often discontinued soon after the researchers retreat from the scene (Hall, 1991). Factors that appear to be inversely related to teacher implementation of procedures include time, effort, and resources required for implementation (e.g., Fantuzzo & Atkins, 1992; Hall, 1991; Witt, 1986). The fact that, following the conclusion of a project teachers are left without the external consultant, a valuable resource on which they rely (Sawka, McCurdy, & Mannella, 2002), may be also be a contributing factor to such a halt.

Possibly, if teachers develop their own interventions, they may be more likely to implement them than when directed to implement an intervention. One way of maximizing the likelihood that teachers develop interventions based on behavioral principles while minimizing countercontrol is to indirectly prompt them through a behavioral process for developing interventions. If time, effort, and resources required for implementation of such a process, as well as reliance on external supports are minimized, teachers may continue to implement the system after researcher departure.

Scripts

Written prompts in the form of checklists or task analyses that incorporate specific behavioral steps to follow have been used to prompt behavior in a variety of situations with diverse populations. For instance, O'Reilly, Green, and Braunling-McMorrow (1990) implemented checklists to teach accident prevention skills, and specific task analyses for correcting hazards, to adults with brain injuries. Welsh, Miller, and Altus (1994) implemented a checklist to prompt the chairperson's duties before, during, and after the meeting.

A script may be considered a more detailed form of task analysis or checklist. A script that is simply read verbatim, out loud, at the meetings, could guide the teachers through a behavioral process. Such a script could prompt teachers to operationally define the target behavior, gather data on the target behavior, look at antecedents and consequences to determine the possible function of the behavior, develop interventions that address the function of the behavior, and assess the effectiveness of these interventions by looking at data. Furthermore, a script that includes blanks to be filled in, and items to check off, could be used as meeting documentation, decreasing the effort required to take notes. Time and effort for implementation may be further reduced if all the necessary items to conduct an effective meeting are readily available at the meeting.

Scripts may not only minimize time and effort required for implementation as well as prompt wanted behaviors, but they may do so in the absence of the researcher. This, in turn, might greatly lessen dependence on the "external consultant" (i.e., the researcher or experimenter).

Program Survival

The Welsh, Miller, and Altus (1994) meeting system, with the checklist, continued to be implemented by housing residents, up to eight years after researcher departure. These researchers use the term "program survival" to refer to the continued, effective use of an intervention by the local staff without assistance from the researchers (p. 424).

Given that program survival refers to the continued use of an intervention, program survival usually occurs in the absence of the researcher. However, it may be very difficult to accurately measure whether or not a program occurs in the absence of the researcher (i.e., survival), as the presence of the researcher is usually necessary to conduct direct observations. Nevertheless, Welsh, Miller, and Altus (1994) offer a clever solution to this problem. These authors suggest that by observing the use of the intervention under conditions of minimized observer and researcher reactivity, one may be able to predict what would happen to program implementation when the researchers are not in the setting. Proposed ways of reducing observer reactivity include observing inconspicuously, minimizing interactions between observers and research participants, and not administering differential consequences based on research observations. Researcher reactivity may be further decreased by researchers minimizing any of their behaviors that foster the implementation of their interventions. Welsh, Miller, and Altus (1994) refer to conducting observations under conditions of minimized observer and researcher reactivity as “survival probes,” and suggest that survival probes provide an accurate prediction of the survival of a program in post-researcher conditions.

PURPOSE OF THIS STUDY

In the present study, a behaviorally based teacher-run scripted meeting system, to address student academic and behavior problems, was developed under survival probe conditions. The purpose of this study was to analyze the effect of a meeting manual, composed of scripted meeting agendas, on meeting behaviors that contribute to behaviorally based student interventions, as well as to assess continued implementation of the system after researcher departure. A secondary goal was to assess the social validity of the meeting system for the teachers and to try to determine the effectiveness of the system on student behavior.

METHOD

Setting

This study was conducted over two years, in a public middle school located in a residential neighborhood of a Midwest town (population 122,377). Approximately 600 students (6^{th}, 7^{th}, and 8^{th} graders) attended this school. Data were gathered during team meetings, which were held either before or after school hours, in a vacant classroom or in the school's library.

Installation

One element of this school's efforts to embed PBS practices involved the school conducting a self-assessment to identify areas needing support. The school's prereferral system, the Student Resource Team (SRT), was one such area identified. Originally, the proposed solution was for PBS to provide a person that would be responsible for assisting teachers when they requested help. However, the experimenter suggested exploring alternatives, explaining that once funding for this person would be depleted, the school would be left with nothing. This, in turn, resulted in allowing the experimenter to explore alternatives.

To familiarize herself with the SRT system, and to determine what may possibly be the problem with it, the experimenter conducted a series of surveys, interviews, and observations. Findings determined teacher attendance at these meetings to be poor; teachers reported feeling like they were not listened to; discussion in meetings centered around possible causes of the problem, such as problems at home or possible psychological delays; decisions were often based on impressions rather than on data; recommendations were not always clear; and there was no systematic follow-up to the student cases.

A school team, composed of people that often attended the SRT meetings was formed, to assist in “fixing” the system. This team consisted of the school’s principal, social worker, counselor, psychologist, a special education teacher and a general education teacher. Based on the experimenter’s results from surveys, interviews and observations, the team determined that the goals for the new system would be to increase teacher attendance and participation at the meetings; to increase the amount of data at the meetings; to increase follow-up meetings; to increase effective meeting behaviors; and to put in place a system that would survive after the experimenter left.

The experimenter worked very closely with this team to develop the new system. Development of the new system took a year. Not only was there extensive collaboration with this team, but there also was extensive usability testing of the system with this team as well as with the teaching staff. The experimenter was always careful to incorporate everyone’s feedback by making the necessary changes or revisions and always following-up to demonstrate that those suggestions had been incorporated. Throughout the development year (2001-2002), the experimenter attended every SRT meeting, to gather baseline data.

The new system, Encouraging Student Progress (ESP), was introduced to the entire school staff at an inservice meeting that took place right before the 2002-2003 school year began. While the decision to implement the new system was an administrative decision, and teaching staff did not have a choice regarding the use of the new system, teachers did have a choice as to whether or not to make a referral. Because most of the teaching staff had experienced frustration with the previous system (SRT), the new system was welcomed by many. However, there were a few staff that did express resistance to change.

Selection Process

Consenting to participate in the study simply meant that the individual (teacher, non-teaching school personnel, or parent) allowed the experimenter to collect data on his or her meeting behaviors, during team meetings. When obtaining informed consent, the experimenter always provided a brief description of the study, purpose, and procedures. The experimenter also told participants that they could withdraw from the study at any time, by simply informing the experimenter that they wished to do so. If a meeting member did not wish to participate in the study, no data were collected related to his or her behavior during the meeting, although they were included in the total meeting attendance count.

During the first year of the study, prior to each team meeting, the experimenter approached each meeting member to obtain informed consent. At the beginning of the second year, prior to intervention, the experimenter approached teachers and non-teaching school personnel at a staff meeting, to obtain informed consent. If, at any point there was a new member (e.g., a parent) at a team meeting, the experimenter approached that member prior to the start of the meeting, to obtain informed consent.

Participants

Over the two years that the study took place, a total of 34 teachers and 10 non-teaching school personnel took part in the study. Non-teaching school personnel refers to the school's principal, vice-principal, counselors, curriculum coordinator, social worker, psychologist, and nurse. Due to turnover, the number of participants varied from year to year. The first year, 25 teachers (out of 33) and 9 non-teaching school personnel (out of 9) participated in the study. The second year, 32 teachers (out of 40) and 8 non-teaching school personnel (out of 8) participated. Twenty-three teachers and 7 non-teaching school personnel participated across both years.

The experimenter was a graduate student enrolled in a Ph.D. program at a local university working as a research assistant in a school-wide positive behavior support (PBS) project. The experimenter had been working in this school during the year prior to this study, conducting a variety of activities related to embedding positive behavior supports in the school, including teaching a small group of staff members individual PBS planning using a case study approach. This study represented one part of the school's efforts to embed PBS practices within the school.

Response Definition

In order to assess the percent of applicable meeting tasks completed, at each team meeting, the experimenter recorded the behavior of each member who had consented to participate in the study. In addition to meeting tasks completed during team meetings, the experimenter collected data on a variety of items such as length of time of the meeting, the number of people attending, the number of people having data at the meeting, and the type of data shared.

Meeting Tasks

The experimenter, in collaboration with the school's principal, counselor, and social worker, identified 15 data-based decision making and team meeting behaviors (i.e., "meeting tasks"), thought to contribute to behaviorally based student interventions, as suggested by Bartels and Mortenson (2002), Bushell and Baer (1994), Flugum and Reschly (1994), Jones and Slate (1996), Sandall, Schwartz, and LaCroix (2004). Meeting tasks incorporated a collection of data-related and appropriate-meeting behaviors. Each of the 15 meeting tasks was operationally defined, and criteria were set for each. Table 1 lists the 15 meeting tasks, along with a summary of the definition and criteria (see Appendix A for a full description).

Secondary Data

The experimenter also collected data on a variety of items during team meetings, including attendance, meeting information, data brought to the meetings, and information related to student interventions and outcomes. The experimenter conducted classroom observations to gather data on student behavior. A teacher survey was also implemented to assess teacher's impressions of the meeting systems, during each condition.

Attendance and Meeting Information

Data were collected on the number of teachers, other school personnel, and family members attending the meetings. Meeting information data included meeting length and meeting number for the student (i.e., first meeting, follow-up).

Table 1
Data-Based Decision Making & Team Meeting Behaviors: Definition & Criteria Summary

Behavior	Definition	Criteria
1. Review/update recommendations	Facilitator states previous meeting recommendations.	Previous recommendations were stated.
2. Define target behavior	Target behavior is defined in specific observable terms.	Definition includes at least one behavioral dimension.
3. Share data	Members display their data so that others may access them.	At least half of the members share data.
4. Data in line graph format	Quantifiable data on target behavior are plotted in a line graph format.	At least half of the members with quantifiable data have a line graph.
5. Look at data	Members make visual contact with the data for at least 3 seconds.	At least half of the members looked at each piece of data shared.
6. Analyze data	Members talk about changes, trends, or stability of the data.	At least one comment is made about each piece of data.
7. Relate data to environmental events	Members make comments that directly relate the data to environmental events.	At least one comment relating data to an environmental event is made.
8. Discuss data collection	Members discuss specifically how data will be collected.	A statement regarding what kind of data to collect is made.
9. Discuss intervention strategies	Members make statements that suggest a potential course of action to change the target behavior.	At least one statement that suggests a potential course of action is made.
10. Discuss intervention implementation	Members discuss intervention implementation.	A statement regarding intervention implementation issues is made.
11. Select a plan of action	Members state what they are going to do with respect to the target behavior.	A plan of action is stated.
12. State who is going to do what, and when	Members state specifically who is going to do what, and when.	Member’s responsibilities are explicitly stated.
13. Confirm date	Facilitator states the date and time of the next meeting.	Date and time is stated.
14. Complete meeting minutes	Facilitator takes notes throughout the meeting.	Meeting notes are available.
15. Initial form/ Attendance	All members attending initial the meeting minutes.	Every attending member initialed.

Data at Meetings

The experimenter also gathered data on the number of teachers or other meeting participants that brought data to the meeting. Each data piece displayed at the meeting was coded as either “observational data” or not (i.e., “other data”). Observational data included (1) notes related to the target behavior obtained from direct observation, such as an Antecedent, Behavior, Consequence Chart (i.e., ABC Chart), (2) quantifiable measures of the target behavior derived either from recording methods such as permanent product, event recording, duration recording, and (3) graphed data of the target behavior, including line graphs, bar graphs, pie charts. “Other data” included information brought to the meeting that was not directly related to the target behavior, and included items such as teacher’s notes, student’s records, a list of assignments, achievement test scores, and health records.

Student Information

Teacher statements. The experimenter recorded statements made by team members, during meetings, regarding what the target behavior was, the intervention that the team decided to implement, and whether or not there were improvements in the target behavior.

Individual student data. In an effort at assessing the actual effects of the teacher run meeting system on student behavior, the experimenter gathered data on three student cases that the teachers met about, in two classes each. The three student cases were randomly selected. The classes that the experimenter observed were also randomly selected.

Teacher Survey

During each condition of the study, the experimenter distributed a survey asking teachers to rate the current meeting system on a variety of measures, including effectiveness at solving student problems, and how much they liked the current system compared to the previous system.

Observation and Recording

Meeting Tasks

During team meetings, the experimenter sat apart from the group and did not participate in the discussion. If, during a meeting, team members had a question for the experimenter, the experimenter redirected them to read through the meeting agenda and follow the directions. The experimenter used a checklist type of data sheet to record the group's behavior (see Appendix B, Observation Form). Any time a team member exhibited any of the target meeting tasks, the experimenter made a check mark under the column coded for that team member. At the end of the observation period, for each of the 15 meeting tasks the experimenter marked whether or not criteria had been met. If a particular item was not applicable to that meeting (e.g., "reviewing previous recommendations" during the first meeting), the experimenter marked that meeting task as "N/A," and that task was excluded from the total count of applicable tasks. The percentage of applicable meeting tasks completed during each team meeting was calculated by adding the total number of meeting tasks which met the criteria, dividing it by the total number of tasks applicable to that meeting, and multiplying this by 100%.

Secondary Data

Attendance, Meeting Information, Data at Meetings, and Teacher Statements

During the meeting, the experimenter collected data on team member's data pieces as they were visible to the experimenter (either the team member shared the data verbally or visually, or the team member placed it on the table). The experimenter also recorded any statement made by the team regarding what the target behavior was, the intervention that the team decided to implement, and whether or not there were improvements in the target behavior. After the meeting, the experimenter completed attendance and meeting length information on the data sheet, by counting the number of people attending the meeting. Meeting length was calculated using a timer.

It should be noted that some teachers that had not consented to participate in the study did attend some meetings. Data were not collected on anything that these members said during the meetings (including meeting task completion), on whether or not they brought data to the meetings, or on the type of data. However, these members were counted into the total number of teachers attending the meeting.

Individual Student Data

For the three randomly selected student cases, the experimenter measured the same target behavior that teachers had selected during the meetings, before they began implementing the interventions that they had selected, and during their implementation. The behavior that the teachers had selected in each of the three cases was turning in assignments. Initially, the experimenter attended the randomly selected classes and sat through the entire class time to observe for assignments turned in. However, it soon became apparent that students could turn assignments in at any time, for instance after study hall, before the end of the day. As such, the experimenter was unable to accurately observe the teacher selected behavior, and had to rely on teacher reports. After such determination, instead of actually observing the student behavior, the experimenter measured student behavior by asking the teachers in the selected classes, how many assignments the target student had turned in, on a daily basis, and how many assignments were due. Because the number of assignments to be turned in differed from week to week, the experimenter reported percentage of assignments turned in, rather than total assignments turned in.

Teacher Survey

At random intervals during each condition, the experimenter distributed a teacher survey by placing the survey in each teacher's box. Teachers had one week to return the survey to the experimenter. Surveys were returned by placing them in the experiment's box at the school, and were anonymous.

Reliability

A trained observer attended the team meetings with the experimenter and independently recorded his observations using the same data collection procedures as the experimenter. Reliability on meeting task completion was calculated by counting the number of agreements on whether each of the 15 meeting tasks met criteria, did not meet criteria, or did not apply; dividing the total number of agreements by 15 (total number of meeting tasks); and multiplying this by 100%.

Reliability was assessed during 78% of the No Meeting Manual (baseline condition) team meetings, and averaged 84% (range = 47 to 100%). Reliability was assessed during 29% of the initial Meeting Manual (treatment condition) team meetings, and averaged 88% (range = 80 to 93%), during 29% of the No Meeting Manual (reversal condition) team meetings and averaged 92% (range = 80 to 100%), and during 29% of the Meeting Manual (treatment condition) team meetings and averaged 91% (range = 86 to 100%).

Procedures

Baseline

During baseline, if a teacher, parent, or non-teaching staff had an academic or behavioral concern about a student, that person would contact the school's social worker. The social worker would schedule a meeting to discuss the student's case, and invite the student's parents, teachers, department heads, nurse, and non-teaching school personnel. These meetings were always scheduled on a Monday, at 3:00 p.m., and were held in a vacant classroom. Because there was one time available for meetings, sometimes there was a wait of a month or more for the actual meeting. The social worker or the school psychologist chaired these team meetings and the meetings followed no set agenda.

Treatment

Scheduling a Meeting

During treatment, if a teacher, parent, or non-teaching staff had an academic or behavioral concern about a student, he or she was to complete a "Concern Form."

The Concern Form guided the person completing it to specify concrete examples to illustrate his or her concern (see Appendix C). The completed Concern Form was then given to a designated non-teaching school staff person, who served as the "program coordinator." The program coordinator scheduled the first team meeting by consulting that student's teachers' schedules, determining times when most teachers would be available, and by looking at room availability during that time. Meetings were usually scheduled within a week of the request. The program coordinator wrote the scheduled meeting date, time, and location on the form, copied this form to all of that student's teachers, and placed the copy in each teacher's mailbox, along with a "Meeting Prep-Pack." The Meeting Prep-Pack guided the teachers as to how to prepare for the meeting, and contained blank forms for the teachers to collect data on (see Appendix D).

The program coordinator then prepared the meeting manual for the teaching team by gathering student information, such as class schedule, grades, medical information, and placing it in the meeting manual (see Appendix E). The program coordinator was only responsible for scheduling the first meeting and for preparing the meeting manual for the teaching team, for keeping the meeting manuals in a locked cabinet, and for upkeep of the meeting manuals. The program coordinator did not attend the meetings. Teachers scheduled follow-up meetings during the meetings themselves. If, at the meetings, the teacher team determined that other people should be invited to the meetings, such as a family member or the student, or if the team needed assistance, one of the team members would be assigned responsibility for making the necessary contacts to invite these people to the next team meeting. All team meetings were held either in an unoccupied classroom or in the school's library.

Chairing the Meetings

The school person who had initially expressed the concern (usually a teacher) was the designated "meeting facilitator" for the team. If a parent had initially expressed the concern, that student's main teacher ("advisor base" teacher) was designated as the meeting facilitator for the team. The meeting facilitator was responsible for chairing the team meetings by following a scripted meeting agenda.

Meeting agendas. In an attempt to follow a behavioral consultation model, three scripted meeting agendas were developed for each of three different types of meetings: An assessment meeting, an intervention meeting, and a follow-up meeting. Each meeting agenda guided the team as to what to do and what to discuss at each meeting, by listing specific questions to ask, issues to address, and decisions to make, based on team members' responses. Meeting agendas were scripted, meaning that all that the meeting facilitator had to do to conduct the meeting was to follow the directions on the form, and to read the script, verbatim, out loud to the team members. Meeting agendas also included blanks to fill in and items to check off so that team member's responses could easily be recoded as the meeting progressed, constituting meeting-minute documentation (see Appendix F). The meeting agendas were placed in a binder, referred to as the "meeting manual."

Meeting manual. The meeting manual contained the student information that the program coordinator had gathered for the team, so that the team would have it readily available at the meetings if needed. In addition to the student information, the meeting manual also contained the meeting agendas for each of the three meetings, as well as blank data collection and graphing forms (see appendix G). Seven different data collection forms were developed, to accommodate permanent product, event recording, momentary sample recording, partial interval recording, latency recording, duration recording, and whole interval recording. Each of these forms had a description of the data collection method, an example, and directions on how and when to use that method on one side, and a blank form for the teachers to use on the other side. The graphing form also had a description of how to graph and an example on one side, and a blank form on the other side. The meeting manual had approximately 10 copies of each of these forms, so that team members would leave the meeting with the necessary forms to collect and graph data. The meeting manual also contained a vinyl envelope for the team to place completed data collection forms in, so that they could look at previously collected data anytime.

Training

Teacher Training

The experimenter presented the teacher-run meeting system procedures, such as how to schedule a meeting (i.e., use of the Concern Form), what to do when there is a concern about one of their students (i.e., going over the Meeting Prep Pack), and how to conduct a meeting (i.e., presentation of the meeting manual) during a two-hour teacher in-service. This in-service took place at the beginning of the second year of this study (intervention year). Other than during this in-service, teachers did not receive any additional training from the experimenter, either on the teacher-run meeting system or on the meeting manual. If teachers had questions, they were directed to talk to an "in-house consultant."

In-House Consultants

In-house consultants were 5 participants (the school's principal, vice-principal, counselor, curriculum coordinator, and the head of special education) that the experimenter trained in greater detail. This training consisted of 15 hours of didactic instruction on the teacher-run meeting system and on basic behavioral principles (see Appendix H), and of "hands-on" instruction with a selected student case. The function of in-house consultants was (1) to assist meeting team members (i.e., teachers) whenever they requested assistance by attending the team meeting when invited to do so, (2) to attend a follow-up meeting when notified by the teacher team that the teacher team had determined that the student should be referred for special education testing, in order to ensure that the team had sufficient data and documentation in support of the referral, (3) to train new incoming teachers on the teacher-run meeting system, (4) to train other in-house consultants if one of them were to be replaced, and (5) to monitor the teacher-run meeting system on an ongoing basis, and make revisions to it, as they saw fit.

Institutionalization

The experimenter worked very closely with the development team in the development of the new meeting system and of the materials. While the experimenter did physically develop all of the meeting materials (i.e., all the forms), the development team and the teachers provided extensive input in the shaping of the system and materials. The end result was a system that they created, with the guidance and assistance of the experimenter. To minimize reliance on the experimenter, or on any one “expert,” the system that was developed was meant to be self-guided, meaning that anyone would able to conduct a successful meeting, simply by following the meeting agenda, without the requirement of any special training.

Additionally, to ensure non-reliance on the experimenter, the experimenter carefully tried to build into the school all the necessary supports ordinarily provided by researchers. One such example was the development of the program coordinator role, whose primary responsibility was upkeep of the meeting manuals. Another example was the development of the in-house consultant role, whose primary function was to assist teachers with the new system. While the experimenter did spend some time training the in-house consultants, part of this training also included training the in-house consultants to train others. All supports ordinarily provided by researchers were programmed into the meeting system. The local staff provided supports such as managing the meeting manuals, photocopying, and helping teachers. The meeting manual provided additional supports in the form of prompts, rationales, and training. And the actual meeting provided other supports, such as social reinforcement.

Design

In order to analyze the effect of the meeting manual on the percentage of meeting tasks displayed during team meetings, a reversal ABA’B design was implemented. Conditions included the following: (1) Baseline: No Meeting Manual; (2) Treatment: Meeting Manual; (3) Reversal: No Meeting Manual; and (4) Treatment: Meeting Manual.

Baseline (A): No Meeting Manual

All of the team meetings taking place during the first school year of this study were observed, resulting in data for 35 meetings. None of the components of the meeting manual or of the teacher-run meeting system were in place during this condition. The experimenter measured the percentage of meeting tasks completed during these meetings.

Treatment (B): Meeting Manual

The following school year began with the teacher-run meeting system and meeting manuals in place. The meeting manual was available for use at teacher-run team meetings throughout this condition. The experimenter continued to measure the percentage of meeting tasks completed during team meetings. There were a total of 31 teacher-run team meetings that took place during this condition, 28 of which were observed.

Reversal (A'): No Meeting Manual

Once the percentage of meeting tasks completed during teacher-run team meetings was well established, the meeting manuals were removed. The experimenter continued to measure the percentage of meeting tasks completed during team meetings. During this condition, there were a total of 15 teacher-run team meetings that took place, 14 of which were observed.

Treatment (B): Meeting Manual

As per teacher and school personnel request, the meeting manuals were re-introduced and were once again available for use during teacher-run team meetings. The experimenter continued to measure the percentage of meeting tasks completed during team meetings. During this final treatment condition, which lasted until the end of the school year, there were a total of 35 teacher-run team meetings that took place, 34 of which were observed.

Follow-Up

After leaving the setting, the experimenter contacted the school's principal and counselor at random intervals, asking about the status of the teacher-run meeting system. On a few occasions, the experimenter asked permission to attend a teacher-run team meeting to collect follow-up data. During the first year after the experimenter left the setting (3rd year of the study, 2nd year of meeting manual implementation), the experimenter observed three teacher-run team meetings, one at 5 months, one at 7 months, and one at 9 months. During the second year after the end of the study, the experimenter was unable to conduct any observations. The experimenter conducted one observation during the third year after the end of the study, at 30 months, and three observations during the fourth year, at 44 months. During these meetings, the experimenter measured the percentage of meeting tasks completed, following the same procedures as during the study.

RESULTS

Meeting Tasks and Program Survival

Figure 1 shows the effects of the meeting manual on the percentage of meeting tasks completed during team meetings. During the first year of the study, baseline year, when the meeting manual was not in place, the percentage of meeting tasks completed averaged 13%. With implementation of the meeting manual, the percentage of meeting tasks completed during meetings increased to an average of 81% (83% if two meetings during which the meeting manual was not used are excluded).

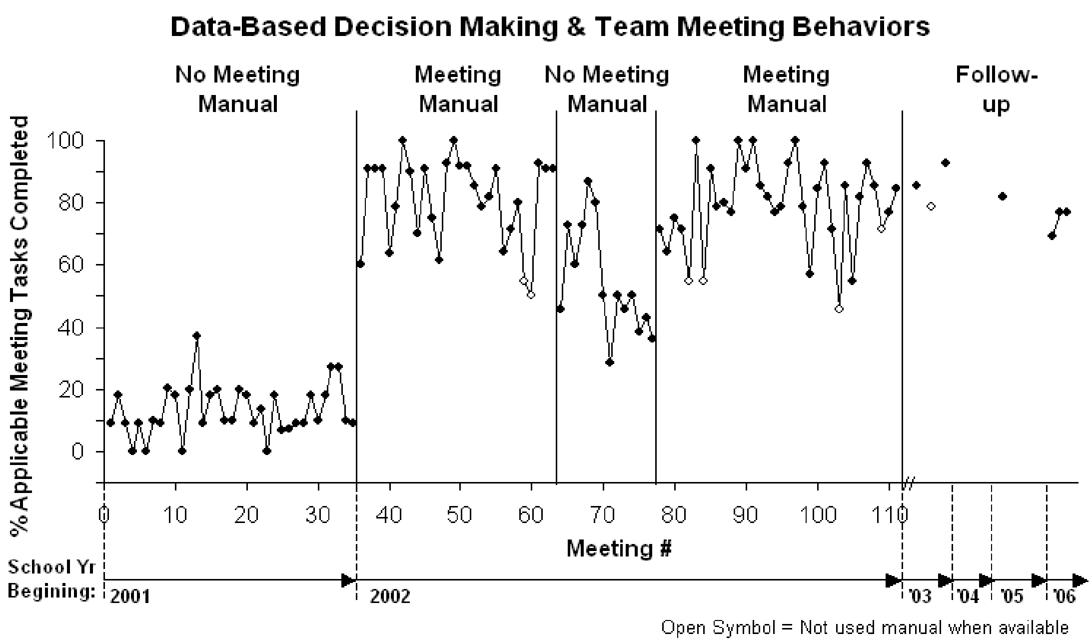

Figure 1. Percent of applicable meeting tasks completed during team meetings

This percentage decreased to an average of 54% when the meeting manual was withdrawn, and increased back to an average 79% when the meeting manual was reinstated (82% if four meetings during which the meeting manual was not used are excluded). Follow-up probes during the four years after the researcher left the setting revealed the percentage of meeting tasks completed during team meetings to average 80% (81% if one meeting during which the meeting manual was not used is excluded). Thus, the percentage of meeting tasks completed was higher during all conditions in which the meeting manual was in place (i.e. initial treatment condition, reinstatement after reversal, and follow-up), when compared to conditions in which the meeting manual was not in place (i.e., baseline and reversal).

Secondary Findings

Attendance

As depicted in Figure 2, during baseline, the average number of teachers attending meetings was 2.14 and the average number of other school personnel 5.03. During the teacher-run meeting system, the average number of teachers attending meetings was 4.37 (more than double), and the number of other school personnel was 0.67. An analysis of teacher attendance revealed the percentage of all the teachers attending at least one teacher-run meeting to be 90% (all but one teacher attended at least one meeting), whereas the percentage of all teachers attending at least one meeting during baseline was 51%.

Meeting Information

As can be seen in Table 2, meeting data revealed that, although the number of student cases referred remained the same under the teacher-run meeting system (approximately 30 cases), the number of total meetings conducted almost tripled (35

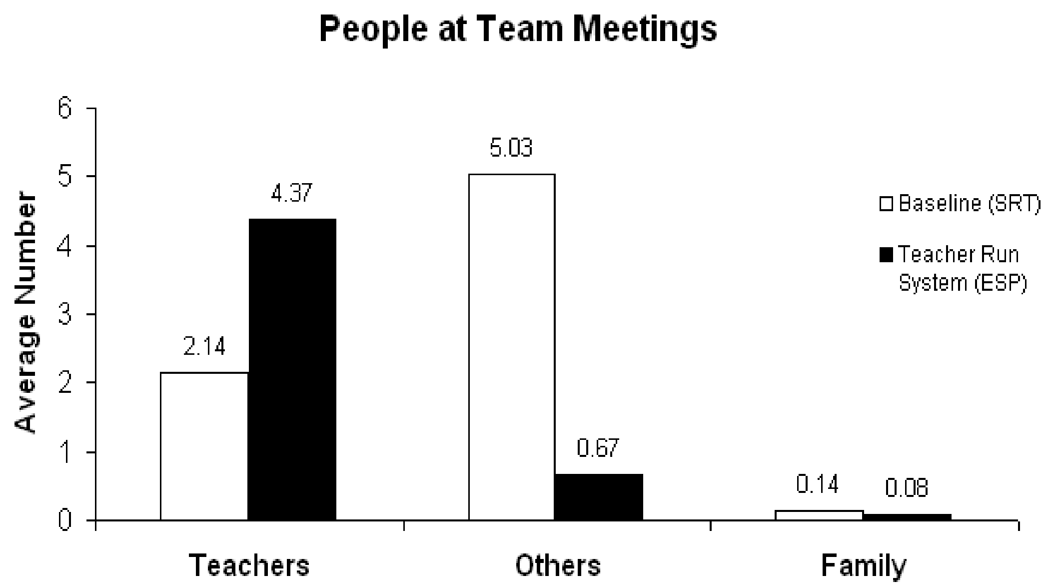

Figure 2. Team meeting attendance during baseline and during teacher-run meetings

meetings during the baseline year, 81 meetings during the implementation year).

Although this is a large increase in meetings, Table 2 also shows that 62% of the teacher-run meetings were follow-up meetings, whereas only 14% of the baseline meetings were follow-up meetings. Follow-up meetings refer to any meeting about the same student that is not the first meeting. Most frequent meeting duration (mode) of baseline meetings was 30 minutes, and of teacher-run meetings was 19 minutes.

Data at Meetings

The average percent of teachers bringing data to the meetings more than doubled during teacher-run meetings: 57% of the teachers, across the three teacher-run meeting conditions, had data, compared to 23% during baseline. As can be seen from Figure 3, the percentage of the data brought to the meetings considered to be

Table 2
Meeting Information

	Baseline Meeting System (SRT)	Teacher-Run Meeting System (ESP) – (Data include reversal)
Total number of student cases	30	31
Total number of meetings during the year	35	81
Total number of meetings that were follow-up meetings	5 (= 14%)	50 (= 62%)
Most frequent meeting length (mode)	30 min.	19 min

direct observational data increased from 0% during baseline to 75% with initial implementation of the meeting manual. While the percentage of data brought to the meetings did not decrease by much with meeting manual withdrawal, the percentage of observational data pieces did dramatically decrease (74.57% to 19.52%).

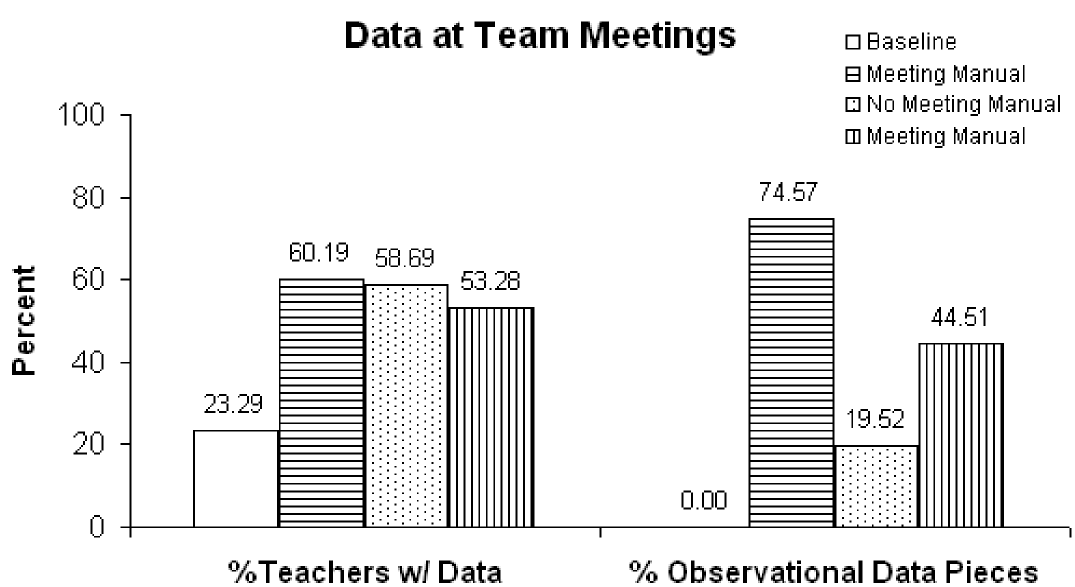

Figure 3. Percent of teachers bringing data to the meetings and, of these data, percent meeting observational criteria during each condition

Reinstatement of the meeting manual did not appear to have an effect on the percentage of teachers bringing data to the meetings. However, reinstatement of the meeting manual was associated with an increase in percent of observational data at team meetings, from 19.52% to 44.51%.

Student Information

Teacher Statements

As can be seen in Figure 4, additional data gathered on the teacher-run meeting system revealed the selected teacher target behavior to be predominantly a combination of an academic and behavioral issue in 65% of the cases, rather than

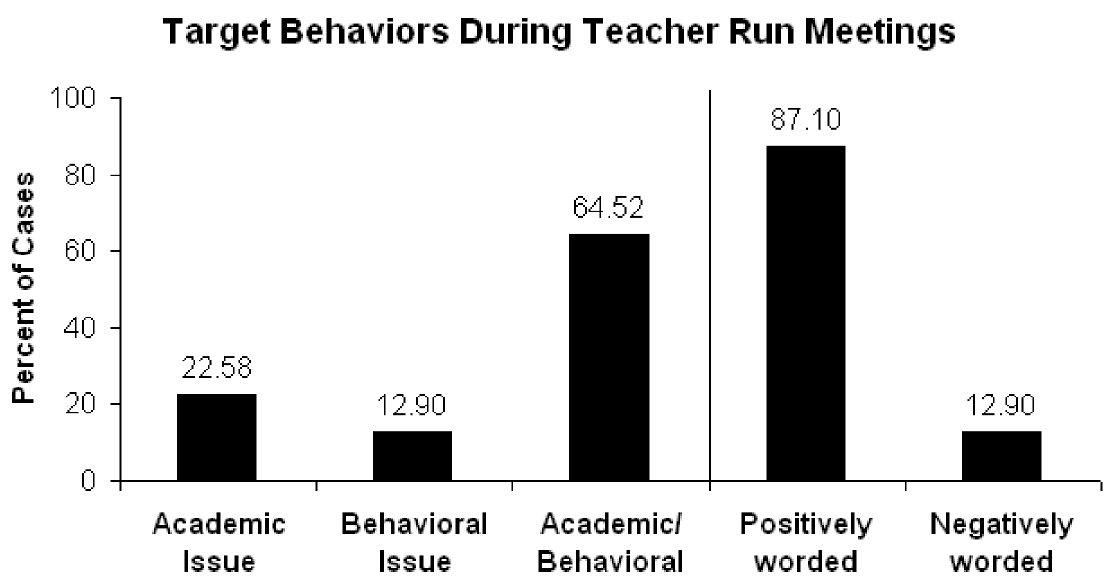

Figure 4. Teacher selected target behaviors during teacher run meetings

exclusively an academic (22.58%) or behavioral (12.90%) issue. An exclusively academic issue was a behavior such as spelling, or not passing a class. An exclusively behavioral issue was a behavior such as crying or following directions. A combination of academic and behavioral issue included behaviors such as turning assignments in, being on-task, and having materials. Teachers targeted a positive behavior to increase in 87% of the cases (e.g., being on task), rather than a behavior to decrease (e.g., being off task).

As Figure 5 depicts, in 95% of the cases teachers selected positive or proactive interventions, and teachers reported improvements in 79% of the cases.

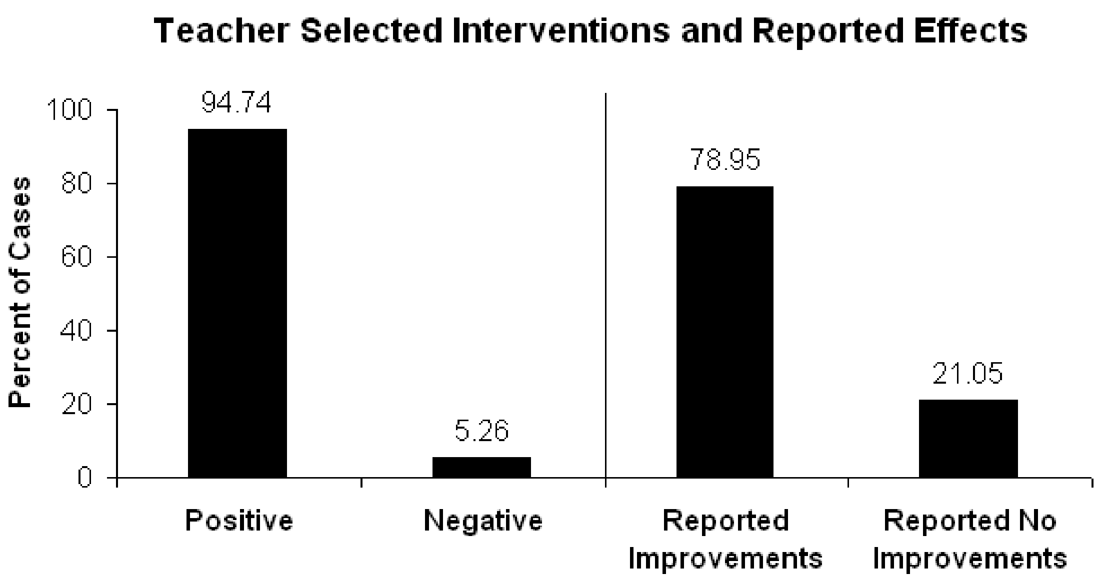

Figure 5. *Percent of cases in which teachers selected positive or negative interventions and teacher reported effects*

Individual Student Data

For Student 1, the teacher-identified function of not turning in assignments was escape. The teacher-selected intervention was for the student to come early and finish the work in the advisor base class, and for the teachers to communicate to the advisor base teacher, on a daily basis, the status of the student's work. As illustrated

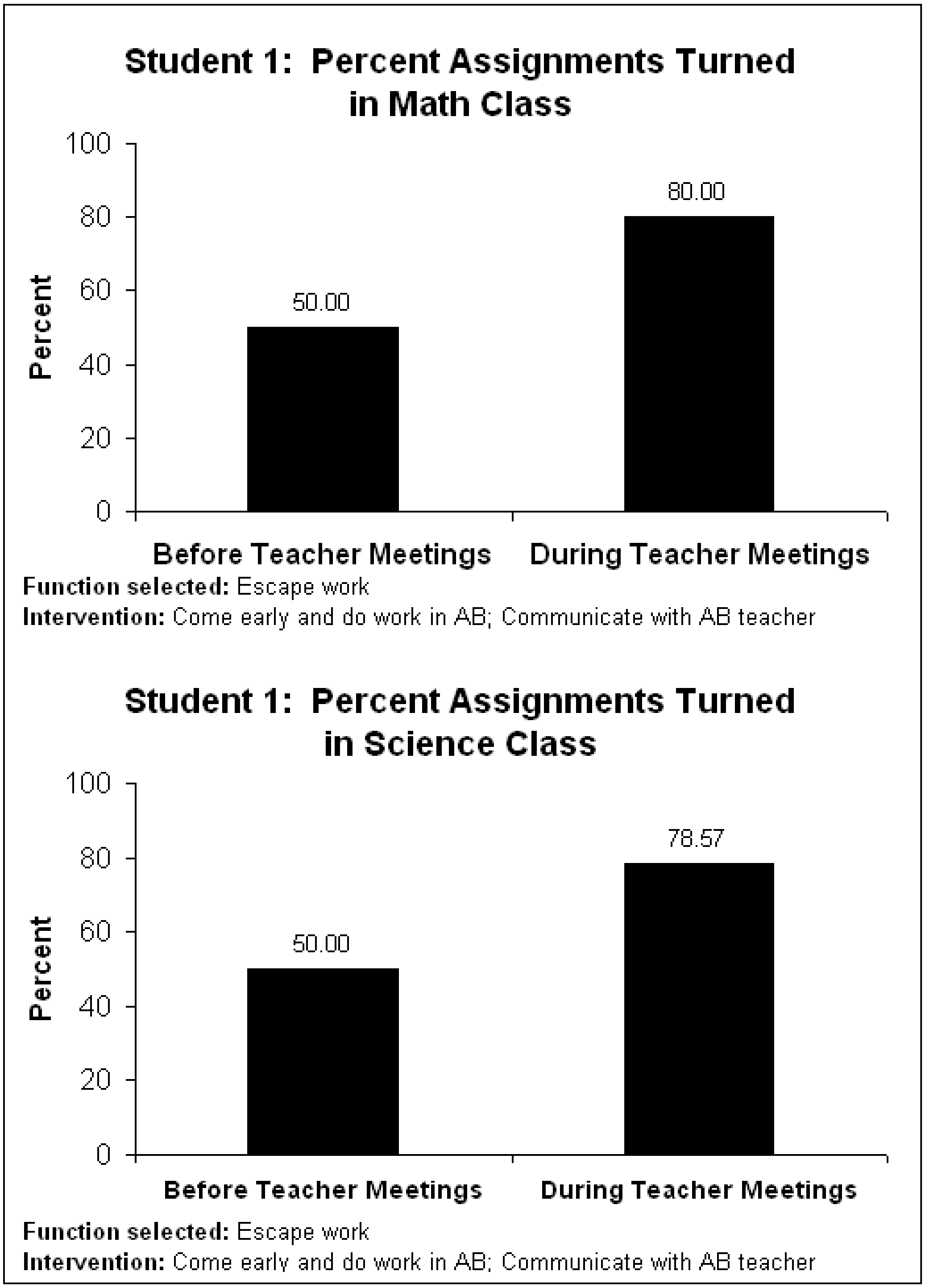

Figure 6. *Function, intervention, and percent of assignments turned in for Student 1, in Math and Science class, before and during teacher run meetings*

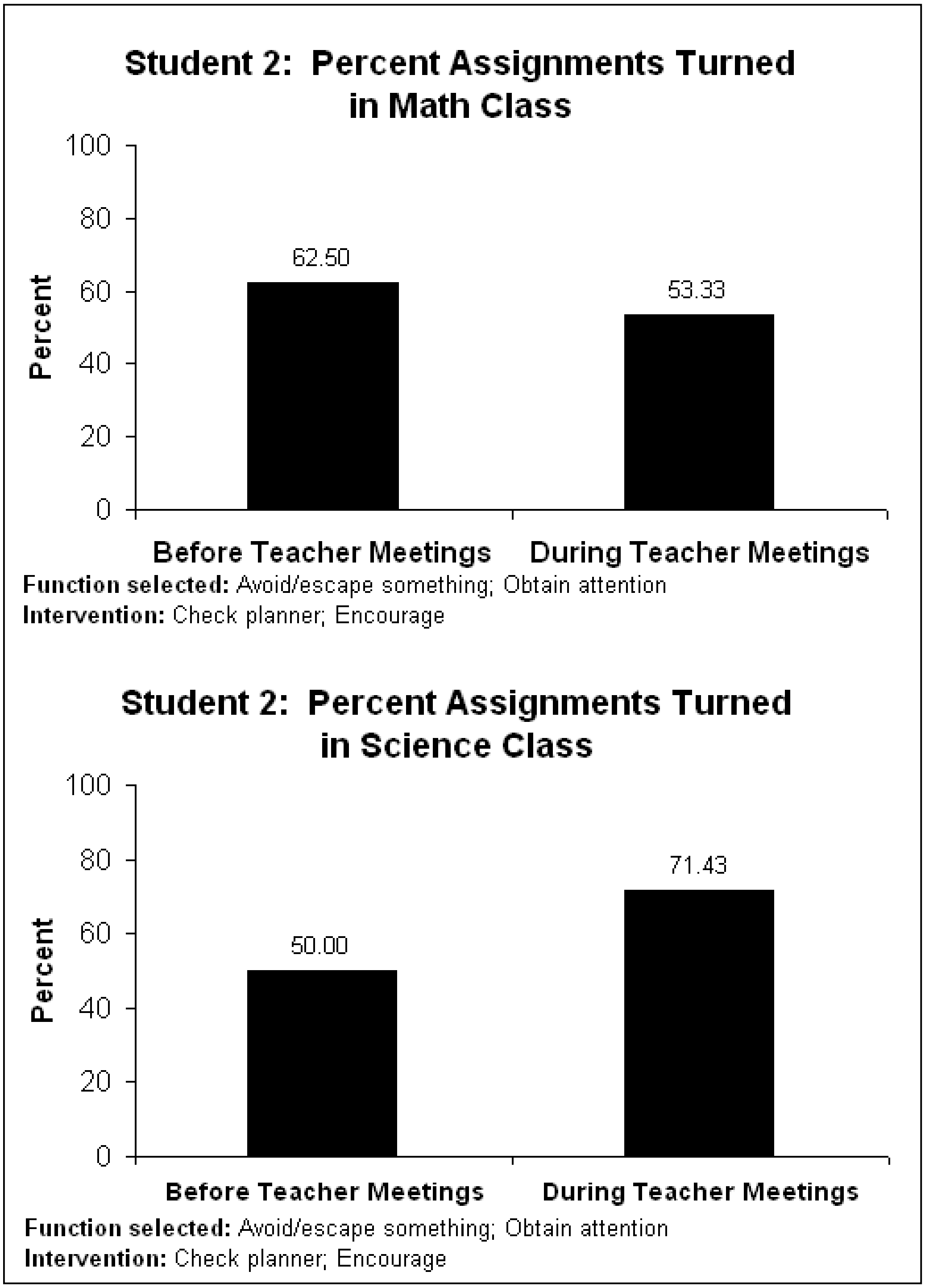

Figure 7. *Function, intervention, and percent of assignments turned in for Student 2, in Math and Science class, before and during teacher run meetings*

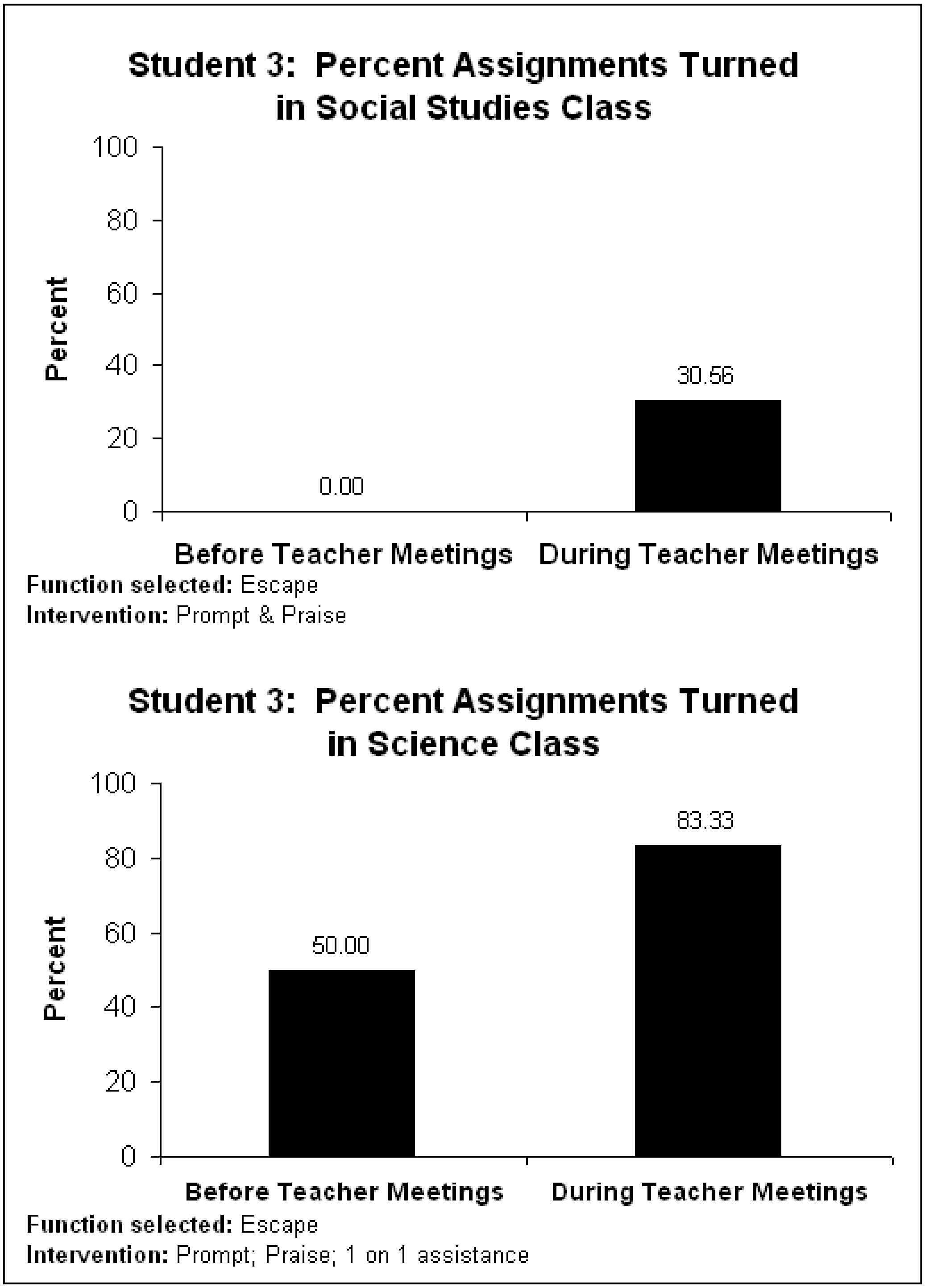

Figure 8. *Function, intervention, and percent of assignments turned in for Student 3, in Social Studies and Science class, before and during teacher run meetings*

in Figure 6, the percent of assignments turned in by Student 1, in both of these classes increased from a baseline level of 50% to approximately 80% when the teachers began intervention implementation through the teacher run meeting process.

For Student 2, the teacher-identified function of not turning in assignments was to avoid or escape something, as well as to obtain attention. The teacher-selected intervention was for the teachers to check the student's planner on a daily basis and to encourage the student to do his work. As illustrated in Figure 7, the percent of assignments turned in, by Student 2, in math class actually decreased from 63% to 53% when the teachers began intervention implementation. In Science class, however, the percentage of assignments turned in increased from 50% during baseline, to 71% during teacher interventions.

For Student 3, the teacher-identified function of not turning in assignments was to escape. The teacher-selected intervention was for the teachers to prompt the student to turn in the assignments, and to praise turning in assignments. Additionally, the science class teacher stated that she could also offer one-on-one assistance when the student asked for help. While the other teachers thought that this was a good idea, they stated that they could not offer one-on-one assistance in their class, as they were too busy during that time. As illustrated in Figure 8, the percent of assignments turned in, by Student 3, in social studies class increased from a baseline level of 0% to 31% when teachers began intervention implementation. In Science class the percentage of assignments turned in increased from 50% during baseline, to 83% during teacher interventions.

Teacher Survey

In the final survey, 69% of the teachers rated the teacher run meeting system as being more effective at solving student problems than the previous (i.e., baseline) system, and 75% stated that they liked the process more.

CONCLUSIONS

Meeting Tasks and Program Survival

This study analyzed the effects of a meeting manual composed of scripted meeting agendas on meeting behaviors that contribute to behaviorally based student interventions. The percentage of meeting tasks completed was higher during conditions in which the meeting manual was available (i.e., treatment), than during those conditions in which it was not available (i.e., baseline and reversal). The decrease in meeting task completion when the meeting manuals were not available suggests that the meeting manuals were, at least in part, responsible for the increase in meeting task completion. Therefore, the data gathered strongly suggest that the meeting manual was effective at increasing meeting behaviors that contribute to behaviorally based student interventions during teacher-run meetings.

The second purpose of this study was to analyze continued implementation of the teacher-run meeting system after researcher departure. The percentage of meeting tasks completed during follow-up observations maintained at approximately the same levels obtained with meeting manual implementation during the time in which the experimenter was in the setting. Maintenance of relatively high meeting task completion levels during follow-up meeting probes suggests continued implementation of the teacher-run meeting system up to four years after researcher departure. Because each observation of the teacher-run meeting system was conducted under survival probe conditions, these data strongly support Welsh, Miller, and Altus' (1994) claim that survival probes may predict what will occur once the researchers are no longer in the setting.

Secondary Findings

Attendance

During the teacher run meeting system, teacher attendance at meetings more than doubled, while school personnel attendance greatly decreased. This suggest that team meetings under the teacher run meeting system are predominantly composed of teachers. This is important, as teachers are the ones that are directly working with the students, and that know the students best. Additionally, increasing teacher participation at the meetings was one of the school's goals for the new system.

Meeting Information

Although the total number of meetings almost tripled under the new system, the number of student cases remained relatively the same (30 cases vs. 31 cases). This great increase in not surprising given that the protocol for the teacher run meeting system included three different types of meetings (i.e. assessment, intervention, and follow-up). Nevertheless, this supports the conclusion that under the teacher run meeting system most student cases were followed-up on. This was another of the school's goals for the new system. It should be noted that, while the number of meetings increased, the time spent in meetings decreased. This might possibly suggest that, having a written agenda to follow may render the meetings more efficient.

Data at Meetings

The percent of teachers bringing data to the meetings, under the teacher run meeting system, more than doubled, and the percent of those data qualifying as observational data increased from 0% to 75% with meeting manual implementation. This is important, as data has been linked to the design of effective interventions (Bartels & Mortenson, 2002). It is interesting to note that, while the number of teachers bringing data to the meetings did not change much with meeting manual withdrawal, the percent of observational data brought to the meetings did. The fact that this percentage decreased to 19% when the meeting manual was removed, and then increased back when the meeting manual was re-instated, suggests that the meeting manual may also be a contributing factor to the increase in direct observational data at the meetings. A possible explanation for this may be the fact that the meeting manual contains several observation forms and allows these to be readily available at the meetings, for teachers to take and use.

Student Information

Teacher Statements

Data gathered on the teacher-run meeting system revealed teachers selecting positive or proactive interventions in 95% of the cases, teachers targeting a behavior to increase in 87% of the cases, and teachers reporting improvements in 79% of the cases. Although these data are not empirically based, they do lend some support to the suggestion that this system may be beneficial for students.

Individual Student Data

In an attempt at determining the effects of the teacher-run meeting system on students, data on student behavior were gathered for three students, in two different classes each. The teacher selected target behavior, for each student, was assignments turned in. Teacher-selected interventions for each student were based on teacher perceived function of the behavior, and differed for each student. Because the experimenter was unable to directly observe the target behavior selected by the teachers, the data gathered for student behavior were primarily based on teacher reports. These data do show that in five of the six classes observed, the percentage of assignments turned in increased by an average of 27% during teacher participation in the teacher-run meeting system. In the other class, a decrease of 10% of assignments turned in was detected. Further review of these data suggests that the decrease may have been due to incompatibility between teacher perceived function of the behavior and intervention selected: The perceived function was to obtain attention, and the intervention selected was to encourage the student. Although these data are primarily based on teacher reports, they do lend support to the fact that students may be benefiting from teachers participating in the teacher-run meeting system.

DISCUSSION

Although it is possible that the increase in the percentage of meeting tasks completed may have been related to events other than meeting manual implementation, as several changes took place when the teacher-run meeting system was instated, the fact that these behaviors declined when the meeting manuals were withdrawn suggests that the meeting manuals were, at least in part, responsible for the increase. However, when the meeting manuals were withdrawn, meeting task completion did not return to baseline levels. This might suggest that the other changes that took place when the system changed may have contributed to some increase in task completion. While this explanation may be valid, a more likely explanation is that some learning of the meeting agenda items may have taken place. This explanation is supported by the fact that teachers continued to engage in some of the target behaviors, in the absence of a meeting manual or meeting agenda. Due to the possibility that learning may have taken place, a multiple baseline design may have been more appropriate, however, the resources required for such a design are considerable.

Follow-up data showed that teachers continued to implement the meeting manual up to four years after researcher departure, with maintenance of effects on meeting task behaviors. This was achieved despite a change in the school's psychologist during the first year of follow-up (year 03-04), and a change in the school's principal and vice-principal during the third year of follow-up (year 05-06). Although it could be argued that teachers may have implemented the meeting manual only on those occasions in which the experimenter conducted follow-up observations, this is an unlikely conclusion, as teachers were unaware that the experimenter would be observing those meetings, and several teachers in these follow-up meetings were new teachers and did not know the experimenter. Furthermore, anecdotal reports of ongoing meeting manual usage were supported by the presence of meeting minutes gathered on the meeting agendas (i.e., permanent product), for several meetings that the experimenter did not attend.

Although the experimenter was unable to attend any team meetings during the second year of follow-up (year 04-05), the experimenter was able to observe completed permanent products, such as completed meeting agendas and data sheets for teacher-run meetings, during this period. Permanent product observations, in addition to anecdotal reports, suggest that the teacher-run meeting system and the meeting manuals continued to be implemented throughout this time. Probe observations conducted during the third and fourth years of follow-up revealed continued implementation of the meeting manual.

A variety of measures were taken into account throughout the development of the teacher-run meeting system, which may have contributed to its continued use. These measures included collaborating with implementers in the development of the system, conducting usability testing, minimizing time and effort of implementation, ensuring availability of necessary resources at meetings, embedding responsibility of all the different components of the system within the school, and ensuring non-reliance on the experimenter to implement any part of the system. These steps have been referred to as “institutionalization” (e.g., Sigurdsson & Austin, 2006).

Secondary findings suggest that implementation of the teacher-run meeting system contributed to an increase in teachers at meetings, an increase of student cases that were followed up, and an increase of data brought to the meetings. Data gathered surrounding teacher-selected interventions, teacher's statement about student improvements, and individual student data, suggest that the teacher run meeting system may contribute to student improvements. Although this suggests that the effects of this system on student behavior are positive, more data are needed to determine the actual benefits of this system for students. Future research should be conducted to determine such effects. In addition, some of the components of the meeting agendas might be revised in the future, to ensure teacher understanding of the link between function of behavior and intervention chosen, as this appeared to be an issue in one of the cases.

This study supports the conclusion that a teacher-run meeting system for addressing student academic and behavioral problems can be developed, that this system can increase certain teacher behaviors at meetings through the implementation of a scripted meeting agenda, and that this system can survive up to four years after experimenter departure.

A teacher survey asking teachers to rate a variety of components of the teacher-run meeting system was conducted during each condition of the study. In the final survey 69% of the teachers rated the teacher-run meeting system as being more effective when compared to the previous system in place (i.e., baseline meeting system), and 75% of the teachers stated that they liked the teacher-run meeting system more. These ratings, in addition to the increase in teacher attendance during meetings, and the continued use of the teacher-run meeting system up to four years after experimenter departure suggest that the system may be socially valid.

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APPENDICES

Appendix A: Meeting Task Criteria

Appendix B: Observation Form

Appendix C: Concern Forms

Appendix D: Meeting Prep-Pack

Appendix E: Student Information Form

Appendix F: Meeting Agendas

Appendix G: Meeting Manual Data Collection and Graphing Forms

Appendix H: In-House Consultant Training Manual

Appendix A: Meeting Task Criteria

Behavioral Definitions

Data must be in written or visual format (not simply verbal or anecdotal reports). **Observational Recording Data** include notes related to the target behavior obtained from direct observation, for example an ABC chart; quantifiable measures of the target behavior derived from event, duration, latency, interval, time sample, and permanent product recording; and graphs, such as line graphs, bar graphs, pie charts, and scatter plots. **Other Data** include teacher's notes; student's records; a list of assignments, dates, and grades; test scores; achievement test scores; health records; etc.

	Behavior	Definition	Criteria
1.	Review and update previous recommendations	Facilitator states previous meeting recommendations. If same recommendation for all members can state recommendation for entire group.	Previous recommendations were stated. **[If 1st meeting = N/A]**
2.	Define the problem behavior	Target behavior is defined in specific measurable/observable terms and includes at least one of the following behavioral dimensions: Frequency, rate, latency, topography, intensity, duration, or accuracy.	If new target behavior, definition includes at least one behavioral dimension. **[If previously defined = N/A]**
3.	Share data	Members display their data so that others may access them by giving copies to others, passing them to at least one other person, or showing them and pointing to them or telling others that they are available.	At least half of the members share data.
4.	Data in line graph format	Quantifiable data on target behavior are plotted in a line graph format (i.e. time component on the x-axis and target behavior on the y-axis).	At least half of the members with quantifiable data have a line graph. **[If 1st meeting = N/A]** **[If no quantifiable data = No]**
5.	Look at data	Members make visual contact with the data for at least 3 seconds.	At least half of the members looked at each piece of data shared. **[If no one shared data = N/A]**
6.	Analyze data	Members talk about the data and make comments related to changes in the data, trends or stability of the data, or make observations based on the data (ex. up, down, better, worse, higher, lower). Excludes just listing/reading off data.	At least one comment is made about each piece of data (shared or not). **[Excludes listing]** **[Members have to see the data to comment]**
7.	Relate data to environmental events	Members make comments that directly relate the data to environmental events, such as day of the week, classes, assignments, people, relationships, food, rest, feeling well, clothing, weather (comment can be in the same statement as Analyze Data).	At least one comment relating data to an environmental event was made; comment can be in the same statement as Analyze Data. **[Members have to see the data to comment]**
8.	Discuss data collection issues	Members discuss specifically how data will be collected, and/or any issues that arise or may arise in collecting them	A statement regarding what kind of data to collect or issues surrounding data collection was made. **[May include testing issues]**
9.	Discuss possible intervention strategies	Members make statements that suggest a potential course of action to try to change the target behavior: Target behavior must be clear (excludes data collection and testing).	At least one statement that suggests a potential course of action to change the target behavior was made. **[If 1st Meeting or Gifted Meeting = N/A]** **[Target behavior must be clear]** **[Excludes data collection & testing]**
10.	Discuss intervention implementation issues	Members discuss intervention implementation issues, such as when to do what, the time it may involve, the availability of items … (target behavior must be clear; excludes data collection and testing).	A statement regarding intervention implementation issues was made. **[If 1st Meeting or Gifted Meeting = N/A]** **[Target behavior must be clear]** **[Excludes data collection & testing]**
11.	Select a plan of action	Members state what they are going to do with respect to the target behavior, until next meeting: testing, collect baseline data, assess the function of the behavior, implement a new intervention, or continue with the same intervention.	A plan of action to measure or change the target behavior was stated. **[Target behavior must be clear]**
12.	State who is going to do what, and when	Members state specifically who is going to do what, and when. If the same recommendation applies to all members, recommendation can be stated as a group recommendation (ex. "We are all going to …").	For each member that is supposed to do something, who is going to do what and when is explicitly stated. If same rec. for all members it can be stated as group rec.
13.	Confirm date	Facilitator states the date and time of the next meeting.	Date and time is stated.
14.	Complete meeting minutes	Facilitator takes notes at various times throughout the meeting for purposes of documenting the meeting and placing the notes in a student-file which others may access.	Facilitator took notes at various times throughout the meeting
15.	Initial form/ Attendance	All members attending the meeting initial the meeting minutes or sign off on an attendance sheet.	Every attending member initialed or signed meeting minutes or attendance sheet.

Appendix B: Observation Form

Teacher/Team Members' Data-Based Decision Making and Team Building Behaviors Observation Form

Date: ____________ **Time:** ____________ **Observer:** ____________ **Reliability Obs.:** ____________ **Teacher Group #:** ____________ **Reliability =** ____________
Baseline ______ **Phase 1** ______ **Phase 2** ______ **Reversal** ______ **Meeting # for the day:** ________ **Meeting # for the student:** ________ **Meeting length:** _________

Observer: Please make sure to have a copy of previous meeting minutes as it is needed to score some behaviors (# 1 & # 2).
Please complete the following form while observing teacher/team members' behavior during team meetings.
In the first table, enter the type of data brought to the meeting by each member, mark if this data is observational recording data, and assign it a letter code (ex. A, B, C, …). Use this code as needed throughout the form. **Data must be in written or visual format** (not simply verbal or anecdotal reports). **Observational Recording Data** include notes related to the target behavior obtained from direct observation, for example an ABC chart; quantifiable measures of the target behavior derived from event, duration, latency, interval, time sample, and permanent product recording; and graphs, such as line graphs, bar graphs, pie charts, and scatter plots. **Other Data** include teacher's notes; student's records; a list of assignments, dates, and grades; test scores; achievement test scores; health records; etc.
In the second table, under "Facilitator" and "Members" columns, write the code number of each participant. Enter the appropriate codes, checks, or tallies in the spaces provided. For each item, on the right column, circle whether or not the criterion was met.
After the meeting, at the bottom of the table, calculate the percentage of data-based decision making and team building behaviors performed.

Member										
Type of data										
Observational Data										
Quantifiable Data										
Code										

	Behavior	**Facilitator**	**Members**									**Criteria**	**Criteria met?**
1	**Review & update previous recommendations**	- Stated ___ - Updated ___	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Previous recommendations were stated = Yes **[If 1st meeting = N/A]**	**Yes No** **N/A**
2	**Define problem behavior**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	If new target behavior, definition includes at least one behavioral dimension = Yes **[If previously defined = N/A]**	**Yes No** **N/A**
3	**Share data** Enter code of data that each member shared											At least half of the members share data = Yes	**Yes No**
4	**Data in line graph format** Check each member having a line graph											At least half of the members with quantifiable data have a line graph = Yes **[If 1st meeting = N/A]** **[If no quantifiable data = No]**	**Yes No** **N/A**
5	**Look at data** Enter code of data when member looks at it											At least half of the members looked at each piece of data shared = Yes **[If no one shared data = N/A]**	**Yes No** **N/A**
6	**Analyze data** Enter code of data that member makes comment about (i.e. trends)											At least one comment is made about each piece of data (shared or not) = Yes **[Members have to see data to comment]**	**Yes No**
7	**Relate data to environmental events** Tally every time a member relates data to a different event											At least one comment relating the data to an environmental event was made = Yes (Can be in same statement as Analyze Data) **[Members have to see data to comment]**	**Yes No**

	Behavior	**Facilitator**	**Members**									**Criteria**	**Criteria met?**
8	**Discuss data collection issues** Tally every time a member makes a specific statement related to data collection											A statement regarding what kind of data to collect or issues surrounding data collection was made = Yes **[May include testing issues]**	**Yes No**
9	**Discuss possible intervention strategies** Tally every time a member suggests a different type of intervention to change behavior											At least one statement that suggests a potential course of action to change the target behavior was made = Yes **[If 1st meeting or Gifted meeting = N/A]** **[Target behavior must be clear]** **[Excludes data collection & testing]**	**Yes No** **N/A**
	If this is a 1st meeting, check box if members discuss possible intervention strategies											Discussed possible intervention strategies	
10	**Discuss intervention implementation issues** Tally every time a member makes a different statement related to intervention imple.											A statement regarding intervention implementation issues was made = Yes **[If 1st meeting or Gifted meeting = N/A]** **[Target behavior must be clear]** **[Excludes data collection & testing]**	**Yes No** **N/A**
11	**Select a plan of action** State what team is going to do with respect to the target behavior											A plan of action to measure or change the target behavior was stated = Yes **[Target behavior must be clear]**	**Yes No**
12	**State who is going to do what and when** For each, check if stated or write "group" if stated for the entire group											For each member that is supposed to do something, who is going to do what, and when is explicitly stated = Yes **[Can be stated as group recommendation]**	**Yes No**
13	**Confirm date** Check if done		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Date & time is stated = Yes	**Yes No**
14	**Complete meeting minutes** Check if done		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Facilitator took notes at various times throughout the meeting = Yes	**Yes No**
15	**Initial form/ Attendance** For each, check if initialed											Every attending member initialed or signed meeting minutes or attendance sheet = Yes	**Yes No**

Percent of data-based decision making and team building behaviors	**Total:**
Total # circled "Yes" (_____) / [Total # circled "Yes" (_____) + Total # circled "No" (_____)] X 100% = ______	**Yes =** _________ **No =** _________ **N/A =** _________

Next meeting date/time/place: __________________________________

Total number of people at the meeting: __________; **Total # teachers:** __________; **Total # others (school):** __________; **Total # family:** __________;

Total number of teachers that have data: __________; **Total number of "others" that have data:** __________
Notes:

Appendix C: Concern Forms

Encouraging Student Progress (ESP)
General Concern Form

____
(Student's Name)

When to use this form

The General Concern Form is to be used to begin the ESP process. If you have a concern about a student and would like to begin the ESP process please complete this form unless:

- Your concern is regarding a Special Education Student, or
- The student's parent(s) or guardian(s) have made a written request for the student to be tested for Special Services.

If one of the above conditions applies, please use the ESP Special Concern Form instead.

How to use this form

- Complete the back of this form, being as specific and as detailed as possible.
- Once completed, please place this form in the Program Coordinator's box.

What will happen after this form is completed

The Program Coordinator will

- Set the date, time, and place of the First ESP Meeting (in approximately 1 to 2 weeks) and enter it at the bottom of this page,
- Copy the completed Concern Form to you as well as to all of the referred student's teachers,
- Give you and all of the referred student's teachers an "ESP Meeting 1 Prep Pack" to guide everyone in preparing and gathering information for the first meeting, and
- Prepare an ESP book for the teacher team.

The person reporting the concern will be the facilitator for the team ("Meeting Facilitator"). Before the first meeting, the Meeting Facilitator will need to pick up the ESP book from the Program Coordinator.

If you have received a copy of a completed Concern Form and an "ESP Meeting 1 Prep Pack":

- Please read through the back of this Concern Form,
- Use the "ESP Meeting 1 Prep Pack" to gather the necessary information to bring to the first meeting, and
- Attend the first meeting: The date, time, and place are located at the bottom of this page.
- If you will be unable to attend that meeting, please let the Meeting Facilitator know prior to the meeting, and give him/her the information that you collected.

To be completed by the Program Coordinator

First Meeting:

Date: ____________________ **Time:** ___________________ **Place:** ____________________

Meeting Facilitator: ____

Student's teachers that have been given a copy of this form and an "ESP Meeting 1 Prep Pack":

___________________	___________________	___________________
___________________	___________________	___________________
___________________	___________________	___________________

Program Coordinator's Initials: __________ Today's date: _________________________

General Concern Form

Date: ___________________ Person Reporting Concern: ______________________________

Student's Name: _______________________________________ Grade Level: _________________

Primary Concern (check all that apply or write in the space provided if none apply):

☐ Attendance Issue	☐ Academic Issue	☐ Behavioral Issue	☐ Health Issue
☐ Arrival time	☐ Assignments	☐ Classroom behavior	☐ Eyesight
☐ Being prepared	☐ Test scores	☐ Peer relations	☐ Hearing
☐ Missing classes	☐ Class participation	☐ Teacher relations	☐ Energy level
☐ **Gifted Referral** MAT Score:	☐ **Other:**		

Please describe your concern (be as specific as possible):

Please provide some examples that illustrate your concern (be as specific as possible):

Please note that the person reporting the concern will be the facilitator for the team ("Meeting Facilitator"). Before the first meeting, the Meeting Facilitator will need to pick up the ESP book from the Program Coordinator.

ESP Special Concern Form P. 1

Encouraging Student Progress (ESP)
Special Concern Form

____
(Student's Name)

When to use this form

The Special Concern Form is to be used to begin the ESP process only when one of the following conditions applies:

- The concern is regarding a Special Education Student, or
- The student's parent(s) or guardian(s) have made a written request for the student to be tested for Special Services.

If none of the above conditions apply, please use the ESP General Concern Form instead.

How to use this form

- Complete the back of this form, being as specific and as detailed as possible.
- Once completed, please place this form in the Program Coordinator's box.

What will happen after this form is completed

The Program Coordinator will

- Notify an ESP In House Consultant,
- Notify the Special Education Department if this referral involves a Special Education student,
- Set the date, time, and place of the First ESP Meeting (in approximately 2 weeks) and enter it at the bottom of this page,
- Copy the completed Concern Form to you as well as to all of the referred student's teachers,
- Give you and all of the referred student's teachers an "ESP Meeting 1 Prep Pack" to guide everyone in preparing and gathering information for the first meeting, and
- Prepare an ESP book for the teacher team.

The person reporting the concern will be the facilitator for the team ("Meeting Facilitator"). Before the first meeting, the Meeting Facilitator will need to pick up the ESP book from the Program Coordinator.

If you have received a copy of a completed Concern Form and an "ESP Meeting 1 Prep Pack":

- Please read through the back of this Concern Form,
- Use the "ESP Meeting 1 Prep Pack" to gather the necessary information to bring to the first meeting, and
- Attend the first meeting: The date, time, and place are located at the bottom of this page.
- If you will be unable to attend that meeting, please let the Meeting Facilitator know prior to the meeting, and give him/her the information that you collected.

To be completed by the Program Coordinator

First Meeting:

Date: ____________________ **Time:** ___________________ **Place:** ____________________

Meeting Facilitator: ____

ESP In House Consultant for this team: ____

Student's teachers that have been given a copy of this form and an "ESP Meeting 1 Prep Pack":

____________________ ____________________ ____________________

____________________ ____________________ ____________________

____________________ ____________________ ____________________

Program Coordinator's Initials: __________ Today's date: _________________________

Special Concern Form

Date: ___________________ Person Reporting Concern: ______________________________

Student's Name: _______________________________________ Grade Level: _________________

Please check one of the following conditions:

_____ This is a concern regarding a Special Education Student
_____ A parent has made a written request for the student to be tested for Special Services
Please enter which services: ____

Note: If none of the above conditions apply please complete the ESP General Concern Form instead.

Please describe your concern (be as specific as possible)**:**

Please provide some examples that illustrate your concern (be as specific as possible)**:**

Please note that the person reporting the concern will be the facilitator for the team ("Meeting Facilitator"). Before the first meeting, the Meeting Facilitator will need to pick up the ESP book from the Program Coordinator.

Appendix D: Meeting Prep-Pack

Introduction to Collecting Information

NOTE

First time users: Please read through the first two introductory pages and through the "What do I need to do for the First Meeting?" section (pp. 3 – 4) before collecting your information, either on the ABC Chart or on the Gifted Referral Worksheet.

Subsequent users: You may go directly to the "What do I need to do for the First Meeting?" section (pp. 3 – 4) and begin collecting your information.

Educators frequently use data to make decisions about the children who attend their schools. As children get ready to enter school, educators often collect information related to school readiness and developmental status. While these children progress through school, they continue to collect and use data to evaluate each student's progress. The type of data used often includes grades on daily activities, tests, standardized test and achievement scores, attendance information, as well as behavioral data such as office referrals and suspensions.

Data are not only important for evaluating student progress but can provide valuable information when trying to change behavior, as they allow one to see in greater detail if there is a problem, what that problem may be and how it may be changed. Therefore, when trying to affect behavior, it is important to gather as much information as possible.

Although gathering as much information as possible about the behavior can be a very large task for one individual to do, if several people contribute to the task, the task becomes easier. This is why your involvement in this process is so important: Not only will you help your colleagues in collecting information, but you will also contribute to the definition of the issue at hand and potential solutions.

This guide is intended to assist you in collecting important information to bring to the first meeting, as well as to prepare you for that meeting.

Please remember to bring all the information that you gather (ABC Chart or Gifted Referral Worksheet) to the first meeting, so that you may share this information with others.

If you cannot attend the meeting, please give your completed form to the Meeting Facilitator prior to the meeting.

Things to Consider When Collecting Information

By gathering information about the behavior and bringing it to the meeting, you will help the team get a better picture of what the behavior looks like and possibly understand why it is occurring.

Although you may already have an idea of what the behavior looks like from reading the Concern Form or from experiencing it in your classroom, the behavior may look very different in your class than in someone else's class.

Please keep in mind that, when gathering information, in addition to the possibility of behavior being very different from one setting to another, each person contributes information based on his/her perceptions and experiences. As such, the pieces of information gathered may be very different from one another. This does not mean that one piece of information is better or more accurate than another. Each piece of information provides a clue. This is why it is important for everyone to gather information: The more clues that you gather, the clearer the picture.

The following are some questions and examples to keep in mind as you gather your information:

- <u>What is the exact behavior that we are talking about?</u>
  Is it being late? Is it not being in one's seat? Is it skipping class? Is it not completing assignments? Is it not turning assignments in on time? Is it not getting a passing grade on assignments? Is it talking to a classroom buddy when the teacher talks? Is it saying bad words? Is it teasing others? Is it pushing others?

- <u>When is the behavior most likely to happen?</u>
  When sitting in the back of the class? When the student has complained about not feeling well? When working individually? When there is a substitute teacher? When a buddy is sitting at the next desk?

- <u>When is the behavior least likely to happen?</u>
  After lunch? When in a good, smiling mood? When the task is short? When working with a peer? When sitting near the teacher? When there are fewer students in the classroom?

- <u>Are there certain things that predict that the behavior is going to happen?</u>
  Teasing comments from a peer? The teacher making a particular request? Sitting next to a certain person?

- <u>What happens as a result of the behavior?</u>
  The student gets attention from the teacher or from peers? The student gets out of doing the assignment? The student is sent to the office?

What do I need to do for the First Meeting?

During the First Meeting (Assessment Meeting), the team will be asked to (1) define the problem behavior so that everyone knows exactly what it looks like, (2) brainstorm as to why it is occurring, (3) decide exactly what behavior the team wants to focus on, and (4) determine what is the best method to observe or measure it.

** If this is a gifted referral, the team will be asked to (1) focus on a behavior that illustrates "giftedness" in the student, (2) define this behavior so that everyone knows exactly what it looks like, and (3) determine what is the best method to observe or measure it.

This is what you need to do in preparation for the first meeting:

Step 1 – Collect Information

1. Look at the *ABC Chart* Example (*ABC Chart* form, p. 1)
2. Use the *ABC Chart* Form (p. 2) to collect your information:
   - Observe the student for at least a few days while completing the *ABC Chart*

   ** For a gifted referral:
   Complete the Gifted Referral Worksheet (pp. 1-2) instead if the *ABC Chart*

Step 2 – Be Prepared to Discuss the Following

After you have completed your *ABC Chart* or Gifted Referral Worksheet if, consider the following issues and enter your answers at the bottom of your *ABC Chart* or Gifted Referral Worksheet:

1. What behavior do you think the team should focus on?
   At the first meeting, you will decide as a team what specific behavior to focus on. This can be one of the problem behaviors that you observed while completing your *ABC Chart* or some appropriate behavior that you would like to see the problem behavior replaced with.
   ** For a gifted referral, the team will be asked to focus on a behavior that illustrates "giftedness" in the student.

2. How would you define this behavior (be as specific as possible)?

3. Which Method of Measurement would you use to measure this behavior?
   After deciding what specific behavior to focus on, the team will determine which is the best method to measure this behavior. The same behavior can often be measured in several ways. In order to determine which is the best method to use, the team will need to answer some questions.

Step 2 (3) - Be Prepared to Discuss the Following - Method of Measurement (continued)

In preparation for the first meeting, you should familiarize yourself with these questions. In order to do so, please select a method of measurement for the behavior that you chose in Step 2, #1 on the previous page.

How to select a method of measurement: The methods of measurement, and therefore the questions that lead to their selection, are listed in the order of lowest to highest amount of effort required. As a result, you should go through these questions in the order presented. If your answer is "No" go on to the next question. When your answer is "Yes," select that method of measurement and write it down in the space provided at the bottom of either your *ABC* Form or Gifted Referral Worksheet. Although you do not have to select the first method for which your answer is "Yes", it is recommended that you do so, because subsequent methods will require more effort.

- ➔ Does this behavior generate a product, for example a written assignment, a clean table, or papers on the floor?
  - ⇨ **If Yes - Select the "Permanent Product" method**
- ➔ Can you easily count every time this behavior occurs: You can tell exactly when it starts and when it ends, and it does not occur so often that it would be difficult to keep a count on it (e.g. standing up)?
  - ⇨ **If Yes - Select the "Behavior Count" method**
- ➔ Does this behavior occur so often that it is difficult to keep a count on it or, is it difficult to tell exactly when the behavior starts or when it ends (e.g. reading)?
  - ⇨ **If Yes - Continue below**
    - ➔ When this behavior occurs, does it last for a while (e.g. writing)?
      - ⇨ **If Yes - Select the "Momentary Sample" method**
    - ➔ Does this behavior happen so quickly that it is hard to catch (e.g. swearing, making gestures)?
      - ⇨ **If Yes - Select the "Partial Interval" method**

Special cases:

- ➔ Do you want to measure how long it takes for the student to respond to a request?
  - ⇨ **If Yes - Select the "Time to Respond" method**
- ➔ Do you want to measure how long this behavior lasts?
  - ⇨ **If Yes - Select the "Behavior Duration" method**
- ➔ Is it important to know that this behavior continues without interruption?
  - ⇨ **If Yes - Select the "Whole Interval" method**

Step 3 - Bring your information to the meeting

Bring your completed *ABC Chart* or Gifted Referral Worksheet Form to the first meeting. If the Concern is in regards to an academic issue, you may also want to bring samples of the student's work to that meeting.

ABC (Antecedent, Behavior, Consequence) Chart: Description, Procedures, & Example

An ABC Chart helps you to see how events and patterns of behavior relate to each other.

Procedures:

* Be on the lookout for the behavior(s) mentioned on the Concern Form
* Each time that this or a similar/related behavior occurs, write down:
    - Under "Behavior" - What the behavior looked like
    - Under "Date/Time" - The date and time when the behavior occurred
    - Under "Activity" - What activity was going on at that time
    - Under "Before" - What happened right before the behavior that **may** have triggered the behavior
    - Under "After"- What happened after the behavior, or as a result of the behavior
* After you have gathered information under different circumstances, at different times, try to determine patterns of the behavior: What tends to trigger the behavior? What usually happens as a result of the behavior? Are there activities or times during which the behavior is more or less likely to happen?
* In preparation for the meeting, at the bottom of the form, enter:
    - The behavior that you think the team should focus on,
    - How you would define this behavior (be as specific as possible), and
    - The method that you would select to measure this behavior.

Example

Date/Time	Activity	Before	Behavior	After
Date/Time when the behavior occurred	What activity was going on when the behavior occurred	What happened right before the behavior that may have triggered the behavior?	What the behavior looked like	What happened after the behavior, or as a result of the behavior
11/5/01 9:46 AM	Reading	Teacher asks Joe to read the next paragraph	Joe says "I don't feel like it"	Zac (peer) laughs; teacher states why it is important to read, and asks another student to read
11/5/01 10:15 AM	Putting books away	Joe not putting his book away; Teacher asks Joe to put his book on the shelf	Joe says "I'm busy, why don't you do it?"	Zac (peer) laughs; teacher states he is being disrespectful; Zac puts Joe's book away
11/6/01 9:32 AM	Turning homework in	Teacher asks Joe for his homework	Joe says "I forgot it"	Teacher says "Well, that's a ZERO on your assignment"

- **What behavior do you think the team should focus on?** Following directions
- **How would you define this behavior (be as specific as possible)?** When the teacher makes a reasonable request to engage in an activity, Joe initiates that activity within 10 seconds.
- **Which method of measurement would you use to measure this behavior?** Behavior count

ABC (Antecedent, Behavior, Consequence) Chart Form

Student's Name: ________________ **Teacher:** ________________
Subject/Period: ___________ **Date(s):** ____________

Procedures: For directions on how to fill out this form, please look at p. 1
- If you need more space, please make copies of this form
- Please bring your completed *ABC Chart* to the 1st Meeting.
- <u>If you cannot attend the meeting, please give your completed *ABC Chart* to the Meeting Facilitator prior to the meeting</u>.

Date/Time	Activity	Before	Behavior	After
Date/Time when the behavior occurred	What activity was going on when the behavior occurred	What happened right before the behavior that <u>may</u> have triggered the behavior	What the behavior looked like	What happened after the behavior, or as a result of the behavior

After you have completed your *ABC Chart*, please answer the following:
- What behavior do you think the team should focus on?

  ____

- How would you define this behavior (be as specific as possible)?

  ____

  ____

- Which Method of Measurement (Prep Pack p. 4) would you use to measure this behavior?

  ____

Gifted Referral Worksheet

When considering a student for Gifted Placement, it may be helpful to look at the following:

A. Teacher Evaluation: Gifted Checklist
B. Teacher Overall Analysis of the Student's Work: Rating
C. Group Achievement: MAT Score Percentile

In preparation for the first meeting, please complete the following worksheet, answer the questions at the bottom of the next page, and bring this information to the meeting.

A. Teacher Evaluation: Gifted Checklist

On the table below, read through each characteristic and place a checkmark in the box to the right if that characteristic applies to the student. Afterwards, add the number of checkmarks.

	Characteristic	Check here
1.	Demonstrates a high level of problem-solving skills	
2.	Is able to accomplish work that goes above and beyond that of their peers (e.g. elaboration, originality)	
3.	Reads independently and does not avoid difficult reading material	
4.	Prefers not to drill on spelling, math facts, flash cards, or handwriting	
5.	Becomes inpatient if work is not perfect	
6.	Completes only part of an assignment and then takes off in a new direction or sticks to a subject long after the class has gone on to other things	
7.	Tries to do things in different, unusual, imaginative ways (ex. ways of getting attention, of completing work, or of getting out of doing work)	
8.	Has unusually advanced vocabulary for age or grade level	
9.	Has verbal behavior characterized by "richness" of expression, imagery, elaboration, and fluency in any language (sometimes rambles)	
10.	Is a keen and alert observer; usually gets more out of a story or film than others	
11.	Exhibits "higher level of thinking"	
12.	Has a ready grasp of underlying principles; can quickly make generalizations	
13.	Catches on quickly; retains and uses new ideas / information from many different sources	
14.	Looks for similarities and differences	
15.	Has rapid insight into cause-effect relationships; tries to discover the how and why of things; asks provocative questions; can be persistent in questions	
16.	Possesses a large storehouse of information about a variety of topics beyond the usual interest of same age peers	
17.	Enjoys debating issues	
18.	Enjoys decision making: Organizes and/or leads group activities	
19.	Seems interested and concerned about social problems	
20.	Often has a better reason than an authority figure for not doing what needs to be done	
21.	Is intolerant of others for dumb ideas	
22.	Has a really zany sense of humor	
23.	Displays extreme patterns of social behavior: Is either very quiet or is restless and impatient	
24.	Has unusual ability/interest in some area ________________	
25.	Seems to easily pick up skills in the arts (music, drama, painting)	
	Total Checkmarks	

A. Teacher Evaluation: Gifted Checklist (continued)

Enter the total number of checkmarks (previous page) and circle the number points accordingly:

Total checkmarks = __________

- 25 checkmarks = 5 points
- 24 checkmarks = 4 points
- 23 checkmarks = 3 points
- 22 checkmarks = 2 points
- 21 checkmarks = 1 point
- 20 checkmarks or less = 0 points

B. Teacher Overall Analysis of the Student's Work: Rating

Taking into consideration the student's performance in your class, do you feel that this student's special intellectual strengths are as great as:

(Circle the number of points accordingly)

- 1 out of the last 100 students you have worked with? ----------- 99th percentile = 5 points
- 2 out of the last 100 students you have worked with? ----------- 98th percentile = 4 points
- 3 out of the last 100 students you have worked with? ----------- 97th percentile = 3 points
- 4 out of the last 100 students you have worked with? ----------- 96th percentile = 2 points
- 5 out of the last 100 students you have worked with? ------------ 95th percentile = 1 point
- None of the above -- Below 95th percentile = 0 points

C. Group Achievement: MAT Score Percentile

Look at the student's MAT score (located on the completed Concern Form), and circle the number of points for the student's percentile:

- 99th percentile = 5 points
- 98th percentile = 4 points
- 97th percentile = 3 points
- 96th percentile = 2 points
- 95th percentile = 1 point
- Below 95th percentile = 0 points

Total the number of points circled from A, B, and C above:

Enter the points circled for each category above, and add them up:

________ (A points) + ________ (B points) + ________ (C points) = ______________ Total Points

- If "Total Points" is equal to 7 or more, the student should be considered for a comprehensive evaluation for Gifted Placement, to be performed by the school psychologist. If, on this evaluation, the student scores in the 97th percentile, the student qualifies for Gifted placement.
- If "Total Points" is equal to 6 or less, the student should probably not be considered for a comprehensive evaluation for Gifted Placement at this time.

After you have completed the Gifted Referral Worksheet, please answer the following:

- What behavior do you think the team should focus on? ______________________________
- How would you define this behavior (be as specific as possible)? ______________________________

____
- Which method of measurement (Prep Pack p. 4) would you use to measure this behavior?

____

Appendix E: Student Information Form

Encouraging Student Progress (ESP)
Student Information Form

This form is to be completed by the Program Coordinator before the First Meeting

Student's Name: ______________________________ Student ID #: __________________________

Date: _________________________________

Please attach a copy of the student's class schedule to this form

Background Information (e.g. scholastic achievements/issues, attendance, discipline, family issues, etc.):

Standardized Testing Information (e.g. CBM, MATS, CRT, State Assessments, etc.):

Test	**Date**	**Score**	**Notes**

Health Issues (e.g. recurrent/chronic illnesses, medications, vision/hearing assessments, etc.):

Date	**Issue**	**Notes/Outcome**

Prescription Medications Used on a Regular Basis:

Check all that apply:

___ Student eats breakfast at school
___ Student usually eats all his/her lunch
___ Student takes the school bus to / from school
___ Student participates in after-school activities

List after-school activities: ____

Parent Contacts:

Date contacted	**By whom**	**Issue**
___________	______________	____________________________________
___________	______________	____________________________________
___________	______________	____________________________________
___________	______________	____________________________________

Appendix F: Meeting Agendas

Encouraging Student Progress (ESP)
First Meeting Agenda/Minutes: Assessment Meeting

Section 1: Completed by the Program Coordinator PRIOR to the meeting

Student's Name: ______________________________ (Last, First, Middle) Date: ____________________

Student ID#: ______________ Grade Level: ______________

☐ *Check if this is a "Gifted Referral"*
Team Members *(enter names of all of the student's teachers in the blanks; check box if present)*:

☐ ________________	☐ ________________	☐ ________________
☐ ________________	☐ ________________	☐ ________________
☐ ________________	☐ ________________	☐ ________________
☐ ________________	☐ ________________	☐ ________________

☐ Meeting Facilitator *(person who wrote initial Concern)*: ____________________________

☐ ESP In House Consultant *(If needed)*: ____________________________________

Section 2: Completed by the Meeting Facilitator (this is the person who completed the Concern Form) DURING the meeting

Directions: Follow directions as stated throughout the agenda; Read items as follows:
- **Bold Faced Items, not italicized: Necessary items – READ OUT LOUD**
- *Italicized Items: Directions – DO NOT READ OUT LOUD*
- Items not in bold or italics and dashed-boxed items: Additional information – Read As Needed

Step 1: Introduce each other

Are we already acquainted with everyone here today?
- *If "Yes": Go to Step 2.*
- *If "No":* **Why don't we start by going around the room and briefly introducing ourselves? I will start.**

Step 2: Check who is present

Let me mark down who is here.
- *Read the names that have been entered in the box above (Section 1),*
- *Place a checkmark next to those that are present; add / check names as needed.*

Step 3: State goals for this meeting

The aim of this meeting is to problem solve an issue. This meeting is meant to be constructive. Everyone's input is very valuable and very important. During the discussion, please remember to be respectful of others.

Our goals for today are to discuss the issue at hand; to come away with a clear understanding of what behavior to focus on and to measure; and to leave the meeting knowing exactly who is going to do what until our next meeting.

Step 4: Review why we are meeting

1. **We are meeting to discuss** ———— [*name of the student*].
2. **We are meeting because** --------------- [*stated concern, from Concern Form in the Concern Section in the ESP book*].

Step 5: Discuss and define the behavior

1. **Lets look at the information that we gathered using the Meeting 1 Prep Pack:**
   ⇨ *If this is not a Gifted Referral:*
   Please take out your ABC Chart.
   - **Look at the "Behavior" column: What behaviors did you record on this column?** *(Enter behaviors recorded below)*

   ____

   ⇨ *For a Gifted Referral:*
   Please take out your Gifted Referral Worksheet.
   - **Look at your Total Points (p. 8): What was everyone's Total Points?** *(Enter everyone's points below)*

   ____
   - **Is the average Total Points above 7?**
     - *If "Yes": Proceed to #2 below.*
     - *If "No":* **If the average Total Points is below 7, it is recommended that we not refer the student for a comprehensive evaluation at this time. Unless we feel strongly about continuing the process, we probably should end the meeting process for now. What would we like to do?**
       ☐ **Continue** *(Continue below)* ☐ **End Process** *(Go to the To Do Chart, enter "End Process", and end meeting)*
2. **Look at the bottom of your form: What behavior do you think the team should focus on?**
   - **Which ONE of these behaviors do we think is the most important to focus on?** ______________________ *(Enter this behavior here and in the box below)*
     ⇨ *If not a Gifted Referral:* **This will be referred to as the Problem Behavior.**
     ⇨ *If Gifted Referral:* **This will be referred to as the Target Behavior.**
3. **Describe, in detail, exactly what** --------------- **[*name of the student*] does when he/she engages in this behavior. Consider what "qualifies" as the behavior, as well as what does not qualify as it.** *(Enter the definition in the box below)*

> ** For more information read on:*
> - Are there other behaviors that may look similar that we need to distinguish this behavior from, for ex. aggression may include only physical contact and exclude yelling? If this is an academic behavior, is there a certain criterion that needs to be met to qualify as the behavior occurring, for ex. any score below 50% on a test?
> - How long does this behavior usually last?
> - Does this behavior happen only under certain circumstances?

Behavior (From #2 above): ____

Behavior Definition (in specific, observable, measurable terms):

____

____

____

4. ⇨ *If this is a Gifted Referral: Proceed to Step 9 (If not gifted referral, continue).*

Problem Behavior (Step 5, #2): ____

Step 6: Discuss what happens before and after the problem behavior

Now that we have defined the problem behavior, we need to discuss what usually happens before and after ------------- [*problem behavior*] occurs.

1. **Please look at the "Date", "Activity", and "Before" columns on your ABC Chart: What usually happens before ----------- [*problem behavior*] occurs?** ***(Enter everyone's answers in the table at the bottom of the page)***

> * *For more information read on:*
> - When does this behavior usually occur? Are there particular times, activities, situations or the presence of certain people, which make this behavior more likely?
> - Is there a time or situation in which this behavior never occurs?

2. **Now look at the "After" column on your ABC Chart: What usually happens after -------------- [*problem behavior*] occurs?** ***(Enter everyone's answers in the table at the bottom of the page)***

> * *For more information read on:*
> - Does the student obtain something he/she wants? For example, an item, an activity, attention from peers, attention from the teacher, … Remember, reprimands also involve attention.
> - Does the student avoid or escape something he/she does not want or like? For instance, being ridiculed, avoid doing an assignment, avoid going to class, avoid going home, …

What happens BEFORE *(Consider when, where, with whom)*	***Problem Behavior***	***What happens AFTER*** *(Consider obtain, avoid/escape something)*

Problem Behavior (Step 5, #2): ____

Step 7: Identify the function of the problem behavior

We now need to consider why we think ------------- [*problem behavior*] is occurring: This is the Function of the behavior. Remember, sometimes the same exact behavior happens for different reasons.

Do we think that ------------- [*problem behavior*]: *(Circle answer for each question)*

- **Happens in order to obtain attention?** **YES NO**
- **Happens in order to obtain something other than attention?** **YES NO**
- **Happens in order to avoid or escape something?** **YES NO**
- **Happens because the student does not have a particular skill?** **YES NO**

Function of the Problem Behavior (check all boxes for which the answer above was "Yes"):
☐ *Obtain attention* ☐ *Obtain something other than attention*
☐ *Avoid or escape something* ☐ *Does not have a particular skill*

Step 8: Decide on a target behavior and define it

The Target Behavior is the behavior that we decide to measure and to intervene on. We can either focus our attention on decreasing the problem behavior that we have been talking about *(target behavior = problem behavior)*, or on increasing an appropriate behavior *(target behavior = appropriate behavior)*.

* *For more information read on:*
We can usually translate the problem behavior into a lack of appropriate behavior. For example, yelling and screaming can be translated into not talking in a calm tone. In this case, we could choose to either focus on decreasing the problem behavior, yelling and screaming, or on increasing the desired behavior, talking in a calm tone.

Would we like the Target Behavior to be an appropriate behavior? *(Check one)*

☐ **No** - *Focus on Problem behavior* ☐ **Yes** - *Focus on Appropriate behavior*

- *If "No"*: **The Target Behavior name and definition will be the same as the problem behavior,** *Step 5(# 2, 3). Proceed to Step 9.*
- *If "Yes"*: **What appropriate behavior would we like to focus on? What would ---------- [*name of the student*] do what he/she would engage in this behavior?** *(Enter the label and definition in the box below).* **This will be the Target Behavior.**

Appropriate Behavior: ____

Appropriate Behavior Definition (in specific, observable, measurable terms):

____

____

Target Behavior (Step 8 or Step 5, #2): ______________________________

Step 9: Decide what is the best method to measure the target behavior

We now need to decide how we are going to measure ——— [*target behavior*].

I am going to ask some questions:

- **If the answer is "No" or "Maybe", I will go on to the next question.**
- **If the answer is "Yes" I will not go on to the next question, as these methods have been ordered by level of effort required. This will be our selected method of measurement.**

Questions for selecting a method of measurement:

- **Does** ——— [*target behavior*] **generate a product, for example a written assignment, a clean table, or papers on the floor?**
  - *If Yes – Stop. Check "Permanent Product" in the box below. Go to Step 10.*
- **Can we easily count every time that** ——— [*target behavior*] **occurs: We can tell exactly when the behavior starts and when it ends, and it does not occur so often that it would be difficult to keep a count on it, for example standing up?**
  - *If Yes – Stop. Check "Behavior Count" in the box below. Go to Step 10.*
- **Does** ——— [*target behavior*] **occur so often that it may be difficult to keep a count on it or, is it difficult to tell exactly when** ——— [*target behavior*] **starts or when it ends, for instance reading?**
  - *If Yes – Continue below:*
    - **When** ——— [*target behavior*] **occurs, does it last for a while, for example writing?**
      - *If Yes – Stop. Check "Momentary Sample" in the box below. Go to Step 10.*
    - **Does** ——— [*target behavior*] **happen so quickly that it is hard to catch, such as swearing or making gestures?**
      - *If Yes – Stop. Check "Partial Interval" in the box below. Go to Step 10.*

Special cases:

- **Do we want to measure how long it takes for the student to respond to a request?**
  - *If Yes – Stop. Check "Time to Respond" in the box below. Go to Step 10.*
- **Do we want to measure how long** ——— [*target behavior*] **lasts?**
  - *If Yes – Stop. Check "Behavior Duration" in the box below. Go to Step 10.*
- **Is it important to know that** ——— [*target behavior*] **continues without interruption?**
  - *If Yes – Stop. Check "Whole Interval" in the box below. Go to Step 10.*

Method of Measurement Selected (check one):

☐ *Permanent Product*	☐ *Momentary Sample*	☐ *Time to Respond*	☐ *Whole Interval*
☐ *Behavior Count*	☐ *Partial Interval*	☐ *Behavior Duration*	

Target Behavior (Step 8 or Step 5, #2): ____________________
Method of Measurement (Step 9): ____________________

Step 10: Discuss what and how to measure until the next meeting

1. **Now that we have decided that we are going to measure ———— [*target behavior*], by using ———— [*method of measurement*], we should look at this form.**
   - *Go to the tab labeled by the method of measurement in Appendix 3 of the ESP book*
   - *Give everyone a copy of the measurement form*
2. **In addition to measuring the behavior we need to graph this information so that we may be able to determine changes in behavior "at-a-glance."**
   - *Go to the tab labeled Graphing Form in Appendix 2 of the ESP book*
   - *Give everyone a copy of the graphing form*

> * *For more information read on:*
> Each form has a description, procedures, and example on p. 1. We will use the back, p. 2, to gather our information. If we need more space, we can make copies.
> It is very important that we all collect this information, even those that are not experiencing the behavior in their classroom.

3. **We should enter the target behavior label on both forms, and the definition on the measurement form, so that we are all consistent in what we are measuring:**
   - *Look at Step 8 or Step 5(# 2, 3) for the target behavior label and definition; read it out loud*
   - *Everyone should enter the target behavior label and definition on their measurement form*
4. **Please take a few minutes to look over the forms:**
   - **Are there any questions?**
   - **Do we need to make any special arrangements to make sure that this information is collected?** For example obtaining a clock, arranging for someone to come and help with measuring the behavior. If so, who will take care of these arrangements? By when?
5. **I will now turn to the To Do Chart** *(last page)*, **and enter who is going to measure what, when, and where; and any other To Do's** *(such as special arrangements)*.

Step 11: Set the date, time, and place for the next meeting

We should meet again in approximately 1 to 2 weeks: When would be a good time for all of us to meet? *(Enter information in the To Do Chart and in the ESP Meeting Calendar)* **You can enter the time and date on the space provided on your measurement form.**

Step 12: Initial To Do's

I will pass the To Do Chart around. Please look at the row where your name is. Make sure that you agree with what I entered and place your initials in the box. If you don't agree with what is entered let me know so I can change it.

Step 13: Gather collected information

Before we leave, I need to gather all the information that we collected and put it in the ESP book. Please pass your ABC Charts to me. *(Collect all the information and put it in the plastic envelope in the back of the ESP book)*

Step 14: End the meeting

Thank you! I will copy the measurement and graphing forms for those that were not here.

To Do Chart: Who is going to do what, when, and where

To Do Chart (First Meeting)					
	Who (member)	***Is going to***	***When***	***Where***	***Initials***
Information Collection To Do's *(Enter names, check boxes or enter information)*		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Collect information on the target behavior &graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
Other To Do's *(Enter necessary information)*	☐ *Meeting Facilitator*	☐ *Copy measurement and graphing forms for:* ________ ________	☐ *After this meeting*	☐ *Place forms in each one's box*	
	☐ *Meeting Facilitator*	☐ *Return ESP book and ESP Meeting Calendar to Program Coordinator*	☐ *After this meeting*	☐ *Program Coordinator's office*	
	☐ *Meeting Facilitator*	☐ *Obtain ESP book and ESP Meeting Calendar from Program Coordinator*	☐ *Before next meeting*	☐ *Program Coordinator's office*	
Next Meeting: *Day/Date:*		*Time:*		*Place:*	

Encouraging Student Progress (ESP)
Second Meeting Agenda/Minutes: Intervention Meeting

Section 1: Completed by the Meeting Facilitator PRIOR to the meeting

Student's Name: ______________________________ (Last, First, Middle) Date: ____________________

Student ID#: ______________ Grade Level: ______________

☐ *Check if this is a "Gifted Referral"* **If this is a Gifted Referral skip this Meeting Agenda/Minutes and proceed directly to the Third Meeting Agenda/Minutes on your second meeting.**

Team Members *(enter names of all of the student's teachers in the blanks; check box if present)*:

☐ ________________	☐ ________________	☐ ________________
☐ ________________	☐ ________________	☐ ________________
☐ ________________	☐ ________________	☐ ________________
☐ ________________	☐ ________________	☐ ________________

☐ Meeting Facilitator *(person who wrote initial Concern)*: ______________________________

☐ ESP In House Consultant *(if needed)*: ____

Note: Also complete the heavy-bordered boxes at the top of the pages, which refer to information from the 1st Meeting, prior to the meeting.

Section 2: Completed by the Meeting Facilitator DURING the meeting

Directions: Follow directions as stated throughout the agenda; Read items as follows:
- **Bold Faced Items, not italicized: Necessary items – READ OUT LOUD**
- *Italicized Items: Directions – DO NOT READ OUT LOUD*
- Items not in bold or italics and dashed-boxed items: Additional information – Read As Needed

Step 1: Introduce each other

Are we already acquainted with everyone here today?
- *If "Yes": Go to Step 2.*
- *If "No":* **Why don't we start by going around the room and briefly introducing ourselves? I will start.**

Step 2: Check who is present

Let me mark down who is here.
- *Read the names that you entered in the box above (Section 1),*
- *Place a checkmark next to those that are present; add / check names as needed.*

Step 3: State goals for this meeting

Our goals for today are to review the status of our previous recommendations; to look at the information gathered and determine how often the behavior is occurring; to brainstorm possible interventions and decide which one to try; and to leave the meeting knowing exactly who is going to do what until our next meeting.

Please keep in mind that the aim of this meeting is to problem solve an issue. This meeting is meant to be constructive. Everyone's input is very valuable and very important. During the discussion, please remember to be respectful of others.

Target Behavior (1st Meeting - Step 8 or Step 5, #2): ______________________________
Method of Measurement (1st Meeting - Step 9):

Step 4: Review why we are meeting

1. **We are meeting because there was a concern about** ---------- *[student's name]*.
2. **At the last meeting we decided to focus on** ---------- *[target behavior]*.
3. **Which we were going to measure by using** ---------- *[method of measurement]*.

Step 5: Review the First Meeting recommendations

Lets go over the last meeting's To Do Chart to see where we are *(1st Meeting, Page 7)*.

1. **At the last meeting we decided that:** ---------- *[person's name]* **was going to** ---------- *[To Do from 2nd column]*.
   - *Read recommendations for each person; If several people were going to do the same thing, read all of those people's names and then read what they were going to do.*
2. **Did anyone encounter any unforeseen events or obstacles that prohibited them from following-up on these recommendations?** *(Circle one)*

   YES NO

   - *If "No": Proceed to Step 6.*
   - *If "Yes": Continue Below.*
3. *Ask each person who was unable to follow-up on the recommendations: (Enter answers below)*
   - **Why don't you share with us some of the issues that you encountered?**
   - **In your opinion, what could we change to facilitate follow-through?**

Reasons why recommendations were not followed-up on: ______________________________
What can be done to ensure future follow-up: ______________________________

Step 6: Determine how often the target behavior is occurring & set a realistic goal

Lets look at the information collected: Please take out the measurement forms and graphs that you completed.

1. **On average, about how often would we say** ---------- *[target behavior]* **occurred since our last meeting?** (i.e. times per week, per day, per class) *(Enter information below)*

   ____

2. *If the target behavior is the problem behavior (otherwise skip to #3):*
   On a scale from 1 to 5, 1 being "Tolerable" and 5 "Not Tolerable", how tolerable would we say ---------- *[target behavior]* **is?** *(Circle the group's rating)*

   [Tolerable] **1* 2 3 4 5** *[Not Tolerable]*

   ** If the average rating is 1, there may not be much need for intervention at this time. You can end the meeting process at this point (no need to meet again) or start the process again, focusing on a different behavior. Enter this information on the To Do Chart (last page).*
3. **On average, how often would** ---------- *[target behavior]* **need to occur to be considered at an acceptable level? This will be our Target Goal.** *(Enter below)*

Target Goal: ______________________________

Target Behavior (1st Meeting - Step 8 or Step 5, #2 if same as problem behavior): ____________________
Problem Behavior (1st Meeting - Step 5, #2): ______________________________
Function (1st meeting – Step 7/ Check all that apply):
- ☐ *Obtain attention*
- ☐ *Obtain something other than attention*
- ☐ *Avoid or escape something*
- ☐ *Does not have a particular skill*

Step 7: Brainstorm how the target behavior may be changed

We now need to brainstorm as to how we may change ———— [*target behavior*].

We can change the likelihood that a behavior will happen in the future by changing what happens before and/or what happens after the behavior.

1. **We will first focus on things that we can do __before__ ———— [*target behavior*] occurs:**

   A. **What are some things that we may be able to do before ———— [*target behavior*] occurs, to change the likelihood of it happening in the future?** *(Enter everyone's ideas in the "Before" column on the table in Page 5)*

   > ** For more information read on:*
   > We can often prevent problem behaviors and increase appropriate behaviors by making changes in the environment, for example changing seating arrangements, clearly stating the expectations and the ways to achieve them, giving frequent reminders, and acknowledging desired behaviors displayed by peers.
   > - We may be able to get some clues as to things that we can do before -------------- [*target behavior*] occurs by looking at what usually happens before --------------- [*problem behavior*].
   > - We had noted that -------------- [*problem behavior*] is more likely to occur when --------------- [*1st Meeting, Step 6, "Before" column*].

   B. **What are some behaviors that we could encourage that would allow the student to --------------- [*function*] in an appropriate manner?** *(Enter everyone's ideas in the "Before" column on the table in Page 5)*

      * *__If "Does not have a particular skill" was checked ask__:*
      What are some behaviors that we could encourage that would lead to the student acquiring the necessary skills?

   > ** For more information read on:*
   > We may also be able to discourage problem behaviors simply by encouraging appropriate behaviors that "serve" the same purpose or function as the problem behavior.
   > - Sometimes students engage in problem behaviors not because they purposely want to be a nuisance but because it is the only, or the easiest way they know to obtain what they want.
   > - We should keep in mind that we may first need to prompt the desired behavior and encourage closer and closer approximations to it.

Target Behavior (1st Meeting - Step 8 or Step 5, #2 if same as problem behavior): ____________________
Problem Behavior (1st Meeting - Step 5, #2): ____________________________________
Function (1st meeting – Step 7/ Check all that apply):

- ☐ *Obtain attention*
- ☐ *Obtain something other than attention*
- ☐ *Avoid or escape something*
- ☐ *Does not have a particular skill*

Step 7 (continued): Brainstorm how the target behavior may be changed

2. **We will now focus on things that we can do after -------------- [*target behavior*] happens:**

   A. **What are some things that we can do after appropriate behaviors occur, to increase the chances that they will occur more frequently in the future?** ***(Enter everyone's ideas in the "After" column on the table in the next page)***

** For more information read on:*

Frequently we can increase appropriate behavior, and thereby decrease problem behavior, by ensuring that these behaviors result in those things that the student wants (ex. attention, items, activities, etc.).

- If a behavior results in something the student wants the behavior will increase.
- Although most of us know this, and we often try to provide "incentives" for students to behave appropriately, the problem lies in that not everyone likes or wants the same things. Here, we often need to think "out of the box": Some students like candy, some like chips, some like to spend time with friends, some like teacher's attention, some like when the teacher gets upset, some even like to be placed in detention, …
- By looking at the function of the behavior, we can get some clues as to what this particular student likes. We can then provide these or similar consequences for appropriate behaviors.
- *For each function checked, other than "Does not have a particular skill" you can ask*: If the function of -------------- [*problem behavior*] was to -------------- [*function*], what are some things we can do after appropriate behaviors occur to increase their occurrence?

   B. **What are some things that we could do after ———— [*problem behavior*] occurs to discourage it from happening again in the future?** ***(Enter everyone's ideas in the "After" column on the table in the next page)***

** For more information read on:*

Often times we can decrease problem behavior by not letting it result in what the student wants (ex. attention, items, activities, etc.).

- If a behavior results in something the student wants the behavior will increase; if a behavior does not result in something the student wants the behavior will decrease.
- Sometimes we do things that we think will decrease the problem behavior. However, if the behavior does not decrease, then the student must be obtaining something he/she wants out of it, although we may not know what this is.
- We may be able to get some clues as to what to do or not to do after -------------- [*problem behavior*] occurs by looking at what usually happens after.
- We had said that -------------- [*problem behavior*] usually results in -------------- [*1st Meeting, Step 6, "After" column*].

Step 7 (continued): Brainstorm how the target behavior may be changed

Intervention Ideas Table (Step 7 continued)		
What can we do BEFORE		*What can we do AFTER*
1 (A) Things we can do before to encourage appropriate behaviors and discourage the problem behavior:	***Target Behavior***	*2 (A) Things we can do after appropriate behaviors:*
1 (B) Appropriate behaviors we can encourage:		*2 (B) Things we can do after the problem behavior:*

Target Behavior (1st Meeting - Step 8 or Step 5, #2): ___________________________

Step 8: Decide how to intervene

Based on the various ideas that we just came up with, we need to decide how we would like to intervene until our next meeting:

1. **Considering all the ideas for interventions to do before -------------- [*target behavior*]:**
   - **Which ideas or combination of ideas do we think would be most effective at changing this behavior?**
   - **Which one of these interventions would we like to try until out next meeting?** *(Enter the team's decision in the box at the bottom of the page)*
2. **Considering all the ideas for interventions to do after -------------- [*target behavior*]:**
   - **Which ideas or combination of ideas do we think would be most effective at changing this behavior?**
   - **Which one of these interventions would we like to try until out next meeting?** *(Enter the team's decision in the box at the bottom of the page)*

** For more information read on:*

As we make our decision, there are a few things that we should keep in mind:

- Not to try too many things at once, as this will make it difficult to tell what works and what does not work – we can always try other things later.
- If there are too many drawbacks to an idea, select a different one. Consistency is one of the most important keys to success: Everyone needs to react in the same way to the behavior.
- Progress may be slow. The problem behavior has occurred for a long time. We should expect the problem behavior to continue to occur at least occasionally at first. Sometimes, the problem behavior may even get worse before decreasing.
- Because consistency is very important, once we select an intervention we should all continue the intervention as agreed upon, even if it seems like we are not being successful, until we meet and decide to change it.
- One of the most effective intervention strategies is to show the student that the problem behavior is no longer successful in achieving what he/she wants. However, once we do this, it is very likely that the behavior will increase temporarily. Therefore, before deciding to do this, we need to make sure that we will be able to handle a temporary increase in the behavior: If we give in to the problem behavior after it increases, we will not be showing that the behavior no longer works, but that the behavior still works if the student tries hard enough. This will make the behavior stronger! As such, if we do not think that we can handle an increase, we should try a different intervention strategy.

Selected Intervention: Until out next meeting, we are going try to change the target behavior by,
Doing the following before the target behavior:

____

____

Doing the following after the target behavior:

____

____

Target Behavior (1st Meeting - Step 8 or Step 5, #2): ________________________
Method of Measurement (1st Meeting - Step 9): ____________________________

Step 9: Discuss how to intervene until the next meeting

1. **Are we all clear on what we are going to do to intervene? Are there any questions? Remember, we need to be consistent!**
2. **Do we need to make any special arrangements to ensure we follow-through?** Who will take care of these? By when? *(Enter under "Other To Do's", in the To Do Chart)*
3. **Are there situations that may come into conflict with the intervention?** If so, what can we do to help? *(Enter under "Other To Do's" in the To Do Chart)*

Step 10: Discuss what to measure and what to do until the next meeting

In order to tell if our intervention is successful, we need to continue to collect information on -------------- [*target behavior*], **using the** ---------- [*method of measurement*] **and graphing forms, as we have been doing.**

- *Go to Appendix 2, Graphing Form, and give everyone a copy of this form*
- *Go to the tab labeled* ----------- [*method of measurement*] *in Appendix 3, and give everyone a copy of this form*

1. **Is anyone missing a form? Are there any questions?**
2. **We should enter the behavior and its definition on the forms, so that we are all consistent in what we are measuring.** *(Everyone enters the behavior & definition).*
   - **Do we need to make any special arrangements to make sure that this information is collected?** If so, who will take care of these arrangements? By when? *(Enter under "Other To Do's" in the To Do Chart)*
3. **On the method of measurement form, p. 2, there is also a box to enter the intervention. We should write it down here so that it is easy to remember.** *(Everyone enters the intervention on their measurement form)*
4. **I am going to enter that we are going to follow the intervention discussed as well as measure and graph the behavior, in the To Do Chart** *(Enter in the To Do Chart)*

Step 11: Set the date, time, and place for the next meeting

We should meet again in approximately 1 to 2 weeks: When would be a good time for all of us to meet? *(Enter information in the To Do Chart and in the ESP Meeting Calendar)* **You can also enter the time and date on your measurement form.**

Step 12: Initial To Do's

I will pass the To Do Chart around. Please look at the row where your name is. Make sure that you agree with what I entered and place your initials in the box. If you don't agree with what is entered let me know so I can change it.

Step 13: Gather collected information

Before we leave, I need to gather all the information that we collected and put it in the ESP book. Please pass your completed measurement and graphing forms to me. *(Collect all the information and put it in the plastic envelope in the back of the ESP book)*

Step 14: End the meeting

Thank you! I will copy the measurement and graphing forms, as well as the intervention notes, for those that were not here.

To Do Chart: Who is going to do what, when, and where

To Do Chart (Second Meeting)					
	Who (member)	Is going to	When	Where	Initials
Intervention & Information Collection To Do's (Enter names, check appropriate boxes or enter other information)		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
		❑ Intervene by following the intervention (box under Step 8, p. 6) ❑ Collect information on the target behavior and graph it	❑ During class time ❑ Other:	❑ In class ❑ Other:	
Other To Do's (Enter necessary information)	☐ Meeting Facilitator	☐ Copy measurement & graphing forms and Intervention notes for: ______ ______	☐ After this meeting	☐ Place information in each one's box	
	☐ Meeting Facilitator	☐ Return ESP book and ESP Meeting Calendar to Program Coordinator	☐ After this meeting	☐ Program Coordinator's office	
	☐ Meeting Facilitator	☐ Tell program coordinator when the next meeting will be	☐ After this meeting		
	☐ Meeting Facilitator	☐ Obtain ESP book and ESP Meeting Calendar from Program Coordinator	☐ Before the next meeting	☐ Program Coordinator's office	

Next Meeting:

Day/Date: Time: Place:

Encouraging Student Progress (ESP)
Third+ Meeting Agenda/Minutes: Progress Check Meeting

Section 1: Completed by the Meeting Facilitator PRIOR to the meeting

Student's Name: ______________________________ Date: ____________________
(Last, First, Middle)
Student ID#: ______________ Grade Level: ______________

☐ *Check if this is a "Gifted Referral"*
Meeting Number *(enter the meeting number as this form may be use for the 3rd and future meetings, as well as for the 2nd "gifted referral" meeting)*: ________
Team Members *(enter the names of all of the student's teachers and of others that attended previous meetings)*:

☐ ________________ ☐ ________________ ☐ ________________
☐ ________________ ☐ ________________ ☐ ________________
☐ ________________ ☐ ________________ ☐ ________________
☐ ________________ ☐ ________________ ☐ ________________

☐ Meeting Facilitator *(person who wrote initial concern)*: ______________________
☐ ESP In House Consultant *(should always be present @ 3rd meeting)*: ______________________

Note: Also complete the heavy-bordered boxes at the top of the pages, which refer to information from the 1st Meeting, prior to the meeting.

Section 2: Completed by the Meeting Facilitator DURING the meeting

Directions: Follow directions as stated throughout the agenda; Read items as follows:
- **Bold Faced Items, not italicized: Necessary items – READ OUT LOUD**
- *Italicized Items: Directions – DO NOT READ OUT LOUD*
- Items not in bold or italics and dashed-boxed items: Additional information – Read As Needed

Step 1: Introduce each other

Are we already acquainted with everyone here today?
- *If "Yes": Go to Step 2.*
- *If "No":* **Why don't we start by going around the room and briefly introducing ourselves? I will start.**

Step 2: Check who is present

Let me mark down who is here.
- *Read the names that you entered in the box above (Section 1),*
- *Place a checkmark next to those that are present; add / check names of others present.*

Step 3: State goals for this meeting

Our goals for today are to review the status of our previous recommendations; to look at the information gathered; to determine how to proceed based on this information; and to leave the meeting knowing exactly who is going to do what.

Keep in mind that the aim of this meeting is to problem solve an issue. This meeting is meant to be constructive. Everyone's input is very valuable and very important. During the discussion, please remember to be respectful of others.

Target Behavior (1st Meeting - Step 8 or Step 5, #2): ________________________________

Step 4: Review why we are meeting

1. **We are meeting because there was a concern about** ------------- *[student's name]*.
2. **During the first meeting we decided to focus on** ------------ *[target behavior]*.
   ⇨ *If this is a gifted referral skip #3 below and proceed to Step 5.*
3. **At the last meeting we decided that we were going to intervene by** ------------- *[2nd Meeting Step 8 or 3rd + Meeting Step 11, Intervention box]*.

Step 5: Review the previous meeting recommendations

Lets go over our last meeting's To Do Chart to see where we are *(2nd or 3rd + Meeting, last page; if gifted referral 1st Meeting, last page).*

1. **At the last meeting we decided that:** ———— *[person's name]* **was going to** ——— *[To Do from 2nd column]*.
   - *Read recommendations for each person; if several people were going to do the same thing, read all of those people's names and then read what they were going to do.*
2. **Did anyone encounter any unforeseen events or obstacles that prohibited them from following-up on these recommendations?** *(Circle one)*

   YES NO

   - *If "No": Proceed to Step 6.*
   - *If "Yes": Continue Below.*
3. *Ask each person who was unable to follow-up on the recommendations: (Enter answers below)*
   - **Why don't you share with us some of the issues that you encountered?**
   - **In your opinion, what could we change to facilitate follow-through?**

Reasons why recommendations were not followed-up on:
What can be done to ensure future follow-up:

Step 6: Determine how often the target behavior is occurring now

The first thing that we need to do is to determine how often -------------- *[target behavior]* **is occurring now.**

1. **Please take out the graphs and measurement forms that you completed so we can look over all of our information.**
2. **On average, about how often would we say** ———— *[target behavior]* **is occurring now?** (i.e. times per week, per day, per class period) *(Enter information below)*

   ____
3. ⇨ *If this is a gifted referral, proceed to Step 12; otherwise, continue.*

Target Behavior (1st Meeting - Step 8 or Step 5, #2): ______________________
Target Goal (2nd Meeting - Step 6, #3): ______________________

Step 7: Establish if the Target Goal has been met

The target goal that we had set was ——— [*target goal*].
Keeping in mind that the behavior is now occurring -------------- [*Step 6 # 2, previous page*],

1. **Has the target goal been met?** *(Check answer)*

   ☐ **YES** ☐ **NO**

   - *If "No":* *Proceed to Step 8.*
   - *If "Yes":* **Since the target goal has been met, the original problem might be solved.** *(Continue below)*

2. **Is this a 60-day follow-up meeting?** *(Check answer)*

   ☐ **YES** ☐ **NO**

   - *If "No":* **We should continue doing the same intervention that we have been doing and have a follow-up meeting in 60 days to make sure that things are still going well.**
     - *Proceed to Step 14 and check "Meet in 60 Days."*
   - *If "Yes":* **Since things are still going well, we should continue doing what we have been doing to change the behavior, but we don't need to meet any more.**
     - *Proceed to Step 14 and check "End Meeting Process."*

     Note: If there are other problems that the team would like to address, a new process, focusing on the new issue, should be re-started.

Step 8: Decide if the team is making progress toward the Target Goal

Although we may not have met our target goal, we may be making progress.

1. **Lets compare the information that we gathered since we began our intervention to the information that we gathered prior to our intervention.**
   - *Take out the completed graphs from the plastic envelope in the back of the ESP book*
   - *Give each person their graph*
2. **Are we making enough progress toward the target goal?** *(Check answer)*

   ☐ **YES** ☐ **NO**

   - *If "No":* *Proceed to Step 9.*
   - *If "Yes":* **Since we are making progress toward the target goal, we should continue doing the same intervention.**
3. **Can we continue doing the same intervention?** *(Check answer)*

   ☐ **YES** ☐ **NO**

   - *If "No":* *Proceed to Step 11.*
   - *If "Yes":* **We should continue doing the same intervention and collecting the same information as we have been doing, and meet again in a couple of weeks to check on progress.**
     - *Proceed to Step 14 and check "Continue Same Intervention."*

Step 9: Discuss if the team was consistent with the intervention

As previously discussed, it is very important that we are all consistent with the intervention. However, there are times when it is difficult to be consistent.

1. **At our last meeting we said that we would intervene by** ———— [*2nd Meeting Step 8 or 3rd + Meeting Step 11, Intervention box*].
2. **Was everyone consistent in implementing this intervention?** *(Check answer)*

☐ **YES** ☐ **NO**

- *If "Yes": Proceed to Step 11.*
- *If "No":* **We can either continue with the same intervention and troubleshoot ways to increase our consistency, or we can try a new intervention. What would we like to do?** *(Check answer below)*

* *For more information read on:* • If we feel that our initial intervention could be successful if we troubleshoot ways of increasing consistency, we should do that. • If we feel that, for one reason or another, our initial intervention was too difficult to implement, we should try a new intervention.

☐ **Continue with the same intervention and troubleshoot ways to increase consistency, or**
☐ **Try a new intervention**

- *If "Continue and Troubleshoot": Proceed to Step 10.*
- *If "Try a New Intervention": Proceed to Step 11.*

Step 10: Troubleshoot ways to increase consistency

1. *Ask each person who expressed difficulty implementing the intervention (enter all the information in the box below):*
   - **Why don't you share with us some of the issues that you encountered in trying to implement the intervention?**
   - **In your opinion, how could we ensure consistency?**
2. **Do we need to make special arrangements to ensure consistency?** If so, who will take care of these? By when? *(Enter To Do's under "Other To Do's" in the To Do Chart)*
3. *Proceed to Step 14 and check "Continue Same Intervention"*

Reasons why it was difficult to implement the intervention consistently: ____ ____ *What can be done to ensure consistency:* ________________________ ____ ____ ____

Target Behavior (1st Meeting - Step 8 or Step 5, #2): ___________________________________

Step 11: Decide on a new intervention

During our Second Meeting we brainstormed various ideas for interventions. Lets look over these: --------------- [*Intervention Ideas Table, 2nd Meeting, Step 7, p. 5*].

Are there ideas that we came up with that we have not yet tried as an intervention? *(Check answer)*

☐ **YES** ☐ **NO**

- *If "No": Proceed to Step 12.*
- *If "Yes": Continue below.*
  - **Considering all the ideas for interventions to do before** --------------- [*target behavior*]**, which one of these, or combination of these, would we like to try as a New Intervention?** *(Enter the team's decision in the "New Intervention" box at the bottom of the page)*
  - **Considering all the ideas for interventions to do after** --------------- [*target behavior*]**, which one of these, or combination of these, would we like to try as a New Intervention?** *(Enter the team's decision in the "New Intervention" box at the bottom of the page)*
  - *Proceed to Step 14 and check "Try New Intervention"*

** For more information read on:*

- We can either modify part of our current intervention or the entire intervention.
- As we decide on a new intervention, we should consider the following:
  - Are there any ideas that we have not tried, which we could add to our current intervention, to make it more successful?
  - If some of the things that we have been doing do not seem to be having any effect, what could we replace them with?
  - Which new combination of ideas do we think would be most successful?
  - Remember not to try too many things at once.
  - If there are too many drawbacks to an idea, select a different one: Consistency is one of the most important keys to success.

New Intervention:
Until out next meeting, we are going try to change the target behavior by,
Doing the following before the target behavior:

____

____

Doing the following after the target behavior:

____

____

Step 12: Discuss referring for Special Services

If we have met at least two times and have enough data to support a referral for testing for Special Services, we can, at this point, refer this case for Special Services testing.

1. **Do we have enough data to support a referral for Special Services testing?** *(Check answer)*

   ☐ **YES** ☐ **NO**

   - *If "Yes": Proceed to # 2 below*
   - *If "No":* **We should continue to gather information.**
     - ⇨ *If this is a gifted referral: Proceed to Step 14 and check "Gather Information"*
     - ⇨ *If this is not a gifted referral:* **We should also continue to implement an intervention.**
       - *Go back to Step 11: Brainstorm a New Intervention to implement until the next meeting; Enter this intervention in the New Intervention box, and then Proceed to Step 14 and check "Try New Intervention."*

2. **Based on the information that we gathered, do we feel that this case should be referred for Special Services testing?** *(Check answer)*

   ☐ **YES** ☐ **NO**

   - *If "Yes": Proceed to Step 13.*
   - *If "No":* **We can continue to meet on a regular basis to check on progress, brainstorm interventions, and/or target a new behavior, or we can end the meeting process for now. What would we like to do?** *(Check answer)*

     ☐ **End Meeting Process** ☐ **Continue to meet on a regular basis**
     - *Proceed to Step 14 and check either "End meeting process" or "Continue to meet"*

Step 13: Complete forms for referring for Special Services

1. **Let me get the Request For Special Services Forms so that we can complete them together.**
   - *Get the Request For Special Services Forms (Appendix 1, in the ESP book).*
   - *Read through the forms and complete them as accurately as possible.*

2. **I will give the completed Request For Special Services Forms to the School Social Worker.** *(Enter this under "Other To Do's" in the To Do Chart)*

3. **We can continue to meet on a regular basis to check on progress, brainstorm interventions, and/or target a new behavior, or we can end the meeting process for now. What would we like to do?** *(Check answer)*

   ☐ **End Meeting Process** ☐ **Continue to meet on a regular basis**
   - *Go to Step 14 and check "Refer for Special Services", and either "End meeting process" or "Continue to meet."*

Step 14: Check what we are going to do next

Check what the team will do next and proceed as stated below each choice:

☐*Meet in 60 Days* (Proceed to Step 15)	☐*Continue Same Intervention* (Proceed to Step 15)	☐*Try New Intervention* (Proceed to Step 15)	
☐*Refer for Special Services* (Also check another box)	☐*Gather Information* (Proceed to Step 16)	☐*Continue to Meet* (Proceed to Step 17)	☐*End Meeting Process* (Proceed to Step 19)

Target Behavior (1st Meeting - Step 8 or Step 5, #2): ________________________________
Method of Measurement (1st Meeting - Step 9): ____________________________________

Step 15: Discuss how to intervene until the next meeting

1. **Are we all clear on what we are going to do to intervene? Are there any questions? Remember, we need to be consistent!**
2. **Do we need to make any special arrangements to ensure we follow-through?** Who will take care of these? By when? *(Enter under "Other To Do's", in the To Do Chart, last page)*
3. **Are there situations that may come into conflict with the intervention?** If so, what can we do to help? *(Enter under "Other To Do's" in the To Do Chart)*

Step 16: Discuss what to measure until the next meeting

We need to continue to collect information on -------------- *[target behavior]*, **using the** -------------- *[method of measurement]* **and graphing forms, as we have been doing.**

- *Go to Appendix 2, Graphing Form, and give everyone a copy of this form*
- *Go to the tab labeled ------------- [method of measurement] in Appendix 3, and give everyone a copy of this form*

1. **Is anyone missing a form? Are there any questions?**
2. **We should enter the behavior, its definition on the forms. If we are implementing an intervention we should also enter it, to increase consistency.** *(Everyone enters the behavior, definition, and intervention on the appropriate forms).*
   - **Do we need to make any special arrangements?** If so, who will take care of these arrangements? By when? *(Enter under "Other To Do's" in the To Do Chart)*
3. **I am going to enter that we are going to follow the intervention discussed as well as measure and graph the behavior, in the To Do Chart** *(Enter in the To Do Chart)*

Step 17: Set the date, time, and place for the next meeting

When would be a good time for all of us to meet? *(Enter information in the To Do Chart and in the ESP Meeting Calendar)*
If scheduling a regular meeting, you should meet in 1 to 2 weeks; if scheduling a follow-up meeting, you should meet in 60 days.
You can enter the time and date on your measurement form.

Step 18: Initial To Do's

I will pass the To Do Chart around. Please look at the row where your name is. Make sure that you agree with what I entered and place your initials in the box. If you don't agree with what is entered let me know so I can change it.

Step 19: Gather collected information

Before we leave, I need to gather all the information that we collected and put it in the ESP book. Please pass your completed measurement and graphing forms to me. *(Collect all the information and put it in the plastic envelope in the back of the ESP book)*

Step 20: End the meeting

Thank you! I will copy the measurement and graphing forms, as well as the intervention notes, for those that were not here.

To Do Chart: Who is going to do what, when, and where

To Do Chart (Third+ Meeting: Meeting #)					
	Who (member)	***Is going to***	***When***	***Where***	***Initials***
Intervention & Information Collection To Do's *(Enter names, check appropriate boxes or enter other information)*		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
		☐ *Intervene following same intervention* ☐ *Intervene following new intervention* ☐ *Measure target behavior and graph it*	☐ *During class time* ☐ *Other:*	☐ *In class* ☐ *Other:*	
Other To Do's *(Enter necessary information)*	☐ *Meeting Facilitator*	☐ *Copy measurement, graphing forms, &Intervention notes for:* _____________ _____________	☐ *After this meeting*	☐ *Place in each one's box*	
	☐ *Meeting Facilitator*	☐ *Return ESP book and ESP Meeting Calendar to Program Coordinator*	☐ *After this meeting*	☐ *Program Coordinator's office*	
	☐ *Meeting Facilitator*	☐ *Obtain ESP book and ESP Meeting Calendar from Program Coordinator*	☐ *Before the next meeting*	☐ *Program Coordinator's office*	

Next Meeting:
Day/Date: *Time:* *Place:*

Appendix G: Meeting Manual Data Collection and Graphing Forms

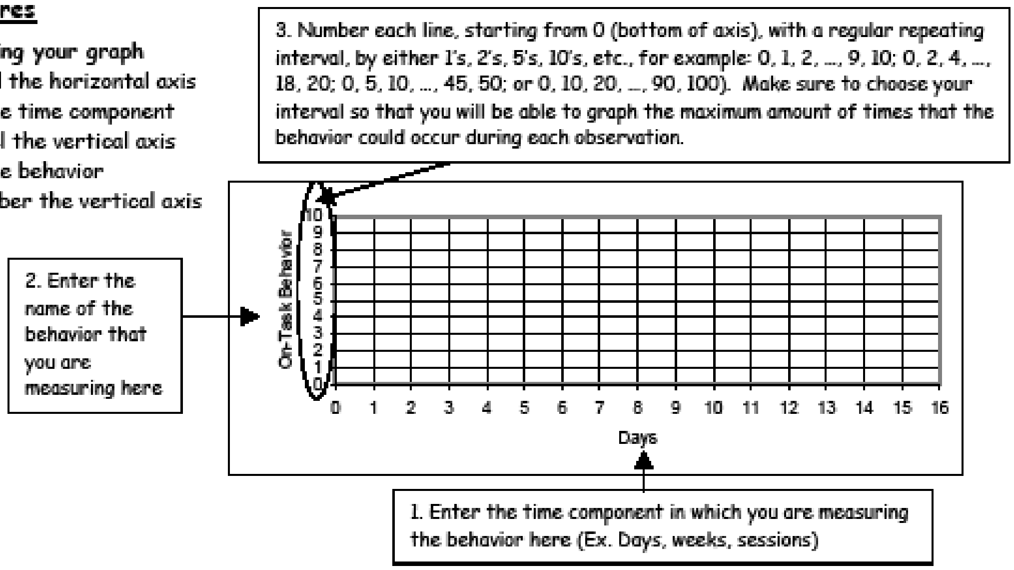
Graphing – Description, Procedures, & Example

In addition to measuring the behavior, it is very important to graph the measurements that you gather, as this allows you to have a visual image of the status of the behavior at any point in time.

A graph allows you to determine, at-a-glance: On average, how often the behavior of interest occurs, times when the behavior is lower, and times when the behavior is higher. By looking at a graph, you can tell right away if the behavior is increasing or decreasing, when it peaks, when it plummets… You can then follow up on this information by examining the situations surrounding times when the behavior changed.

Procedures

Preparing your graph
1. Label the horizontal axis with the time component
2. Label the vertical axis with the behavior
3. Number the vertical axis



Entering information on your graph / Example

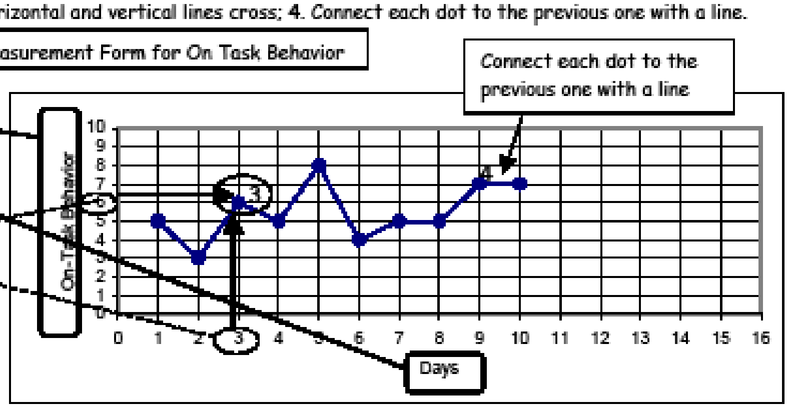
* Every time that you collect information, enter it on your graph.

To place the points on the graph:

1. Look at the 1st column on your measurement form -On the horizontal axis, find the time component that represents when you collected the information (ex. Day 3);
2. Look at the last column on your measurement form -On the vertical axis, find the value of the measurement (ex. 6).
3. Place a dot where the horizontal and vertical lines cross; 4. Connect each dot to the previous one with a line.

1st and last columns of Measurement Form for On Task Behavior

Days	Total times behavior occurred
1	5
2	3
3	6
4	5
5	8
6	4
7	5
8	5
9	7
10	7



ESP Graphing Form P. 2

Graphing Form

Student's Name: ____________________________ **Teacher:** ________________________

Subject/Period: _____________________________ **Date(s):** _________________________

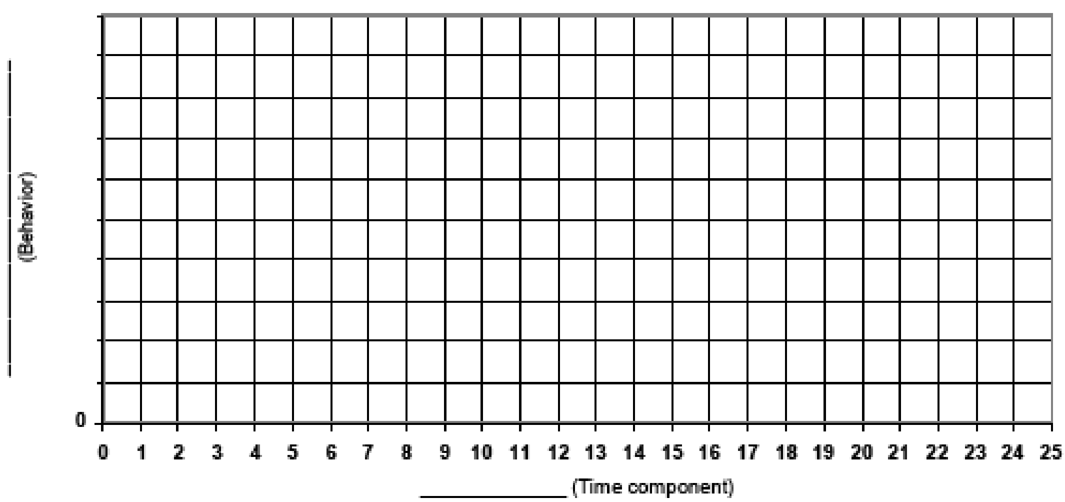
Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1

* If you need more space, please make copies of this form
* Bring this information to the next meeting

Behavior (From 1st Meeting):
____

Method of Measurement:
____



Permanent Product – Description, Procedures, & Example

When the behavior that you are looking at results in a lasting product, Permanent Product may be the best method to use because you don't have to be "on the lookout" for the behavior to happen, as you can measure it afterwards by looking at its product. However, you do have to be careful that only this student's target behavior, and not someone else's or some other behavior, results in the product that you have chosen to look at.

Examples of lasting products include written assignments, papers thrown on the floor, items left on the lunch table. In these examples, the behaviors that you might be looking for could be, answering questions correctly, number of completed assignments, number of homework assignments turned in, attending class, being upset, cleaning up after lunch, ….

Procedures

At the meeting:

- Write down the permanent product that you will be looking at
- Write down the behavior that you will be looking for in that permanent product, and its definition
- If the team decides on an intervention (meetings 2 or 3), enter it in the box provided (p. 2)

After the meeting:

- For each permanent product that you look at write down:
  - The date when the permanent product was completed
  - The label of that permanent product
  - The number of times that the behavior occurred
  - The number of opportunities in which the behavior could have occurred
  - Calculate the Total Percent of number of times that the behavior occurred **(This is what you graph)**

Example

Behavior: Answering questions correctly on homework assignments turned in.
Behavior Definition: Answer on homework questions is complete and accurate (excludes partially answered items). Excludes any written assignments performed in class.
Permanent Product Looked at: Homework assignments turned in.

Date	Permanent Product Label	Number of Times Behavior Occurred (# Correct answers)	Number of Opportunities	Total % of Times Behavior Occurred
11/5	Homework Section I	12	20	(12 / 20) X 100 = 60
11/6	Homework Section II	4	10	(4 / 10) X 100 = 40
11/7	Homework Section III	25	40	(25 / 40) X 100 = 63
11/8	Homework Section IV	12	30	(12 / 30) X 100 = 40
11/9	Homework Section V	14	30	(14 / 30) X 100 = 47

Permanent Product Form

Student's Name: ___________________________ **Teacher:** ________________________

Subject/Period: ____________________________ **Date(s):** ________________________

Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1

* If you need more space, please make copies of this form

* Bring this information to the next meeting

Behavior (From 1st Meeting): ____

Behavior Definition (in specific, observable, measurable terms):

____

____

Permanent Product Looked at: ____

Intervention (From 2nd or 3rd Meeting):

____

____

Date	Permanent Product Label	Number of Times Behavior Occurred	Number of Opportunities	Total % of Times Behavior Occurred

Behavior Count – Description, Procedures, & Example

When the behavior that you are looking at can be easily counted Behavior Count may be the best method to use, as it does not require too much effort and may not interfere with ongoing activities. A behavior can be easily counted when:

- The behavior has a clear beginning and end so that you can easily tell when the behavior starts and when it ends, and
- It does not happen at such a high rate that it is hard to keep track of.

There are several ways to keep track of behaviors as they occur: You can use a wrist counter; put paperclips, pennies, or buttons in one pocket and move them to a different "target" pocket as each behavior occurs; or make tally marks on a piece of paper. To obtain the total number of times that the behavior occurred, at the end of your observation time, you would either look at your wrist counter or add up the number of items in the "target" pocket, or the number of tally marks. This form uses tally marks. However, you can choose a different method to keep track of behaviors as they occur.

Examples of behaviors that you can measure by counting include leaving one's seat, raising one's hand, yelling out an answer, asking to go to the bathroom, being late or being on time to class, ….

Procedures

At the meeting:

- Write down the behavior that you will be looking for and its definition
- If the team decides on an intervention (meetings 2 or 3), enter it in the box provided (p. 2)

After the meeting:

- Every time that you are "on the look out" for the behavior:
  - Write down the date
  - Make a tally mark every time that the behavior occurs
  - At the end of your observation period, total the number of tally marks for that day (if using a different method to keep track of behavior, enter the total in the Total column) **(This is what you graph)**

Example

Behavior: Leaving seat during class time

Behavior Definition: Being at least one foot away from desk/seat during class, anytime after tardy bell rings. Includes times when has asked for permission to leave seat.

Date	Tally every time that the behavior occurs	Total number of times behavior occurred
11/5		7
11/6		4
11/7		6
11/8		5
11/9		8

Behavior Count Form

Student's Name: ____________________ **Teacher:** ____________________

Subject/Period: ____________________ **Date(s):** ____________________

Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1

* If you need more space, please make copies of this form
* Bring this information to the next meeting

Behavior (From 1st Meeting): ____

Behavior Definition (in specific, observable, measurable terms):

____

____

Intervention (From 2nd or 3rd Meeting):

____

____

Date	Tally every time that the behavior occurs	Total number of times behavior occurred

Momentary Sample – Description, Procedures, & Example

When the behavior that you are looking at is not easily counted, you can measure the behavior by counting the number of time-intervals in which the behavior occurred. A behavior is not easily counted when:

- It is difficult to tell exactly when the behavior begins or when it ends, <u>or</u>
- It occurs at such a high rate that it is difficult to keep a count on it.

If this behavior tends to last for a while, such as reading or writing, you may use the Momentary Sample method: You can simply look at the end of each interval to see if the behavior is occurring at that particular moment. Since the behavior lasts for a while, you do not need to be looking throughout the entire interval. You should note that you will need some timing instrument such as a wall clock, wristwatch, or stopwatch in order to keep track of the intervals.

Examples of behaviors that you can measure using Momentary Sample include writing, reading, working on the given assignment, talking to peers, ….

Procedures

<u>At the meeting</u>:

* Write down the behavior that you will be looking for and its definition
* Write down how long you will be observing every time that you observe: Total Observation Time
* Divide the total observation time into 10 same length intervals; write down the length of each interval
  - All intervals need to be the same length: Intervals can be from a few seconds long up to a few minutes long (less than 11 minutes)

  <u>Note</u>: Total observation time and length of intervals need to be the same each time that you observe
* If the team decides on an intervention (meetings 2 or 3), enter it in the box provided (p. 2)

<u>After the meeting</u>:

* Enter the date of your observation
* Make sure that you have your timing instrument available prior to beginning your observation
* Keep an eye on your timing instrument to keep track of the intervals
* **At the end of each time interval**:
  - Look and see if the behavior is occurring at that particular moment – Not before, not after
  - If the behavior is occurring at that moment, place plus sign (+) for that interval
  - If the behavior is not occurring at that moment, place an minus sign (-) for that interval
* At the end of your observation time, total the number of plus signs (This is what you graph)

Example

<u>Behavior</u>: Talking to peers

<u>Behavior definition</u>: Talking to a peer anytime when the teacher is talking or when should be performing individual work during class time.

<u>Total Observation Time</u>: 50 minutes <u>Length of each interval</u>: 5 minutes

Date	Interval #										Total times behavior occurred (+)
11/5	1	2	3	4	5	6	7	8	9	10	
+ or –	-	+	-	+	-	+	+	+	-	-	5

Momentary Sample Form

Student's Name: ____________________ **Teacher:** ____________________

Subject/Period: ____________________ **Date(s):** ____________________

Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1

* If you need more space, please make copies of this form
* Bring this information to the next meeting

Behavior (From 1st Meeting): ____

Behavior Definition (in specific, observable, measurable terms):

____

____

Total Observation Time: __________ **Length of each interval:** __________

Intervention (From 2nd or 3rd Meeting):

____

____

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Partial Interval - Description, Procedures, & Example

When the behavior that you are looking at is not easily counted, you can measure the behavior by counting the number of time-intervals in which the behavior occurred. A behavior is not easily counted when:

- It is difficult to tell exactly when the behavior begins or when it ends, or
- It occurs at such a high rate that it is difficult to keep a count on it.

If this behavior happens so quickly that it is hard to catch (the behavior itself does not last for a long time), you may use the Partial Interval method to measure this behavior: You can look to see whether or not the behavior occurs at some point in each time interval. You should note that you will need some timing instrument such as a wall clock, wristwatch, or stopwatch in order to keep track of the time intervals.

Examples of behaviors that you can measure using Partial Interval include praising others, making a particular comment, making a certain gesture, walking by a particular place, ...

Procedures

At the meeting:

* Write down the behavior that you will be looking for and its definition
* Write down how long you will be observing every time: Total Observation Time
* Divide the total observation time into 10 same length intervals; write down the length of each interval
  - All intervals need to be the same length: Intervals can be from a few seconds long up to a few minutes long (less than 11 minutes)

  Note: **Total observation time and length of intervals need to be the same each time that you observe**
* If the team decides on an intervention (meetings 2 or 3), enter it in the box provided (p. 2)

After the meeting:

* Enter the date of your observation
* Make sure that you have your timing instrument available prior to beginning your observation
* Keep an eye on your timing instrument to keep track of the intervals
* **During each time interval:**
  - Look to see if the behavior occurs
  - Once the behavior occurs, place a plus sign (+) for that interval
  - If, at the end of the interval the behavior did not occur, place a minus sign (-) for that interval
* At the end of your observation time, total the number of plus signs (This is what you graph)

Example

Behavior: Saying something nice

Behavior Definition: Making a statement to a peer or a teacher during class time, in a pleasant tone, which includes either praise or politeness, for example saying "you did well" or "excuse me"

Total Observation Time: 20 minutes Length of each interval: 2 minutes

Date	Interval #										Total times behavior occurred (+)
11/5	1	2	3	4	5	6	7	8	9	10	
+ or -	+	-	-	+	-	-	-	+	-	-	3

Partial Interval Form

Student's Name: ___________________________ **Teacher:** _________________________

Subject/Period: ____________________________ **Date(s):** _________________________

Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1

- If you need more space, please make copies of this form
- Bring this information to the next meeting

Behavior (From 1st Meeting): ____

Behavior Definition (in specific, observable, measurable terms):

____

____

Total Observation Time: ___________ **Length of each interval:** ____________

Intervention (From 2nd or 3rd Meeting):

____

____

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Time to Respond – Description, Procedures, & Example

If you are interested in measuring the time that it takes for the student to respond, you can measure just that by using the Time to Respond method. However, in order to do so, you need to make sure that the behavior that you are looking at has a clear beginning so that you can tell exactly when the behavior starts. To measure how long it takes to respond you will need some timing instrument such as a wall clock, wristwatch, or stopwatch.

Examples of behaviors where you might want to measure time to respond include time to sit at one's desk, time to take out materials, time to begin writing, ….

Procedures

At the meeting:

* Write down the behavior that you will be looking for and its definition
* If the team decides on an intervention (meetings 2 or 3), enter it in the box provided (p. 2)

After the meeting:

* Make sure that you have your timing instrument available prior to beginning your observation
* Each time that you are expecting the behavior:
  - Write down the date
  - Write down the time when the instruction to do the behavior is given
  - Write down the time when the behavior starts
  - Calculate the length of time that it took for the behavior to begin and write it in minutes and/or seconds **(This is what you graph)**

Example

Behavior: Time it takes to start working

Behavior Definition: Time it takes for the student to begin writing on assignment paper after instruction to start working on assignment is given to the whole class.

Date	Enter time when instruction is given	Enter time when behavior starts	Length of time for the behavior to start
11/5	8:46 AM	8:52 AM	6 minutes
11/6	8:32 AM	8:35 AM	3 minutes
11/7	8:55 AM	9:02 AM	7 minutes
11/8	8:44 AM	8:49 AM	5 minutes
11/9	8:37 AM	8:41 AM	4 minutes

Time to Respond Form

Student's Name: ___________________________ **Teacher:** _________________________

Subject/Period: ____________________________ **Date(s):** _________________________

Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1

- If you need more space, please make copies of this form
- Bring this information to the next meeting

Behavior (From 1st Meeting): ____

Behavior Definition (in specific, observable, measurable terms):

____

____

Intervention (From 2nd or 3rd Meeting):

____

____

Date	Enter time when instruction is given	Enter time when behavior starts	Length of time for the behavior to start

Behavior Duration – Description, Procedures, & Example

If you are interested in measuring how long a behavior lasts you can do that by using the Behavior Duration method. However, in order to do so, you need to make sure that the behavior that you are looking at has a clear beginning and a clear ending so that you can tell exactly when the behavior starts and when it finishes. You will also need some timing instrument such as a wall clock, wristwatch, or stopwatch.

Examples of behaviors that you might want to measure the length of include crying, being out of the classroom, being in a particular location of the classroom, ...

Procedures

At the meeting:

- Write down the behavior that you will be looking for and its definition
- If the team decides on an intervention (meetings 2 or 3), enter it in the box provided (p. 2)

After the meeting:

- Make sure that you have your timing instrument available prior to beginning your observation
- Each time that the behavior occurs:
  - Write down the date
  - Write down the time when the behavior began
  - Write down the time when the behavior stopped
  - Calculate the length of time that the behavior lasted and write it in minutes and/or seconds **(This is what you graph)**

Example

Behavior: Working individually

Behavior Definition: Sitting at desk, with an assignment on the desk, looking at assignment, not talking to peers. Once student looks up (not looking at assignment any more), the behavior has stopped. If student begins talking to peers while looking at assignment, behavior has stopped.

Date	Enter time when the behavior began	Enter time when behavior stopped	Length of time that the behavior lasted for
11/5	9:55 AM	10:06 AM	11 minutes
11/5	10:19 AM	10:28 AM	9 minutes
11/6	9:43 AM	9:51 AM	8 minutes
11/7	10:04 AM	10:19 AM	15 minutes
11/7	10:23 AM	10:33 AM	10 minutes

Behavior Duration Form

Student's Name: ______________________ **Teacher:** ______________________

Subject/Period: ______________________ **Date(s):** ______________________

Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1
* If you need more space, please make copies of this form
* Bring this information to the next meeting

Behavior (From 1st Meeting): ____
Behavior Definition (in specific, observable, measurable terms):

____

____

Intervention (From 2nd or 3rd Meeting):

____

____

Date	Enter time when the behavior began	Enter time when behavior stopped	Length of time that the behavior lasted for

Whole Interval - Description, Procedures, & Example

If you are interested in knowing that the behavior continues without interruption you can measure the behavior by counting the number of intervals in which the behavior occurred throughout the entire interval. You should note that, in order to keep track of the time intervals, you will need some timing instrument such as a wall clock, wristwatch, or stopwatch.

Examples of behaviors that you can measure using Whole Interval include writing, reading, working on the given assignment, ...

Procedures

At the meeting:

* Write down the behavior that you will be looking for and its definition
* Write down how long you will be observing every time: Total Observation Time
* Divide the total observation time into 10 same length intervals and write down the length of each interval
    - All intervals need to be the same length: Intervals can be from a few seconds long up to a few minutes long (less than 11 minutes)

  Note: Total observation time and length of intervals need to be the same each time that you observe
* If the team decides on an intervention (meetings 2 or 3), enter it in the box provided (p. 2)

After the meeting:

* Enter the date of your observation
* Make sure that you have your timing instrument available prior to beginning your observation
* Keep an eye on your timing instrument to keep track of the intervals
* **During each time interval:**
    - Look to see if the behavior occurs **throughout the entire interval**
    - If the behavior stops at any time, place a minus sign (-) for that interval
    - If, at the end of the interval the behavior is still occurring, place a plus sign (+) for that interval
* At the end of your observation time, total the number of plus signs **(This is what you graph)**

Example

Behavior: On task behavior

Behavior Definition: Looking at the teacher while she is talking; talking to the teacher; or looking at assignment

Total Observation Time: 10 minutes Length of each interval: 1 minute

Date	Interval #										Total times behavior occurred (+)
11/5	1	2	3	4	5	6	7	8	9	10	
+ or -	-	+	+	+	-	+	-	+	+	-	6

Whole Interval Form

Student's Name: ___________________________ **Teacher:** _________________________

Subject/Period: ____________________________ **Date(s):** _________________________

Next meeting Date/Time/Place: ____

Procedures: For directions on how to fill out this form, please look at p. 1
* If you need more space, please make copies of this form
* Bring this information to the next meeting

Behavior (From 1st Meeting): ____
Behavior Definition (in specific, observable, measurable terms):

____

____

Total Observation Time: ___________ **Length of each interval:** ____________

Intervention (From 2nd or 3rd Meeting):

____

____

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Date	Interval #										Total times behavior occurred (+)
	1	2	3	4	5	6	7	8	9	10	
+ or -											

Appendix H: In-House Consultant Training Manual

ESP In House Consultant Training:
ESP System

Encouraging Student Progress (ESP)
ESP Introduction

What is ESP?

The Encouraging Student Progress (ESP) process is a system to help teachers problem-solve issues that they may be encountering with some students.

After a student is referred to the ESP process, a Team composed of all of that student's teachers is formed.

The ESP system consists of a set of self-guided materials. These materials help the Team:

- Determine what the problem behavior is,
- Brainstorm the purpose of this behavior,
- Decide what behavior to focus on,
- Decide how to measure this behavior,
- Brainstorm intervention ideas,
- Select an intervention plan, and
- Determine if they are making progress.

Encouraging Student Progress (ESP)
The Referral Process

When does a student get referred to the ESP process and who makes the referral?

There are 3 types of referrals that can take place: General Referrals, Automatic Referrals, and Special Referrals.

General Referrals involve any concern that any teacher or school personnel may have about any student that has not been already identified as a Special Ed student (excludes parental written request to test for Special Services).

Automatic Referrals involve concerns that are "mandatory". There are two cases where it is "mandatory" to make a referral to the ESP process:

- The AB teacher is required to make a referral to the ESP process if at the end a 9-week report period a student has received 3 Fs in their yearlong classes
- A classroom teacher is required to make a referral to the ESP process if that teacher had to write 4 Discipline Referrals for the same student in one quarter.

Special Referrals involve:

- Any concern that any teacher or school personnel may have about a student that has been identified as a Special Ed student, and
- Any concern regarding testing for Special Services that a parent has put in writing.

  If a parent or guardian expresses a concern about a specific class, they should be directed to talk to the teacher for that class.

  If a parent or guardian expresses a concern about testing their child for Special Services, they should be directed to put their concern in writing and to give it to the student's AB teacher. The AB teacher then refers the student to the ESP process.

Encouraging Student Progress (ESP)
The Referral Process (continued)

How do I make a referral to the ESP process?

In order to begin the ESP process, a teacher or school personnel needs to complete a Concern Form.

There are 2 different Concern Forms that can be completed. The form to use depends on the type of referral that is being made:

- The General Concern Form is completed for General and Automatic Referrals
- The Special Concern Form is completed for Special Referrals

Once the Concern Form is completed, it is placed in the Program Coordinator's box.

Encouraging Student Progress (ESP)
The Referral Process (continued)

What happens after a Concern Form is completed?

After a General Concern Form is completed, the Program Coordinator:

- Sets the date/time/location for the first meeting (to be held approximately 1 to 2 weeks after the Concern Form was turned in).
- Writes the date/time/location for the first meeting on the Concern Form.
- Copies the completed Concern Form for all of the referred student's teachers, and
- Places an ESP Meeting 1 Prep Pack, which includes the copy of the completed Concern Form, in each of the referred student's teachers' boxes.

After a Special Concern Form is completed, the Program Coordinator:

- Completes all of the same tasks as for the General Concern Form, and in addition:
    - Notifies an ESP In House Consultant about the referral so that they may join the Team, and
    - Notifies the Special Education Department within the school, if the referral involves a Special Education student.

Encouraging Student Progress (ESP)
Process Overview

After the Concern Form is completed and before the 1st meeting:

- The referred student's teachers
    - Read through the Completed Concern Form and through the Meeting 1 Prep Pack
    - Collect information to bring to the First Meeting, guided by the Meeting 1 Prep Pack
- The Program Coordinator
    - Gathers information for the Team by completing the Student Information Form
    - Prepares an ESP book for the Team

On the day of the meeting, before each meeting:

The teacher who initially wrote the Concern Form, i.e. the Meeting Facilitator:

- Picks up the ESP book from the Program Coordinator
- Picks up the ESP Meeting Calendar from the Program Coordinator's office

On the day of the meeting, at each meeting:

The teacher who initially wrote the Concern Form, i.e. the Meeting Facilitator:

- Guides the teachers through the meeting by following the Meeting Agenda
- Completes the Meeting Minutes by filling in the Meeting Agenda

On the day of the meeting, after each meeting:

The Meeting Facilitator (the teacher who initially wrote the Concern Form):

- Copies the Graphing and Measurement Forms selected by the Team, to those teachers that were not at the meeting, and places them in their boxes
- Returns the ESP book to the Program Coordinator
- Returns the ESP Meeting Calendar to the Program Coordinator's office
- Tells the Program Coordinator when the 3rd ESP Meeting will be held

Encouraging Student Progress (ESP)
Process Overview (continued)

What happens at these meetings?
There are 3 different types of meetings: *An Assessment Meeting*, an Intervention Meeting, and a *Progress Check Meeting*.

During the First Meeting – *Assessment Meeting* – the Team is guided to:

- Look at the information that each member gathered before the meeting
- Decide on a behavior to focus on
- Define this behavior
- Decide what is the best method to collect information about this behavior
- Schedule a meeting in 1 to 2 weeks

After the First Meeting, the team members collect information about the behavior of focus and bring this information to the Second Meeting.

During the Second Meeting – Intervention Meeting the Team is guided to:

- Look at the information that each member gathered before the meeting
- Set a target goal
- Brainstorm possible interventions
- Decide on an intervention plan
- Schedule a meeting in 1 to 2 weeks

After the Second Meeting, the team members implement the intervention that the Team agreed upon, and continue to collect information about the behavior to bring to the Third Meeting

During the Third Meeting – Progress Check Meeting the Team is guided to:

- Look at the information that each member gathered before the meeting
- Determine if progress is being made
- Decide how to proceed

Encouraging Student Progress (ESP)
Who is who? Who does what?

There are four different types of people that are involved in the system. These include:

- The Program Coordinator
- Team Members
- The Meeting Facilitator
- The ESP In House Consultant

Encouraging Student Progress (ESP)
Who is who? Who does what? (continued)

The Program Coordinator

The Program Coordinator is the person that takes care of the paperwork (i.e. ESP Books). The Program Coordinator **does not attend the meetings.**

The Program Coordinator:

- Sets the date/time/location for the first meeting (to be held approximately 1 to 2 weeks after the Concern Form was turned in).
- Writes the date/time/location for the first meeting on the Concern Form.
- Copies the completed Concern Form for all of the referred student's teachers.
- Places an ESP Meeting 1 Prep Pack, which includes the copy of the completed Concern Form, in each of the referred student's teachers' boxes.
- Gathers information for the Team by completing the Student Information Form and places it in the ESP book.
- Prepares the ESP book for the Team before each meeting by adding the necessary copies of forms to the ESP book.
- Notifies an ESP In House Consultant about the referral so that they may join the Team, when necessary, and
- Notifies the Special Education Department within the school if the referral involves a Special Education student.

Encouraging Student Progress (ESP)
Who is who? Who does what? (continued)

Team Members

Team Members include all of the referred student's teachers. If someone other than a teacher made the referral, that person is also considered a Team Member.

Team Members:

- Gather information about the behavior, and
- Attend the meetings.

If a Team Member cannot attend the meeting, the Team Member is to give the information that they collected to the Meeting Facilitator prior to the meeting.

Encouraging Student Progress (ESP)
Who is who? Who does what? (continued)

The Meeting Facilitator

The Meeting Facilitator is the person that wrote the Concern Form (the Meeting Facilitator is also a Team Member).

The Meeting Facilitator:

- Picks up the Student's ESP book and the ESP Meeting Calendar from the Program Coordinator before each meeting,
- Guides the teachers through the meetings by following the Meeting Agenda,
- Completes the Meeting Minutes by filling in the blanks on the Meeting Agenda,
- Places the original copy of the completed Meeting Agenda/Minutes Form back in the ESP book,
- Copies the Graphing and Measurement Forms selected to those Team Members that could not attend the meeting,
- Places the copies of the Graphing and Measurement Forms in those Team Members' boxes,
- Returns the ESP book and the ESP Meeting Calendar to the Program Coordinator,
- Lets the Program Coordinator know when the third meeting will be held, and
- Communicates to the Program Coordinator when a decision to Refer for Special Services is made.

Encouraging Student Progress (ESP)
Who is who? Who does what? (continued)

The ESP In House Consultant

The ESP In House Consultant is a person within the school, that is familiar with the ESP process and that has had some training in some basic behavioral principles.

The ESP In House Consultant becomes part of the Team:

- At the 1st Meeting if the concern involves a Special Education student Referral (the Special Concern Form is completed), or
- At the 3rd Meeting.

The ESP In House Consultant assists the Team by helping to:

- Collect information,
- Brainstorm interventions,
- Implement interventions,
- Assess progress, and
- Decide if the Team has gathered enough data to support a referral for testing for Special Services.

ESP In House Consultants also form the ESP In House Consultant Team.

The ESP In House Consultant Team conducts quarterly reviews of the ESP System.

Encouraging Student Progress (ESP)
Who attends the meetings? (summary)

If this is a *General* or *Automatic* Referral (the *General Concern Form* is completed):

- Meeting 1 – Only all of the student's teachers attend
- Meeting 2 – Only all of the student's teachers attend
- Meeting 3 – All of the student's teachers and an ESP In House Consultant attend

If this is a *Special* Referral (the *Special Concern Form* is completed) regarding a student that has already been identified as a Special Education student:

- Meetings 1, 2, and 3 - All of the student's teachers, the Special Education Primary Implementer and an ESP In House Consultant attend

If this is a *Special* Referral (the *Special Concern Form* is completed) regarding a student whose parents have made a written request for testing for Special Services:

- Meeting 1 – All of the student's teachers and the School Social Worker attend
- Meeting 2 – Only all of the student's teachers attend
- Meeting 3 – All of the student's teachers and an ESP In House Consultant attend

ESP In House Consultant Training: Behavior Principles

Defining a Behavior

When talking about behavior, you should **define** the behavior that you are talking about so that everyone understands exactly what you mean.

A good definition is:

- Objective,
- Clear, and
- Complete.

Objectivity refers to the observable characteristics of the behavior. If your definition includes inferential terms, such as expressing anger, being nice, showing interest, you should try to change these into more objective terms. For example, instead of "expressing anger", you could say, "crumpling up paper" or "cussing."

Clarity refers to the definition being unambiguous. People should be able to read it and paraphrase it accurately. For example, instead of saying "aggression means hitting," you might want to clarify what you consider "hitting": Is it a tap on the back? Is it kicking? Is it punching? Is it slapping? Does it include objects or only persons (ex. kicking a wall)?

Completeness refers to the definition's boundaries. The definition should include what is an instance of the behavior as well as what is not an instance of the behavior. For example, does "cleaning up after lunch" mean taking all the items off the table? What if one item is left: was this cleaning or not? What about wiping the table? What about pushing the chair in?

You should always try to define the behavior in such a way that nothing is left to interpretation: The person observing should be sure of whether or not the behavior occurred.
The more specific your definition is, the easier it will be to measure the behavior.

Questions that you can ask to determine if this is a good definition include:

- Can you count the number of times that the behavior occurs? (Answer should be "Yes")
- Will someone not related to the situation know exactly what to look for if you tell him/her to look for the behavior? (Answer should be "Yes")
- Can you break down this behavior into smaller components, each of which is more specific and observable? (Answer should be "No")

Problem Behavior, Appropriate Behavior, Target Behavior

A **problem behavior** is a behavior that is "causing" a problem. "Problem behavior" is also referred to as "inappropriate behavior" or "maladaptive behavior". Usually you will want to decrease problem behavior.

An **appropriate behavior**, on the other hand, is a "good" behavior. "Appropriate behavior" is also referred to as "desirable behavior" or "adaptive behavior". Usually, you will want to increase appropriate behavior.

A **target behavior** simply refers to the behavior that you have chosen to focus on. It can be either a problem behavior or an appropriate behavior.

A problem behavior can often be translated into a lack of appropriate behavior. It is sort of like looking at a glass half empty versus looking at a glass half full. You can choose to focus either on decreasing a problem behavior or on increasing an appropriate behavior.

Focusing on decreasing a problem behavior

Advantages:

Since you will be collecting information on this behavior you will know if in fact it is decreasing.

Disadvantages:

You are not teaching what to do (fails the "dead man's test": A dead person can omit just about any behavior). You will be focused on "catching" the person being bad, which may not lead to a pleasant interaction (and may even lead to escalation).

Focusing on increasing appropriate behavior

Advantages:

You are teaching what to do. This can lead to teaching a variety of other skills. You will also be focused on "catching" the person being good, which is likely to lead to a pleasant interaction.

Disadvantages:

Since you will be collecting information on appropriate behavior you may not know for a fact that the problem behavior is decreasing. However, it is very likely that you will notice if the problem is still occurring.

Reinforcement and Punishment

Reinforcement is something that occurs <u>after</u> the behavior, which <u>increases</u> the likelihood that the behavior will occur again in the future (increases or maintains behavior).

- *A* **positive reinforcer** is something "good" that the person gets after performing a particular behavior.
  <u>Example</u>: My husband makes the bed. I smile, say thank you, and give him a kiss. He makes the bed more often in the future. The smile, thank you, and kiss were positive reinforcers for him.

- *A* **negative reinforcer** is something "bad" that the person gets taken away after performing a particular behavior.
  <u>Example</u>: I have a headache, so I take a pill. After a few minutes my headache goes away. Next time I have a headache, I will be more likely to take a pill. The headache going away was a negative reinforcer for me taking the pill.

Punishment is something that occurs <u>after</u> the behavior, which <u>decreases</u> the likelihood that the behavior will occur again in the future.

- *A* **punisher** is something "bad" that the person gets after performing a particular behavior.
  <u>Example</u>: I walk into my meeting unprepared. The attendees soon start walking out. Next time I have a meeting I make sure that I am prepared. The attendees walking out was a punisher for me not being prepared.

- *A* **response cost** is something "good" that the person gets taken away after performing a particular behavior.
  <u>Example</u>: Rob is running late, so I leave (his ride is gone). Next time that we are supposed to ride together he makes sure to arrive on time. Rob's ride leaving was a response cost for him being late.

Remember: "Good" and "bad" are always relative to the person. What I may consider "good" someone else may not (or they may even consider it "bad"), and vice versa.

Reinforcement and Punishment (continued)

	Good	Bad
Give something	Positive Reinforcement Behavior: ⇧	Punishment Behavior: ⇩
Take away something	Response Cost Behavior: ⇩	Negative Reinforcement Behavior: ⇧

If a behavior is occurring, it means that in one way or another it is being reinforced.

If a behavior is not occurring it means that:

- The behavior may have been punished,
- The person may not have a particular skill to perform the behavior, or
- The person may not be aware that they are expected to engage in the behavior.

Differentiation of other terms

A **reward** is similar to positive reinforcement: Something is presented as a consequence of the behavior. The difference is that the "something" is selected arbitrarily and may not actually increase future behavior.

A **bribe** is also similar to positive reinforcement: Something is presented as a consequence of the behavior. The difference is that the purpose of the reinforcer is to achieve an advantage for the person who delivers it rather than for the person who receives it.

Function

The **function** of a behavior simply refers to the purpose of that behavior. The function of the behavior is important because it will help you determine possible intervention strategies.

Remember, if a behavior is occurring, it means that in one way or another it is being reinforced.

Behavior usually happens either **to obtain** something or **to avoid/escape** something.

Things that may be obtained or avoided/escaped usually fall into one of the following categories:

- Social (attention)
- Tangible (activities, materials, food)
- Sensory (physiological conditions)

		Something:		
		Social	Tangible	Sensory
Behavior may occur in order to:	Obtain			
	Avoid/Escape			

<u>Determining the function of a behavior</u>

To determine the function of a behavior you need to look at what happens before the behavior as well as what happens after the behavior.

- When looking at what happens before, you try to get clues about situations in which the behavior is more and least likely to occur.
- When looking at what happens after, you try to get clues about what may be reinforcing the behavior.

Please note:

- **The same behavior may have different functions in different situations.**
- **Different behaviors may have the same function in the same situation.**

The 3-Term Contingency

The 3-term contingency will help you determine the function of the behavior. The **3-term contingency** refers to the relation between antecedents, behavior, and consequences.

- ***Antecedents*** are events that happen before a behavior occurs.
- ***Consequences*** are events that happen after the behavior occurs.

The relation between **behavior and consequence** is important because:

- If the behavior is followed by a reinforcing consequence the behavior is more likely to occur again in the future.

- If the behavior is followed by a punishing consequence the behavior is less likely to occur again in the future.

The relation between **behavior and antecedent** is important because:

- If a behavior is reinforced under certain conditions, it is likely that the behavior will occur more frequently under those same or similar conditions.

- If a behavior is punished under certain conditions, it is likely that the behavior will occur less frequently under those same or similar conditions.

A setting event is an antecedent that is temporary and that alters the "usual" antecedent-behavior relation by making it even more or less likely that the behavior will occur under those conditions.

Example: When I sit on the couch my dog often sits in front of me and puts her paw on my leg. When she does this, I usually pet her. Every time that my cat walks into the living room and I am sitting on the couch, my dog rushes to sit in front of me, puts her paw on my leg, and even begins scratching my leg if I don't pet her right away.

- *Antecedent:* Me sitting on the couch
- *Setting event:* My cat walking in
- Behavior: My dog putting her paw on my leg
- *Consequence:* Me petting her

Measuring a Behavior

It is very important to measure the behavior that you want to change, because this allows you to determine whether or not the chosen intervention is making a difference.

In order to determine if the chosen intervention is making a difference, you need to compare how the behavior is after the introduction of the intervention to how it was prior to the intervention. Therefore, you need to measure the behavior before the introduction of the intervention (Baseline Condition), as well as during the intervention (Intervention Condition).

Since behavior is often affected by different things in the environment and can vary from day to day, it is highly recommended that the behavior of interest be measured several times during each condition (baseline and intervention). Each added measurement increases the accuracy of the overall picture of the behavior.

There are several methods that can be used to measure behavior. These include:

- Permanent Product Recording
- Event Recording (Behavior Count)
- Interval Recording:
  - Momentary Sample
  - Partial Interval
  - Whole Interval
- Latency Recording (Time to Respond)
- Duration Recording (Behavior Duration)

Often, different methods may be used to measure the same behavior. The method that you choose to use will largely depend on the information that you are trying to gather as well as on the advantages and disadvantages of the method.

Methods of Measurement: Permanent Product Recording

Permanent Product Recording is the only method used to measure behavior where the observer does not look directly at the behavior as it happens. The observer looks at the behavior's product, after the behavior is supposed to have occurred.

Permanent Product Recording may be used any time that the behavior of interest results in some kind of tangible product (e.g. written assignment) or in some kind of lasting environmental change (e.g. cleanliness).

This method involves looking at the product and determining whether or not the behavior of interest occurred, or how many times this behavior did or did not occur.

If the number of opportunities in which the behavior can happen vary, then the percentage of times in which the behavior did or did not occur should be calculated.

Advantages:

- Permanent products may be readily available
- The observer can measure the behavior when it is most convenient for them

Disadvantages:

- Need to be careful that only the actual behavior of interest results in the permanent product, and not some other behavior
- Need to make sure that the permanent product is not the result of someone else's behavior

Methods of Measurement: Event Recording

Event Recording (Behavior Count) involves observing for a predetermined amount of time, and recording each time that the behavior of interest occurs. At the end of the observation period, the number of times that the behavior occurred during the observation is totaled.

In order to be able to record each time that the behavior of interest occurs, you need to be able to tell exactly when the behavior begins and when it ends. In addition, this behavior should not occur at such a high rate that it is too difficult to keep a count on it.

To record every time that the behavior occurs, you can make tally marks on a sheet of paper. However, if making tally marks on a piece of paper is not convenient, you can move objects from one place to another in order to keep track of each time that the behavior occurs. For example, you can put a handful of beans in one pocket and every time that the behavior occurs you move one bean to the other pocket (target pocket). In addition, there are other devices that may be used to keep track of behavior, such as wrist counters, golf counters, and digital counters.

At the end of the observation period you would total the number of times that the behavior occurred by simply either totaling the tally marks, counting the number of items moved, or looking at the counter, depending on which method you used to keep track of the behavior.

The length of the observation can vary from a few minutes long to a few hours long, depending on the behavior of interest. You should select the length of your observation so that it allows enough time for the behavior of interest to occur multiple times. Once you select the length of your observation, it should remain the same throughout all the observations (during baseline and during intervention).

Advantages:

- Simple procedure
- Minimized interference of other ongoing activities

Disadvantages:

- Requires the observer to be on the "lookout" for the behavior
- May not be used with high rate behaviors
- May not be used if behaviors do not have discrete beginnings and endings

Methods of Measurement: Interval Recording

Interval Recording involves dividing your observation time into intervals and recording if the behavior of interest did or did not occur during each interval. At the end of the observation period, the number of intervals in which the behavior occurred is totaled.

Interval recording is usually used when:

- It is difficult to tell when the behavior of interest begins or ends
- The behavior of interest occurs at a very high rate

There are 3 types of Interval Recording methods:

- Momentary Sample Recording
- Partial Interval Recording
- Whole Interval Recording

The Interval Recording method that you choose depends on the behavior of interest and on the information that you are trying to gather. (Each one of these methods is described in the following pages).

The total length of the observation can vary from a couple of minutes to several minutes long. You should select the length of your observation so that it allows enough time for the behavior of interest to occur multiple times.

Once you select the length of your observation, you need to divide it into intervals. Please note that although your observation time is divided into intervals, you do not stop observing after each interval.

Each interval needs to be the same length. Intervals should be long enough so that the behavior can occur, but short enough so that the behavior does not occur too often within that amount of time.

The total observation time and the length of each interval should remain the same throughout all the observations.

Methods of Measurement: Interval Recording (continued)

Momentary Sample Recording

Momentary Sample Recording involves looking at the end of the interval and recording whether or not the behavior of interest is occurring at that particular moment.

This method is often used if the behavior of interest lasts for a while (ex. writing).

- Advantages:
  - Not necessary to look throughout the entire interval: Only look at the end

- Disadvantages:
  - Need to have a timing instrument available
  - Need to keep track of the time intervals

Partial Interval Recording

Partial Interval Recording involves looking throughout the interval to see if the behavior of interest occurs at any time in that interval. Once the behavior occurs, you mark that interval as an occurrence. If, by the end of the interval the behavior did not occur, you mark that interval accordingly.

This method is often used if the behavior of interest is hard to catch or does not last in time (ex. smiling).

- Advantages:
  - Once the behavior occurs for that interval, you do not need to continue looking until the next interval

- Disadvantages:
  - Need to have a timing instrument available
  - Need to keep track of the time intervals
  - May overestimate the occurrence of the behavior

Methods of Measurement: Interval Recording (continued)

Whole Interval Recording

Whole Interval Recording involves looking throughout the interval to see if the behavior of interest occurs throughout the whole interval. If, the behavior occurs throughout the whole interval without stopping, at the end of that interval you mark that interval as an occurrence. If, the behavior did not occur or stopped at any time throughout the interval, you mark that interval as the behavior not occurring.

This method is usually used if it is important to know that the behavior of interest continues without interruption (ex. reading).

- *Advantages:*
  - *Once the behavior stops occurring for that interval, you do not need to continue looking until the next interval*

- Disadvantages:
  - Need to have a timing instrument available
  - Need to keep track of the time intervals
  - May underestimate the occurrence of the behavior

Methods of Measurement: Latency Recording

Latency Recording (Time To Respond) is used when the time that it takes from the onset of an instruction to the time when the behavior of interest occurs is important.

Latency Recording involves observing each time that the behavior of interest is expected, recording the time when the instruction to engage in this behavior is given, and recording the time when the behavior actually begins. At the end of the observation, the time that it took for the behavior to actually begin is calculated.

What you would need to do is to write down the time as soon as the instruction to engage in the behavior is stated. You would then observe for the behavior of interest to occur. As soon as this behavior begins, you would write down the time again.

After the observation, you would calculate how long it took for the behavior to begin. You can make this calculation so that the results are either in minutes or in seconds, depending on how precise you want your measurements to be. Although the results can be presented either in minutes or in seconds, they need to be presented the same way for each observation conducted.

In order to be able to record the time when the behavior of interest begins, you need to be able to tell exactly when the behavior begins. In addition, you need to have a timing instrument available.

Advantages:

- Only need to look when the behavior is expected (instruction is given)
- Can stop looking once the behavior begins

Disadvantages:

- Requires the observer to be on the "lookout" for the behavior until the behavior occurs
- May not be used with behaviors that do not have discrete beginnings
- Need to have a timing instrument available
- Need to calculate the length of time afterwards

Methods of Measurement: Duration Recording

Duration Recording (Behavior Duration) is used when the length of time that the behavior of interest lasts is important.

Duration Recording involves observing each time that the behavior of interest occurs, recording the time when this behavior begins, recording the time when the behavior stops, and calculating how long it lasted.

What you would need to do to be on the lookout for the behavior of interest to occur. As soon as this behavior begins, you would write down the time when the behavior started. You would then continue observing until this behavior stops, at which point you would write down the time again.

After the observation, you would calculate how long the behavior of interest lasted, from beginning to end. You can make this calculation so that the results are either in minutes or in seconds, depending on how precise you want your measurements to be. Although the results can be presented either in minutes or in seconds, they need to be presented the same way for each observation conducted.

In order to be able to record the time when the behavior of interest begins and ends, you need to be able to tell exactly when the behavior begins and ends. In addition, you need to have a timing instrument available.

Advantages:

- This method allows one to determine how long the behavior of interest lasts. This may be important as sometimes behaviors may increase or decrease in length but not necessarily in number of occurrences.

Disadvantages:

- Requires the observer to be on the "lookout" for the behavior to occur
- The observer needs to continue looking until the behavior stops
- May not be used with behaviors that do not have discrete beginnings and endings
- Need to have a timing instrument available
- Need to calculate the length of time afterwards

Selecting a Method of Measurement

When selecting a method of measurement you need to take into consideration:

- The behavior that you are trying to measure,
- The type of information that you would like to gather, and
- The advantages and disadvantages of each method of measurement.

The following questions should guide you to selecting a method appropriate for the behavior that you are trying to measure. The questions have been ordered from least to most amount of effort required for each method.

- Does this behavior generate a permanent product, such as a written assignment, a clean table, or papers on the floor?
  ⇨ If Yes – Select Permanent Product Recording ("Permanent Product")

- Can you easily count every time that this behavior occurs: You can tell exactly when it starts and when it ends, <u>and</u> it does not occur so often that it would be difficult to keep a count on it (e.g. standing up)?
  ⇨ If Yes – Select Event Recording ("Behavior Count")

- Does this behavior occur so often that it is difficult to keep a count on it <u>or</u>, is it difficult to tell exactly when the behavior starts or when it ends (e.g. reading)?
  ⇨ If Yes – *Continue asking:*
  - When this behavior occurs, does it last for a while (e.g. writing)?
    ⇨ If Yes – Select Momentary Sample Recording ("Momentary Sample")
  - Does this behavior happen so quickly that it is hard to catch (e.g. swearing, making gestures)?
    ⇨ If Yes – Select Partial Interval Recording ("Partial Interval")

- Do you want to measure how long it takes for the student to respond to a request?
  ⇨ If Yes – Select Latency Recording ("Time to Respond")

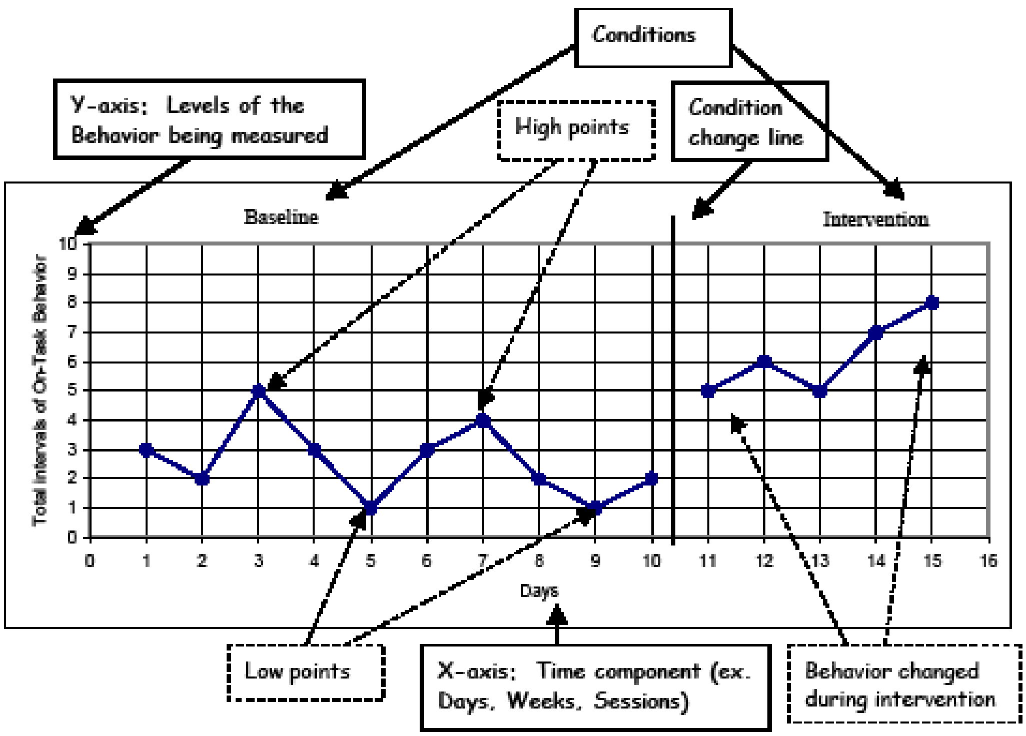
- Do you want to measure how long this behavior lasts?
  ⇨ If Yes – Select Duration Recording ("Behavior Duration")

- Is it important to know that this behavior continues without interruption?
  ⇨ If Yes – Select Whole Interval Recording ("Whole Interval")

Graphing a Behavior

In addition to measuring the behavior that you want to change, it is very important to graph the measurements that you gather, as this allows you to have a visual image of the status of the behavior at any point in time. Again, having multiple measurements of the behavior is important, as these will be translated in multiple points on your graph, allowing for a more accurate picture of the behavior.

Here are the important elements of a graph:



A graph allows you to determine, at-a-glance, how often the behavior of interest occurs on average, times when the behavior is lower, and times when the behavior is higher. This information will be very useful during the entire time that you are concerned about the behavior: Assessment, intervention, and even after the intervention.

Graphing a Behavior: During Assessment

By allowing you to establish how often the behavior of interest occurs on average, your graph will help you determine if there are times during which the behavior is different, either lower or higher.

You can then focus on those times when the behavior appears different than usual, and look at the circumstances surrounding those times to determine what may be affecting the behavior.

You can use this information to decide where to focus your intervention as well as to assist you in developing your intervention.

Your graph will also assist you in determining when to begin an intervention. You will usually want to begin an intervention when the behavior is stable: Its values do not fluctuate very much from one another. If you begin an intervention when the behavior is not stable (its values fluctuate frequently) you will have a difficult time determining if your intervention is making a difference.

Graphing a Behavior: During Intervention

By comparing the behavior before (Baseline condition) and after the introduction of the intervention (Intervention condition), your graph will help you determine whether or not that particular intervention is making a difference.

- If the behavior remains the same during the intervention, this means that the intervention may not be having any effect on the behavior. However, when making such a decision, you should make sure that you have allowed enough time for the intervention to actually have an effect. If, after allowing a reasonable amount of time for the intervention to have an effect, there still does not seem to be any difference in the behavior, you should consider trying a different intervention.

- If the behavior is different during the intervention, then the intervention is probably making a difference.

Once you have determined that the intervention is having an effect on the behavior, the next thing that you need to consider is whether or not the behavior is moving in the right direction. Here, you should keep in mind that some interventions might temporarily increase the behavior before making it decrease.

By continuing to measure the behavior throughout the intervention, and graphing these measurements, your will be able to determine, at-a-glace, if you should try a different intervention, continue the same intervention, modify the intervention, or discontinue it.

- If the behavior is not moving in the expected direction, then you should consider trying a different intervention.

- If the behavior is moving in the expected direction, then you should continue the intervention until the behavior reaches the target goal, at which time you may consider gradually discontinuing it.

- If the behavior stops moving in the right direction, you should look at the events surrounding the time when this occurred, and modify the intervention accordingly.

Graphing a Behavior: After the Intervention

Once the behavior reaches the target goal, you should gradually decrease what you have been doing as an intervention. During this time, it is important to keep a close eye on your graph.

By continuing to measure and graph the behavior once you have decided to gradually decrease the intervention, you will be able to tell, at-a-glance, if the behavior maintains at the target goal level, or if you are discontinuing the intervention too fast.

- If the behavior maintains at the target goal level as you are gradually decreasing the intervention, you should continue decreasing the intervention until it is discontinued.

- If the behavior begins to move in the wrong direction, it means that you are discontinuing the intervention too fast.
  You should go back to implementing the intervention at the same level as that prior to when the behavior changed, wait until the behavior goes back to the target goal level, and proceed even more cautiously.

- If the behavior continues to move in the wrong direction after proceeding more cautiously, this means that some level of the intervention may be necessary to maintain optimal levels of the behavior.

After the intervention is discontinued, or after it has been decided that some level of the intervention is going to be implemented to maintain the behavior, you should measure and graph the behavior every once in a while. When you measure the behavior every once in a while it is referred to as a "probe."

Graphing of probes will allow you to determine, at-a-glance, if the behavior is maintaining at optimal levels or if some type of "intervention booster" may be necessary. At first, probes should be conducted frequently, for example weekly, and as time goes on their frequency should decrease (ex. every other week, every third week, every month, and so on).

Intervention: Increasing Appropriate Behavior

There are several things that you can do to try to change a behavior:

- You can do things before the behavior occurs, to encourage appropriate and/or discourage problem behaviors
- You can do things after the behavior occurs, to encourage appropriate and/or discourage problem behaviors

Most of the time, you will be able to discourage problem behaviors simply by focusing on increasing appropriate behaviors.

Determining appropriate behaviors to focus on:

- Look at the function of the behavior:
  - What are some appropriate behaviors that would serve the same function as the problem behavior?
  - You may want to select one of these behaviors to encourage
- Look at the problem behavior:
  - What are some other behaviors that may be incompatible with this behavior?
  - You may want to select one of these behaviors to encourage
- Other appropriate behaviors

Before the behavior occurs:

- Make sure that the person knows how to do the appropriate behavior: Practice the appropriate behavior
- Set up the environment for success
- Look at setting events and antecedents of problem behavior: Is there a way to change these to encourage appropriate behaviors and discourage problem behaviors?
- State the contingencies
- Give choices
- Prompt the appropriate behavior
- Give rationales as to why it is important to engage in such a behavior
- Model the appropriate behavior
- Reinforce others for engaging in the appropriate behavior with behavior specific praise

After the appropriate behavior occurs:

- Reinforce it!

About Reinforcers

There are several types of reinforcers: Edible, tangible, activity, social

- Anything can act as a reinforcer
- Reinforcers are specific to the person
- Reinforcers can change: There are times when certain things are more attractive than others

Remember: Reinforcers always increase behavior!!!!!
(Note: For negative reinforcement to occur an ongoing aversive stimulus needs to be present)

Selecting reinforcers:

- You can look at a list of items to get ideas of things that may act as reinforcers
- You can present a variety of choices and see which items/activities the person selects
- You can observe the person to try to determine things that they like
- You can ask the person
- You can look at the consequences maintaining inappropriate behaviors and use these as reinforcers for appropriate behaviors

It is always a good idea to have a variety of reinforcers available:

- This provides variety: If you always use the same reinforcer, after a while it may lose strength.
- This provides choice: If you have a selection of reinforcers, you are more likely to have something that is reinforcing at that particular point in time. In addition, choice, in itself, may also be a reinforcer.
- One way to provide a variety of reinforcers is to have a list of potential reinforcers - A "reinforcer menu" -

How to present a reinforcer:

- Whenever you are reinforcing a behavior, no matter what the reinforcer is, it is always a good idea to present it with behavior specific praise:
    - This allows the person to know exactly what behavior is being reinforced
    - This will be helpful in the future, when decreasing the rate of reinforcement ("thinning" reinforcement)

About Reinforcers (continued)

When to present a reinforcer:

At first, it is very important to reinforce the desired behavior immediately after it occurs, and to reinforce it every time that it occurs:

- Reinforcing the behavior immediately after it occurs provides immediate feedback to the person.
- In addition, by reinforcing immediately you are minimizing the time lapse between the behavior and the reinforcer, decreasing the chances that other behaviors will occur before the reinforcer is given, and therefore decreasing the chances of reinforcing the wrong behavior.
- If the reinforcer is one that may not be provided immediately, for example an activity, you should at least try to provide immediate feedback, let the person know that they have "earned" that reinforcer and when it will take place, and make sure that you follow through (regardless of the behavior that occurs in between).
- Reinforcing the behavior every time that it occurs lets the person know that you are paying attention to their behavior, and that they are doing what you want them to be doing.

Once the behavior is established, you should slowly begin to increase the time lapse between the behavior and the presentation of the reinforcer, as well as begin to decrease the rate of reinforcement:

- The reason for increasing the time lapse between the behavior and the presentation of the reinforcer is so that it resembles the more natural context, where the person usually needs to be a little patient.
- The reason for decreasing the rate of reinforcement is that if behavior is reinforced every single time that it occurs, once reinforcement stops the behavior will quickly decrease. If behavior is reinforced every once in a while this will maintain and strengthen the behavior, as the person will know that reinforcer is still available.

Reinforcer quantity:

- If too much of the reinforcer is provided in a small amount of time, the reinforcer is likely to lose strength quickly
- How much of the reinforcer to provide depends on the type of reinforcer and on the number of times that it may be presented in a given amount of time
- It is important to provide enough of the reinforcer to maintain the behavior, but not too much that the person will lose interest

Intervention: Teaching New Behavior - Shaping

Sometimes, the person may not display the behavior that we would like to see because they do not know how to perform that particular behavior.

When teaching a new behavior, it is a good idea to:

- Begin by naming the behavior or the skill that you are going to tech,
- Provide a rationale as to why this behavior is important,
- Describe the behavior that you are going to teach,
- Model the behavior,
- Ask the person to practice the behavior, and
- Reinforce each attempt or approximation to the behavior.
- As the behavior begins to occur, reinforce closer and closer approximations.

It is important to understand that a new behavior may take some time to develop. At first, you will probably need to prompt the behavior for the behavior to occur, and you will need to reinforce approximations to the behavior (even if they are not good approximations to it).

With increased practice, the behavior will begin to look closer and closer to what the final product should look like. As this occurs, you should increase your criteria for reinforcement.

Example - Suppose that you want to teach Todd to bring all of his materials class:

- You should explain to Todd why it is important that he bring all of his materials to class, and describe specifically what you mean by "all materials" (notebook, pen, pencil, textbook, coloring pencils).
- You would then have Todd practice gathering these items from his locker and bring them to class.
- At first, you might need to prompt Todd to get the items. However, it is possible that even with the prompt, Todd might come back to class with only a pencil. This is okay: It is a first step, and you should reinforce this behavior rather than punish not having all of the items.
- Once Todd starts to bring a pencil to class on a regular basis, you might require him to also have another item in order to provide reinforcement, for instance he might need to have a pencil and a notebook.
- Once the pencil and the notebook get to class on a regular basis, you might increase the requirement to 3 items for reinforcement to occur, and so on.

Reinforcing closer and closer approximations to the final behavior is referred to as "shaping."

Intervention: Teaching New Behavior - Chaining

Oftentimes, behaviors may be broken down into a series of small steps. These small steps follow each other, and, in combination, amount to the wanted behavior. As such, each step is like a link in a chain: If one link is missing the chain is broken… Sometimes, the person may not display the behavior that we would like to see because they do not know how to perform one or more of the steps in a chain, or because they have not "linked" all the steps together.

When using chaining to teach a new behavior, you should:

- Begin by naming the behavior or the skill that you are going to tech,
- Provide a rationale as to why this behavior is important,
- Describe the behavior that you are going to teach in a step by step fashion,
- Model each step of the behavior,
- Ask the person to practice the behavior on a step by step fashion,
- Prompt steps as needed,
- Reinforce each step (or approximation to it), and
- Reinforce the completion of the behavior (the chain).

As steps begin to occur in succession, you should decrease your rate of reinforcement for each step and reinforce the completion of a couple of steps at a time.

The chaining procedure may be used in different ways:

- You can use this procedure starting with the first step in the chain: Teaching that step first, and proceeding through the rest of the steps in the chain by prompting each one as necessary until the chain is complete. Once the first step is learned, you would move the teaching emphasis to the second step in the chain, proceeding through the rest of the chain as before until this step is learned. You would continue teaching each step in succession until the last step in the chain is learned. This type of chaining is referred to as "forward" chaining.
- You can also use this procedure starting with the last step in the chain instead of the first one: You may prompt (or even perform yourself) each step of the chain up to the last step, placing the teaching emphasis on that step. Once the last step is learned, you would proceed backwards, placing the teaching emphasis on the next to the last step. You would continue teaching each preceding step until the first step in the chain is learned. This type of chaining is referred to as "backward" chaining.

Intervention: Teaching New Behavior – Chaining (continued)

Example: Teaching Todd how to get to class on time prepared
Steps to arriving to class on time prepared:

1. As soon as the bell rings, walk directly to your locker
2. Open your locker
3. Look at your schedule to see which class you need to go to next
4. Look at the list of necessary items for that class
5. Gather the necessary items in your hands
6. Close your locker
7. Walk directly to that class
8. When you get to the classroom, place the items on your desk and sit
9. Wait patiently for the teacher to give directions as to what to do next

- If you were going to teach Todd how to get to class on time prepared by using <u>forward chaining</u>, you would start by teaching him the first step, and prompting and guiding him through the next 8 steps. Once he learned how to perform the first step well, you would move to teaching the second step: He would perform the first step on his own, you would place the teaching emphasis on the second step, and prompt and guide him through the other 7.
- If you were going to teach Todd how to get to class on time prepared by using <u>backward chaining</u>, you would start by prompting and guiding him through the first 8 steps, and place the teaching emphasis on the ninth step. Once he learned how to perform the ninth step well, you would move to teaching the eighth step: You would prompt and guide him through the first 7 steps, placing the teaching emphasis on the eighth step, and then he would perform the ninth step on his own.

It is important to understand that new behavior takes time to develop. At first, you will probably need to prompt each step of the behavior for the behavior to occur, and you will need to reinforce the approximations made to each step, even if they are not good approximations and even if they were prompted. Once steps begin to occur in succession, you can decrease you rate of prompting and of reinforcement for those steps.

However, you should be careful not to wait until the completion of several steps to provide reinforcement unless you are sure that those steps can be successfully completed: If you wait to provide reinforcement until a particular step and that step is not completed correctly, reinforcement is not going to occur and the previous steps that were completed correctly will therefore not be reinforced.

Intervention: Decreasing Problem Behavior

As previously stated, most of the time you will be able to discourage problem behaviors simply by focusing on increasing appropriate behaviors. In addition, by increasing and teaching appropriate behaviors you may contribute to the development of new opportunities for the person. Remember, simply decreasing inappropriate behavior does not always translate into a positive result for that person.

Nevertheless, there are times when you may need to focus on decreasing problem behaviors. These occasions include when you are dealing with:

- Dangerous behavior,
- Destructive behavior, or
- Behaviors that seriously impede the person's or other's ability to function.

As with increasing positive behavior, you may be able to decrease problem behavior by doing things before, as well as by doing things after this behavior occurs.

Things that you could do <u>before</u> the problem behavior occurs, to try to decrease the chances of it happening include:

- Changing the environment in such a way that the problem behavior does not have the possibility of occurring. For example, if the problem is talking to peers, maybe changing the seating arrangement might make this more difficult to occur.

- Being aware of the antecedents and setting events where the problem behavior is more likely to happen, and changing these in way that may avoid the occurrence of the problem behavior.

Intervention: Decreasing Problem Behavior (continued)

Things that you can do <u>after</u> the problem behavior occurs, which decrease the chances of it happening again in the future, may include negative or restrictive procedures. However, before selecting any negative or restrictive procedure you should try to change the behavior using positive approaches first.

If the positive approaches fail, then you might consider more restrictive approaches, such as:

- Extinction: *Contingent withholding of reinforcement*
- Response Cost: *Contingent removal of reinforcers*
- Time Out: *Contingent removal of the opportunity to obtain reinforcers*
- Punishment: *Contingent presentation of an aversive stimulus*

When choosing a negative or restrictive procedure, you should take into consideration its advantages and disadvantages, check the laws and regulations, and select the least restrictive and least intrusive procedure possible.

Some of the reasons to avoid using negative procedures include:

- Negative procedures don't teach how to behave appropriately
- Negative procedures tend to contribute to escalation
- Negative procedures tend to produce counter control, which may result in other problem behaviors

Intervention: Decreasing Problem Behavior - Extinction

Extinction refers to withholding reinforcement contingent on the problem behavior.

In order for extinction procedures to be effective, you need to know what is maintaining the behavior (what is reinforcing it). This could be attention, access to certain activities or items, or escape or avoidance of certain activities, items, or situations. During extinction, you make sure that whatever reinforces the behavior does not occur when the problem behavior occurs.

Example: Every time Jill has to do independent work she says she does not feel well; the teacher then talks to her about what may be causing her not to feel well and tries to comfort her.

- During extinction, whenever Jill would have independent work and said she was not feeling well the teacher would refrain from talking to her about not feeling well and from comforting her.

<u>Advantages of Extinction</u>:

- It can be a very effective procedure.
- It can have long lasting effects.
- Aversive stimuli are not required.

<u>Disadvantages of Extinction</u>:

- It does not decrease the behavior immediately (if this is a dangerous behavior, this is an important consideration).
- You need to be in control of what is reinforcing the behavior.
- Extinction procedures may be very difficult to implement consistently (for example, at times it may be very difficult to ignore the behavior).
- Extinction will make the behavior increase before decreasing ("extinction burst"). You need to make sure that you will be able to continue to implement the extinction procedures consistently throughout this period. If you do not, and you reinforce the behavior then, the behavior will worsen.
- Sometimes extinction may bring about aggression ("extinction-induced aggression"). Because there is a possibility that this may occur, you should be prepared in case it does occur.
- After extinction has been implemented successfully, you should expect the behavior to reappear at some point ("spontaneous recovery"). You need to be prepared for this moment and make sure that when this occurs, you continue to implement the procedures consistently.

Intervention: Decreasing Problem Behavior – Differential Reinforcement

Differential Reinforcement involves placing the problem behavior on extinction while at the same time reinforcing something else. There are several variations of Differential Reinforcement.

Differential Reinforcement of Alternative behavior (DRA) involves reinforcing any other behavior that is not the problem behavior.

Differential Reinforcement of Incompatible behavior (DRI) involves reinforcing a specific behavior that is incompatible with (cannot occur at the same time as) the problem behavior.

Example: Every time Jill has to do independent work she says she does not feel well; the teacher then talks to her about what may be causing her not to feel well and tries to comfort her.

- During differential reinforcement of alternative behavior (DRA), the teacher would ignore the talk about not feeling well, and would reinforce any other behavior, such as preparing to do the work (opening the book, having materials ready, …).
- During differential reinforcement of incompatible behavior (DRI), the teacher would ignore the talk about not feeling well, and would reinforce an incompatible behavior instead, such as working quietly or talking about something other than feeling ill.

Advantages of DRA and DRI:

- Both DRA and DRI are constructive procedures: You teach what to do rather than what not to do.
- DRA and DRI are usually acceptable procedures.
- DRA and DRI procedures can have lasting effects.

Disadvantages of DRA and DRI:

- The effects of DRA and DRI may be delayed.
- The problem behavior may not necessarily decrease with DRA.

Intervention: Decreasing Problem Behavior – Differential Reinforcement (continued)

Differential Reinforcement of Zero rates of behavior (DRO) involves delivering the reinforcer after a specific amount of time during which the problem behavior did not occur.

Example: Every time Jill has to do independent work she says she does not feel well; the teacher then talks to her about what may be causing her not to feel well and tries to comfort her.

- During differential reinforcement of zero rates of behavior (DRO), the teacher might deliver attention to Jill only after five minutes go by during which Jill did not say anything about not feeling well.

<u>Advantages of DRO:</u>

- DRO procedures are relatively easy to apply.
- DRO procedures promote relatively rapid and durable effects.

<u>Disadvantages of DRO:</u>

- DRO procedures are not very constructive: You are not teaching what to do.
- The focus is on the problem behavior.
- You may end up reinforcing other problem behaviors that may be occurring at the time when reinforcement *is* due.

Intervention: Decreasing Problem Behavior – Differential Reinforcement (continued)

Differential Reinforcement of Low rates of behavior (DRL) involves reinforcing the behavior only when it follows a specific amount of time during which it did not occur. This procedure would be used in order to decrease the behavior but not eliminate it.

Differential Reinforcement of Diminishing rates of behavior (DRD) involves providing the reinforcer only if the behavior occurred less than a certain number of times within a certain period of time (this is analogous to shaping)

Example: Every time Jill has to do independent work she says she does not feel well; the teacher then talks to her about what may be causing her not to feel well and tries to comfort her.
Although, in this case it is not appropriate for Jill to be talking about not feeling well every time that she has to do independent work, it is possible that there may be times when she is genuinely not feeling well and she should be able to express this to the teacher. As such, the teacher may not want to completely eliminate this behavior but simply reduce it.

- During differential reinforcement of low rates of behavior (DRL), the teacher would talk to Jill about not feeling well and comfort her when Jill expresses that she is not feeling well, only if she has not said anything about not feeling well during the previous five days.
- Suppose that Jill usually expresses not feeling well 3 times in one hour, during differential reinforcement of diminishing rates of behavior (DRD), the teacher would talk to Jill about not feeling well and comfort her if Jill expresses that she is not feeling well only twice in one hour. The teacher would then decrease this to talking to Jill if she expresses not feeling well once during the hour, etc…

<u>Advantages of DRL and DRD:</u>
- DRL and DRD are usually acceptable procedures.
- These procedures are effective for getting the behavior under control.

<u>Disadvantages of DRL and DRD:</u>
- These procedures may take some time to show an effect.
- The implementer needs to keep track of time and of number of responses.

Intervention: Decreasing Problem Behavior – Response Cost

Response Cost involves the withdrawal of something "good", contingent on the behavior.

Example: Every time Jill has to do independent work she says she does not feel well; the teacher then talks to her about what may be causing her not to feel well and tries to comfort her.

- If the teacher were using response cost to decrease Jill's behavior of saying that she is not feeling well, the teacher might take away one point every time that Jill mentions not feeling well (assuming that points are something that Jill likes).

Advantages of Response Cost:

- Response cost may produce rapid behavior reduction.
- Response cost may be convenient to use.

Disadvantages of Response Cost:

- Response cost may not produce long lasting effects.
- In order to be able to withdraw something, the person needs to have a "reserve" of it.
- The person needs to have a way to make up for losses; otherwise the person may just give up.
- Need to carefully consider response cost magnitude: It the cost is too big the person may just give up; if the cost is too small the person may not care.
- Response cost may provoke escape, avoidance, or aggression.
- Response Cost is easy to abuse: It creates a temptation to use it more frequently or more restrictively than necessary.

Intervention: Decreasing Problem Behavior – Time Out

Time Out involves the withdrawal of access to sources of reinforcement during a certain amount of time contingent on the behavior.

Example: During class, whenever the teacher asks a question and the student says the correct answer he/she earns a point. Tim really likes earning points, and whenever the teacher asks a question he yells out the answer. The teacher has asked him to raise his hand and wait until she asks him for the answer instead of yelling it out, but he continues to yell out the answer without raising his hand or waiting.

- During time out, if Tim would yell out the answer not only would he not earn a point for that answer if it were correct, but the opportunity for him to get points would be taken away for a period of time, for example 2 minutes: During the next two minutes after he yelled out the answer he would not be able to earn points even if he raised his hand.

<u>*Advantages of Time Out:*</u>

- Time out can be a very effective procedure.
- Time out does not require the removal of materials or the presentation of aversive consequences.
- Time out does not need to be implemented for long periods of time to be effective.

<u>Disadvantages of Time Out:</u>

- In order for time out to be effective, "time in" needs to be reinforcing.
- Time out needs to be used consistently in order to be effective.
- You need to be careful that release from time out is not contingent on or does not coincide with problem behavior.
- Time out is not a constructive procedure: It does not teach what to do.
- Time out focuses on the problem behavior.
- Time out may contribute to loss of learning time.
- Time out may provoke behavior to escalate.
- Time out may provoke escape, avoidance, or aggression.
- Time out is easy to abuse: It creates a temptation to use it more frequently or more restrictively than necessary.
- Legal considerations need to be taken into account.

Intervention: Decreasing Problem Behavior – Punishment

Punishment involves the presentation of an aversive stimulus ("a punisher"), contingent on the behavior, which decreases the likelihood that the behavior will occur again in the future.
Punishers can vary from mild (ex. "No!") to severe (ex. noxious stimuli). It should be noted that applying a punisher for long lengths of time will not necessarily make the punisher more effective.

Punishers, like reinforcers:

- *Are specific to each individual*
- *Can change depending on the circumstances*
- *Are more effective if introduced immediately after the behavior*
- *Are more effective if implemented consistently*

Advantages of Punishment:

- Punishment can quickly stop behavior.
- Punishment can be very effective.
- Punishment can have long lasting effects.

Disadvantages of Punishment:

- Punishment is a very controversial procedure: It may bring about a variety of social concerns, such as ethical, safety, and legal issues.
- Due to its effectiveness at immediately reducing the behavior, punishment can be easily over used.
- Punishment promotes aggression.
- Punishment often suppresses future responding and promotes withdrawal.
- Punishment can contribute to a variety of negative consequences, such as negative "self-esteem."
- Punishment may induce a negative relationship between the punishing agent and the person being punished.
- Punishment may only be effective at reducing the behavior in the presence of the punishing agent.
- Using of punishment (modeling) promotes the idea that "punishment is okay."
- It may be difficult to find a relevant punisher for the particular behavior.
- It may be difficult to determine at which level a punisher will be most effective and least restrictive: Using a mild punisher and slowly increasing its aversive features to try to render it more effective may contribute to building tolerance; however, directly using a more aversive punisher when there is a possibility that a milder one could work is not ethical.

Progress Evaluation

Progress should be evaluated regularly:

- If you are the person measuring the behavior, you can evaluate progress every time that you place your point on your graph.

- If you are not the person measuring and graphing the behavior, you can evaluate progress by looking at the completed graphs at regular intervals (weekly, bi-weekly, etc.)

In order to determine if a selected intervention is making a difference, the first thing that you need to do is to look at the measurements of the behavior. The easiest way to do this is to look at the graph of the behavior.

Here, what you want to do is to compare the behavior before the intervention (baseline) and during the intervention (Note: For more information on graphs, you may refer back to the Graphing a Behavior section, pp. 16-19).

As you compare the measurements of the behavior, the question that you are trying to answer is:

"Is the behavior different after intervention, when compared to baseline?"

- If the answer is "No" this means that the intervention may not be making a difference.

- If the answer is "Yes", this means that the intervention is making a difference.

By looking at the measurements of the behavior and at the graphs, you will be able to determine how to proceed with the intervention. <u>This is why it is important to evaluate progress on a regular basis</u>.

Progress Evaluation (continued)

The intervention does not seem to be making a difference

If the intervention does not seem to be making a difference, the first thing that you need to do is to determine if you have allowed enough time for the effect to show.

- If you think that given a little more time the effect may show, you should continue with the same intervention and re-assess progress in a week or two.

- If you think that you have allowed enough time for the intervention to show an effect, the next thing that you need to look at is whether or not the intervention was implemented as planned.

    - If the intervention was not implemented as planned, you should find out why this is so.
        - If it is a "simple" matter, such as people forgetting to do what was decided, you should troubleshoot ways of increasing consistency and continue to implement the same intervention.
        - However, if it is a more complicated matter, such as the intervention is too difficult to implement, you should consider simplifying it or trying a new intervention.

    - If the intervention was implemented as planned but it does not seem to be making a difference you should consider a different intervention.

Progress Evaluation (continued)

The intervention seems to be making a difference

If the intervention seems to be making a difference, the first thing that you need to consider is whether or not the behavior is moving in the direction towards the target goal.

- If the behavior is not moving towards the target goal, you need to determine if this is what is expected from the given intervention or not. For example, if the intervention involves extinction, you should expect the behavior to increase before decreasing.
    - If this is expected from the given intervention, you should continue implementing the intervention and re-assess progress in approximately one week.
    - If this is not expected from the given intervention, you should implement a different intervention to try to change the behavior in the wanted direction.

- If the behavior is moving towards the target goal, you need to decide if the intervention is making a big enough difference given the amount of time that it has been in place.
    - If the intervention does not seem to be making a big enough difference you should consider ways in which the intervention could be modified to have a greater effect, and continue to implement the intervention with the added modifications.
    - If the intervention is making a big enough difference, you should continue implementing the same intervention.

ESP In House Consultant Training References

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